Archdiocese of Omaha

Math Curriculum

K-12

Final July 2013

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Introduction

Purpose of this curriculum:

The purpose of this standards-based curriculum is to assist administrators and teachers of the Archdiocese of Omaha in teaching math in the Archdiocesan Catholic schools. This guide contains clear expectations for math education standards as well as specific Nebraska Standards relating to each program standard. It is intended that this material be used in the development of local math education curriculum plans and for the training of teachers of math education.

Administrators will use this curriculum to assist teachers in applying the desired math education standards to the specific grade levels.

Teachers will use this curriculum as the basis for planning their lessons for the year. Use of the curriculum will assist students in attaining the standards for which all are accountable. Teachers are required to spend 80% of their time teaching strictly from the curriculum guide with the remaining 20% of their time teaching concepts that enhance the curriculum.

Archdiocese of Omaha Mission Statement

The mission of the Catholic Schools in the Archdiocese of Omaha, Nebraska, in cooperation with the parents, is an extension of the four-fold educational mission of the Catholic Church:

- **to proclaim the message of faith and morals**
- **to foster community**
- **to encourage worship and prayer**
- **to motivate to serve others**

Each school is to foster in students a personal relationship with Jesus Christ educating them to become academically proficient and responsible, community-minded adults who will be active and loyal members of their Church and their country.

Archdiocese of Omaha Exit Standards

All graduates of Catholic Schools in the Archdiocese of Omaha demonstrate:

- **Knowledge of Catholic Church teachings of faith, morals, and virtues**
- **Knowledge of core disciplines and fine arts**
- **Higher-order thinking skills**
- **Effective communication skills**
- **Effective social interaction skills**
- **Independent learning skills**
- **Life-long learning with the ability to access and utilize resources**
- **Knowledge of practices essential to:**
  - **Christ-centered families**
  - **Full participation in parish community life**
  - **Sound health in mind, body and spirit**
  - **Responsible stewardship**
  - **Mature, responsible, and sensible use of technology**
  - **Effective citizenship.**

Math Program Mission Statement

Our purpose is to prepare all students to be active problem solvers through ethical application of mathematical knowledge and skills.

Math Program Standards

Program Standard #1: PROBLEM SOLVING

- Apply and adapt a variety of appropriate strategies and tools to analyze and solve problems.

Program Standard #2: COMMUNICATION

- Write and verbalize strategies and processes precisely through the language of mathematics.

Program Standard #3: REASONING

- Explore, evaluate and justify reasonableness of answers and processes.

Program Standard #4: CONNECTIONS

- Integrate mathematics ethically in a global society.

Program Standard #5: REPRESENTATIONS

- Create and demonstrate mathematical relationships numerically, algebraically and graphically.

Math Essential Standards

Standard #1: PROBLEM SOLVING

Grades K-2: Explore ways to solve problems

Grades 3-5: Identify and demonstrate strategies to solve problems

Grades 6-8: Apply strategies to solve problems

Grades 9-12: Adapt and analyze strategies to solve problems

Standard #2: COMMUNICATION

Grades K-2: Recognize and use mathematical symbols and words

Grades 3-5: Explain mathematical terminology and processes

Grades 6-8: Describe and differentiate between mathematical processes

Grades 9-12: Express mathematical concepts precisely

Standard #3: REASONING

Grades K-2: Explain and show work to justify answers

Grades 3-5: Demonstrate and justify mathematical processes

Grades 6-8: Apply fundamental properties of mathematics to justify answers

Grades 9-12: Formulate, analyze and test conjectures

Standard #4: CONNECTIONS

Grades K-2: Recognize mathematical ideas in everyday experiences

Grades 3-5: Show how mathematics relates to real-world situations

Grades 6-8: Explain how mathematical ideas interconnect

Grades 9-12: Apply knowledge in contexts outside of mathematics

Standard #5: REPRESENTATIONS

Grades K-2: Model mathematical concepts using materials

Grade 3-5: Demonstrate mathematical understanding

Grades 6-8: Collect and draw conclusions using mathematical data

Grades 9-12: Design and analyze mathematical models of real-world situations

PRIMARY GRADES K-2

For successful implementation, all teachers need to read, understand and utilize all pieces of information within their section beginning with the Curriculum Implementation Map.

- **MATH PROGRAM AND ESSENTIAL STANDARDS**
- **CURRICULUM IMPLEMENTATION MAP**
- **DIRECTIONS FOR ADMINISTRATION OF PERFORMANCE ASSESSMENT**
- **DIRECTIONS FOR USE OF SCORING GUIDE**
- **TEACHER NOTES/RESOURCES**
- **PERFORMANCE ASSESSMENT**
- **STUDENT SCORING GUIDE**
- **DIRECTIONS FOR USE OF GRADE LEVEL TALLY SHEET**
- **GRADE LEVEL TALLY SHEET**
- **DIRECTIONS FOR USE OF CONTENT CHECKLIST**
- **CONTENT CHECKLIST**
- **CURRICULUM GUIDE GLOSSARY**

Math Program and Essential Standards Grades K-2

Program Standard #1: PROBLEM SOLVING

Essential Standard #1: Explore ways to solve problems

Program Standard #2: COMMUNICATION

Essential Standard #2: Recognize and use mathematical symbols and words

Program Standard #3: REASONING

Essential Standard #3: Explain and show work to justify answers

Program Standard #4: CONNECTIONS

Essential Standard #4: Recognize mathematical ideas in everyday experiences

Program Standard #5: REPRESENTATIONS

Essential Standard #5: Model mathematical concepts using materials

Curriculum Implementation Map

ONGOING ACTIVITIES

Administrator's role:

- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:

- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

AUGUST

Administrator's role:

- Begin looking at calendar to schedule time for faculty to work on curriculum implementation. Allow time each quarter for curriculum work.
- Meet with faculty to review and study Assessments and Student Scoring Guides that will be used for the year.
- Meet with faculty to align school curriculum with the Archdiocesan Curriculum.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

Teacher's role:

- Plan instruction based on the Standards.
- After you have aligned the curriculum, meet by grade levels (K-2, 3-5, etc) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for the year.
- Determine pieces of content, lessons, or units that are essential to meeting the Standards and Assessments.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

SEPTEMBER

Administrator's role:

- Consider sending home communication to parents via newsletter briefly explaining the implementation of the Standards, Curriculum and the Assessments. We recommend that you attach a copy of the Program Standards.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used, and determine Assessment dates for first semester Assessments. Discussion needs to begin on determining dates for the second semester Assessments as well.

Teacher's role:

- Meet with Level teachers to create an example of a completed Assessment that can be shared with students.
- Display the Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Explain Essential Standards to students.
- Work with Level teachers to schedule dates for the Assessment.
- Report Assessment dates to the Key Person (grade level coordinator/curriculum coordinator) in charge of your level or the Key Person in your building.
- Distribute the assigned Assessment Task Guidelines and Student Scoring Guide sheet to students.
- Go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age-appropriate language if needed.
- Share the Assessment example with students.
- Begin teaching to the Standards.

OCTOBER

Administrator's role:

- Contact the CSO for assistance as needed.
- In early October, receive Assessment dates from Key People (grade level coordinator/curriculum coordinator) and place in the school calendar.
- Share information with faculty checking progress; allow time for work in levels.

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Continue to share the Assessment example with students.

NOVEMBER

Administrator's role:

- Share information with faculty checking for progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Allow time for teachers to work in levels.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Administer the first semester Assessment.

DECEMBER

Administrator's role:

- Collect Grade Level Tally Sheets from the faculty who administered an Assessment.
- Share information with faculty and allow time for work in levels.
- Allow time with faculty to review the curriculum implementation process and discuss questions or concerns in planning next semester.
- Collect comments to be shared with CSO.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- Meet with Level teachers to discuss student's ratings on first semester Assessments in order to plan for the rest of the year.
- Turn in Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the first semester Assessment and Student Scoring Guide to be used in the future.
- Place Student Scoring Guide in student's cumulative folder.

Spring Semester Time Line

ONGOING ACTIVITIES

Administrator's role:
- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

JANUARY

Administrator's role:
- Look at calendar to schedule time for faculty to work on curriculum implementation.
- Consider sending home communication to parents via newsletter briefly explaining the implementation of Standards, Curriculum, and Assessments.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used second semester.
- Remind faculty that the deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:
- If you have not done so yet, align the curriculum by grade level (K-2, 3-5, etc.) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for second semester.
- Meet with Level teachers to create an example of the Assessment that can be shared with students.
- Work with Level teachers to schedule dates for the Assessment. Report Assessment dates to Key Person (grade level coordinator/curriculum coordinator) in charge in your building.
- If you have not done so yet, display the Program Standards and Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Continue working with students on curriculum as they prepare for the Assessment.
- Explain/Review Standards displayed in the classroom with students.
- Distribute the assigned Assessment and Student Scoring Guide sheet to students.
- Explain/Review the Assessment Task Guidelines, Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age appropriate language if needed.
- Share your Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send the Grade Level Tally Sheet to administrator.

FEBRUARY

Administrator's role:
- Share information with faculty checking progress.
- Allow time for faculty to work in levels.
- Check with Key People (grade level coordinator/curriculum coordinator) on dates for the Assessments.
- Place Assessment dates in the school calendar.
- Contact the CSO as needed for assistance.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue working with students on curriculum as they prepare for the Assessment.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send Grade Level Tally Sheet to administrator.

MARCH

Administrator's role:

- Share information with faculty checking progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Share information with faculty and allow time for work in levels.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.

APRIL

Administrator's role:

- Share information with faculty and allow time for work in levels.
- Remind teachers of deadline for reporting to the building administrator is the **week of April 22.**
- Collect Grade Level Tally Sheets and transfer information to the Building Level Tally Sheet.
- Send the completed Building Level Tally Sheet to the **Catholic Schools Office by May 1.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.

MAY

Administrator's role:

- Send completed Building Level Tally Sheet to the CSO if you have not done so yet.
- Allow time with faculty to review the curriculum implementation program and discuss questions or concerns in planning next year.
- Collect comments/revisions to be shared with CSO.
- Submit comments/revisions to the CSO.

Teacher's role:

- Meet with Level teachers to discuss student's ratings on Assessment in order to plan for next year.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the Assessment and Student Scoring Guide to be used next year.
- Place individual Student Scoring Guide in student's cumulative folder.

Directions for Administration of the Performance Assessment

*Refer to the **Curriculum Guide Glossary** found in this section of the Math Curriculum Guide to assist you with the terminology.*

Before the school year begins, the teacher will read through the entire curriculum to assist with mapping instruction for the year. In doing so, the teacher will have read through the Assessment Task Guidelines and Student Scoring Guide to know when in the year to place the instruction that will precede the administration of the Assessment. The Assessment should flow from the curriculum. The Assessment should not be an "add on" tacked on at the end of the school year merely to meet minimum guidelines from the Archdiocese and the State of Nebraska. When used properly, the Assessment and Student Scoring Guide provide the teacher with additional information about individual student learning.

1. **At the beginning of the school year**, the teacher will have gone through the curriculum guide and mapped an instructional plan for the year based on the Curriculum Implementation Map found in the Math Curriculum Guide. The teacher will then base the foundation of planning on the M-mastery (proficiency) identified pieces of content in the grade level Content Checklist.

2. The teacher will find the Assessment Task Guidelines and Student Scoring Guide in the specific grade level section of the curriculum. The teacher will provide each student with both the Assessment and the Student Scoring Guide at the beginning of instruction so that expectations about performance are clearly understood. The teacher will explain the purpose for the Assessment and Student Scoring Guide to the class and allow time for questions about the Assessment process.

3. It is important for the teacher and the students to understand that students are rated for proficiency on the Assessment which is recorded on the Student Scoring Guide. As a criterion-referenced test, the Performance Assessments are designed for the individual student to show what he/she knows. Scoring results from all K-12 Archdiocesan schools will be reported to the Catholic Schools Office.

4. The instruction of all guidelines for the Assessment must take place before the Assessment is administered. The teacher will accomplish this by preparing and teaching one piece of content from the guideline at a time. The teacher will always refer back to how this instruction will assist students when they take the Assessment. The teacher may need to seek additional resources to teach some of the guidelines as some of the content may not be present in the textbook.

5. While successful instruction of the Assessment Task Guidelines is taking place, the teacher will assign the Assessment Task to the students providing them with class time as directed by the teacher.

6. The students will be given a date for completion determined by the teacher. The Assessment may need to be modified for some students. Consideration will need to be given to those students on an IEP or 504 Plan. The teacher will determine any adjustments needed with the help of the administrator or school counselor.

7. The teacher will collect the Assessments and rate them for proficiency completing the Student Scoring Guides.

8. We know that all students can learn and succeed but not on the same day or in the same way. Teachers may need to allow a student(s) some additional time or give the student(s) another chance to show what they know if the student(s) have not achieved a proficiency rating of Level 3, "Meets Standard".

9. When the teacher has completed the rating on all students, the teacher will then complete the Grade Level Tally Sheet for reporting to the Archdiocese. Once the Grade Level Tally Sheet has been completed, the teacher will place the Student Scoring Guide in the individual student's cumulative file.

10. The teacher will then take the completed Grade Level Tally Sheet to the building administrator who will then complete the Building Level Tally Sheet and send it to the Catholic Schools Office.

Directions for Use of the Student Scoring Guide

The teacher will note the information that was shared in the **"Directions for Administration of the Performance Assessment"**. If the teacher has not read this information, please do so before proceeding.

It is important to understand that the teacher is rating student proficiency in the identified areas listed on the "Student Scoring Guide" for Archdiocesan reporting purposes.

1. Initially, the teacher will fill in the student name information and the date assessed unless the student has completed this for the teacher.

2. The teacher will read the Student Scoring Guide and rate each piece of criteria that is required. For example, "Problem Solving" might be the first criterion listed. The teacher will go to the column with the Level 3 heading, "Meets Standard", to check if the student completed the required work assigned under "Content". If the student completed all the required pieces, then the teacher will mark a "3" under the Results column for "Content". If a student has exceeded the Standard by completing the required work in Level 4, "Exceeds Standard", then the teacher will mark a "4" under the Results column. If the student is missing some of the required work, the teacher will look at Level 2, "Progressing Toward Standard", and Level 1, "Does Not Meet Standard", to mark the appropriate rating in the Results column.

3. The teacher will repeat this process for each identified criterion that needs to be rated.

4. The teacher's next step is to transfer the students' totals from the Student Scoring Guide to the "**Grade Level Tally Sheet"**. Directions for use of the Grade Level Tally Sheet follow in this section.

5. The teacher will then place the Student Scoring Guide in the individual student's cumulative file to fulfill the State of Nebraska's requirement for criterion-referenced testing. As an official document, the Student Scoring Guide is considered part of the student's permanent file.

Math Assessment Grade 2: Survey Says!
Teacher Notes

Program and Essential Standards

- Problem Solving
- Reasoning
- Connections
- Representation
- Communication

Administration Time: Grade 2, 1st or 2nd Semester

Suggested Time Frame: Allow one to two weeks for students to complete.

Essential Question: How do I create appropriate graphs to represent and analyze data?

Task: Survey a group of people and record the results to be used on a graph.

Teacher Notes:

1. You can choose to rewrite the student page in more appropriate student-language.
2. The **ONLY** component of this assessment that can be completed outside of class is the survey.
3. See attached pages for the following:
    A. question/tally sheet
    B. graph paper and pictograph paper
    C. observation sheet
4. Conference with each student after they have written their question/categories. Correct any misspellings at this time. Accurate spelling is expected with no more than 2 errors on their graph to receive a Level 3 (Proficient) on the Scoring Guide.
5. Do not take off points for spelling errors on the Observation Sheet.
6. Possible ways to share the information include, but are not limited to: a booklet, poster, or power point. The presentation of the information can be individual, small group or whole class based on teacher discretion and time.
7. To exceed the standard in the area of representation, the student must complete a different type of graph than the original (i.e. bar graph and pictograph).
8. After their presentation, students should answer teacher-directed or student-directed questions other than the questions on their observation sheet.
   Sample Teacher Questions:
    - What did you think was going to be the most/least popular category choice?
    - What are your personal top and bottom choices?

Question/Tally Sheet

NAME:_____

QUESTION: _____

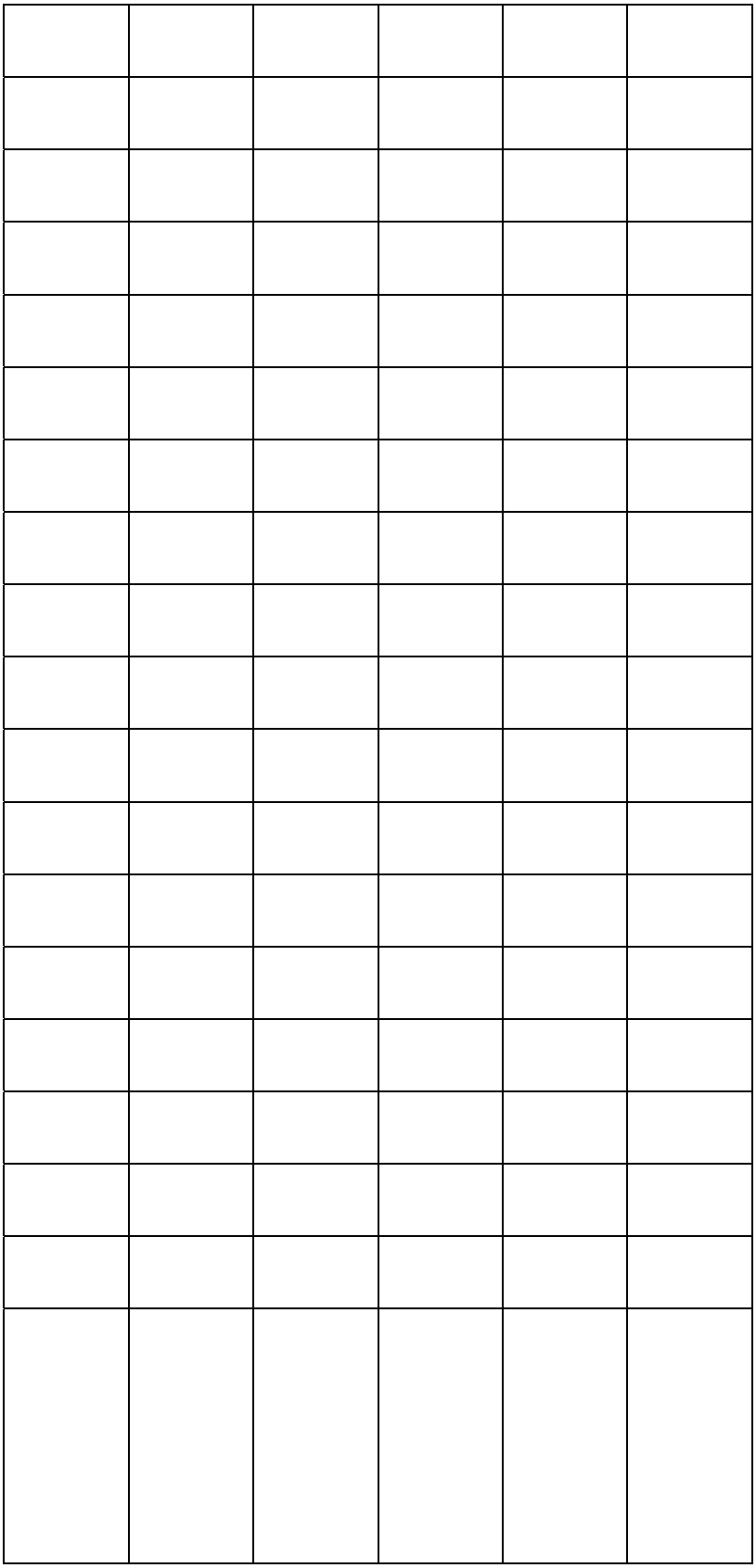
GRAPH TITLE:_____

Category Choices

1._____ Total	2._____ Total
3._____ Total	4._____ Total
5._____ Total	6._____ Total

Grade 2 Assessment – Survey Says!
PICTOGRAPH PAPER

GRAPH PAPER



Observation Sheet

1. Which choice had the most responses?

   _____

2. Which choice had the least responses?

   _____

3. What is the total of any four responses? Write a number sentence to show the sum.

   _____

4. What is the difference between your greatest response and your least response? Write the number sentence to show the difference.

   _____

5. What is the sum of your second and third greatest responses? Write a number sentence to show the sum.

   _____

6. What else can you observe from your graph? Write a sentence to explain.

   _____

   _____

   _____

Math Assessment Grade 2: Survey Says!

Student Copy

Essential Question: How do I create the best graphs to show and understand data?

Task: Survey a group of people and record the results on a graph.

Guidelines:

1. **Choose a Topic:**
   a. Choose a topic for your survey such as favorite ice cream flavor, kind of pet, favorite hobby, etc.
   b. Your topic should have 4 category choices
2. **Preparation**:
   a. Write your survey question and category choices on the question sheet
   b. Write your category choices in each of the tally boxes
   c. Conference with your teacher about your question and categories
3. **Collect Data:**
   a. Survey at least 15 people, but no more than 20, using your question
   b. Tally your results on the tally sheet
4. **Display Your Data:**
   a. Choose a type of graph (picture or bar graph)
   b. Label your graph (title of graph, category labels, number the graph)
   c. Record results on your graph
5. **Analyze Data & Draw Conclusions**:
   a. Use the observation sheet to correctly answer questions based on your graph
6. **Create a Visual Way to Share your Data:**
   a. Include your question/tally sheet, graph, and observation sheet
   b. Use neat handwriting and correct spelling on the graph
7. **Presentation:**
   a. Using your graph and observation sheet, clearly and correctly explain your results and the graph you made
   b. Answer teacher or student questions about your graph correctly

Name: _____ Assessment Completion Date: _____

Math Scoring Guide Grade 2:
Assessment Task: Survey Says!

Survey a group of people and record the results on a graph.

Criteria	Level 1 Does Not Meet Standard	Level 2 Progressing Toward Standard	Level 3 Meets Standard	Level 4 Exceeds Standard	Results
Problem Solving, Reasoning and Connections	Shows less than four of the skills listed in Level 3	Shows only four of the five skills listed in Level 3	▪ Chooses a topic with 4 categories ▪ Writes a question ▪ Surveys 15 people ▪ Correctly lists categories on the question/tally sheet ▪ Correctly answers five of the six questions on the observation sheet	In addition to meeting all criteria in Level 3, chooses 5-6 categories	
Representations	Shows less than three of the skills listed in Level 3	Shows only three of the four skills listed in Level 3	▪ Correctly tallies the results ▪ Correctly totals the tally marks ▪ Correctly labels the graph ▪ Correctly records the results	In addition to meeting all criteria in Level 3, shows data with another type of graph	
Communication	Shows less than three of the skills listed in Level 3	Shows only three of the four skills listed in Level 3	▪ Creates a visual to share data including question/tally sheet, graph and observation sheet ▪ Information neatly displayed ▪ Speaks clearly (voice and volume) ▪ Answers teacher and/or student questions correctly	In addition to meeting all criteria in Level 3, student speaks with confidence using good eye contact	

List any modifications made:

Directions for Use of Grade Level Tally Sheet

1. The teacher will administer the Assessment to his/her students and then rate the individual student's Assessment using the individual **Student Scoring Guide** included in the curriculum guide before proceeding to Step Two.

2. The teacher will need to make copies of the Grade Level Tally Sheet as needed.

3. Once the teacher has completed rating the entire class, the teacher will then complete the Grade Level Tally Sheet transferring the class totals in each category onto the tally sheet.

4. Complete one Grade Level Tally Sheet per grade. Individual classroom teachers from the same grade must gather the results from the individual Student Scoring Guides, combine the results, and enter the total numbers for the entire grade onto one sheet.

5. Submit only <u>one</u> completed Grade Level Tally Sheet to your administrator by the **week of April 22**.

6. The individual teacher will then file the individual Student Scoring Guide in the student's cum folder.

7. The building administrator will then complete the Building Level Tally Sheet using the information from the Grade Level Tally Sheets. The Building Level Tally Sheet is due to the **Catholic School Office by May 1**.

Grade Level Tally Sheet for Grade 2
Math Assessment Task
Survey Says!

School Name/City:

Assessment Date:

Total # Students Assessed:

Total # Students:

Directions: Complete one sheet per **grade level**. Classroom teacher(s) must gather the results from the individual student scoring guides and enter the totals. Submit only one sheet per grade level to your administrator by the **week of April 22**.

Criteria	Level 1 # Students Not Meeting Standard	Level 2 # Students Progressing Toward Standard	Level 3 # Students Meeting Standard	Level 4 # Students Exceeding Standard	Total Number of Students
Problem Solving, Reasoning and Connections					
Representation					
Communication					

Directions for Use of Content Checklist

The grade level Content Checklist is designed to accompany the Essential Standards. Faculty discussion will need to take place to ensure consistency in teaching. The administrator should reproduce the Content Checklist and distribute it to all teachers.

The format for the Content Section is as follows:

1. Blank box to record date of instruction of content or to use as a check-off to indicate that instruction of content occurred
2. Numeric system that identifies the specific content statement
3. Content Statement
4. Nebraska Math Standard Reference **(NE)**
5. Program Standard Reference **(PS)**
6. Level of Teacher Instruction:
   Introduce (**I**), Develop **(D**), Master (**M)**

Introduce **(I)**: To provide with a beginning knowledge or first experience of something. No assessment.

Develop **(D**): To progress from simple to more complex through practice. Check for understanding as needed.

Master **(M)**: To gain control over content; to understand and be able to retrieve the specified material for use as needed to maintain proficiency. Must be assessed.

Teachers will use this curriculum as the basis for planning their lessons for the year. Use of the curriculum will assist students in attaining the Standards for which all are accountable. Teachers are required to spend 80% of their time teaching strictly from the curriculum guide with the remaining 20% of their time teaching concepts that enhance the curriculum.

Archdiocese of Omaha Math Content Checklist
Primary Grades K-2

			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	1	**NUMERATION/NUMBER SENSE**			
	1.1	Counts and sequences whole numbers 0-100 (NE 1.1.1; PS #5)	**I, D**	**M**	
	1.2	Compares relationships among whole numbers 0-100 -bigger, smaller, more, greater, less, fewer, equal, higher, lower, before, after, between (NE 1.1.1; PS #5)	**I**	**D,M**	
	1.3	Demonstrates the value of whole numbers using a variety of models and representations (NE 1.1.1; PS #5)	**I**	**D,M**	
	1.4	Demonstrates one-to-one correspondence to 20 (NE 1.1.1; PS #5)	**I,D,M**		
	1.5	Identifies and writes whole numbers 0-999 (NE 2.1.1; PS #5)	**I**	**D**	**M**
	1.6	Compares relationships among whole numbers 100-999 (NE 2.1.1; PS #5)		**I**	**D,M**
	1.7	Identifies the place value of whole numbers up to 999 using <, >, and = (NE 3.1.1; PS #5)		**I**	**D,M**
	1.8	Recognizes and connects number words to numerals up to one hundred (NE 2.1.1; PS #2, 4)	**I**	**D**	**M**
		Skip counts to one hundred: (NE 2.1.1; PS #1)			
	1.9	2's	**I**	**D**	**M**
	1.10	3's			**I**
	1.11	5's	**I, D**	**M**	
	1.12	10's	**I,D,M**		
	1.13	Recognizes odd and even numbers (NE 4.1.1; PS #2)		**I**	**D**
	1.14	Identifies ordinal positions to tenth (NE 1.1.1; PS #2, 5)	**I**	**D,M**	
	1.15	Recognizes fractions (NE 2.1.1; PS #2)	**I**	**D**	**M**
	1.16	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**
	1.17	Orders and compares whole numbers greater than 1,000 (NE 3.1.1; PS #5)			**I**
	1.18	Rounds whole numbers (NE 3.1.1; PS #5)			**I**
	1.19	Communicates in written, expanded, and standard form using whole numbers (NE 3.1.1; PS #4)			**I**
	1.20	Uses objects, diagrams and pictures to show mathematical concepts (NE 3.1.2, 4.1.2; PS # 1, 2, 4, 5)		**I**	**D**
	1.21	Skip counts by 100 to 1000 (PS #2)		**I, D**	**M**

Archdiocese of Omaha Math Content Checklist
Primary Grades K-2

			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	2	**COMPUTATION/ESTIMATION**			
	2.1	Demonstrates the meaning of addition and subtraction with whole numbers (NE 1.1.2; PS #1, 2, 3, 4, 5)	**I**	**D,M**	
	2.2	Adds and subtracts fluently up to 10 using appropriate strategies (NE 1.1.3; PS #1, 3)	**I**	**D,M**	
	2.3	Makes estimations and comparisons to actual results (NE 2.1.4; PS #1, 3)			**I,D,M**
		Recognizes symbols and words (NE 2.1.2; PS #2)			
	2.4	+,-, =, plus, minus	**I**	**D,M**	
	2.5	- greater than, less than, < , >		**I**	**D**
	2.6	- add, subtract, sum, difference, addend, equal	**I**	**D**	**M**
	2.7	Demonstrates the concept of addition up to 20 (NE 2.1.3; PS #1, 3)	**I**	**D**	**M**
		Uses addition strategies (NE 2.1.3, 5.1.2; PS #1, 3)			
	2.8	-commutative property (related facts)		**I**	**D**
	2.9	-doubles/near doubles		**I,D**	**M**
	2.10	-making a ten		**I,D**	**M**
	2.11	-counting up	**I**	**D**	**M**
	2.12	-number lines	**I**	**D**	**M**
	2.13	Demonstrates the concept of subtraction from 20 (NE 2.1.3; PS #1, 3)	**I**	**D**	**M**
		Uses subtraction strategies (NE 2.1.3; PS #1, 3)			
	2.14	-fact families		**I,D**	**M**
	2.15	-counting back/up		**I,D**	**M**
	2.16	-number lines	**I**	**D**	**M**
	2.17	Adds and subtracts whole numbers using estimation (NE 2.1.4; PS #1)			**I,D,M**
	2.18	Adds 2-digit numbers with and without regrouping (NE 2.1.3; PS #1)		**I**	**D,M**
	2.19	Adds 3-digit numbers with and without regrouping (NE 2.1.3; PS #1)			**I,D,M**
	2.20	Adds money combinations with coins and bills(PS #1)		**I**	**D**
	2.21	Subtracts 2-digit numbers with and without regrouping (NE 2.1.3; PS #1)		**I**	**D,M**
	2.22	Subtracts 3-digit numbers with and without regrouping (NE 2.1.3; PS #1)			**I,D,M**
	2.23	Chooses correct operations and solves problems involving one-step solutions (NE 3.1.3; PS #1, 3, 4, 5)	**I**	**D**	**D**
	2.24	Chooses correct operations and solves problems involving multiple steps (NE 3.1.3; PS #1)		**I**	**D**
	2.25	Demonstrates and communicates solutions to problems. (NE 3.1.3; PS #1)		**I**	**D**

Archdiocese of Omaha Math Content Checklist
Primary Grades K-2

			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	2	**COMPUTATION/ESTIMATION** continued			
	2.26	Adds with three addends with sums to 20 (PS #2)		**I,D**	**M**
	2.27	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**
	2.28	Applies strategies when solving word problems with or without appropriate technology (NE 3.1.3, 3.1.4; PS #1, 3, 4)	**I**	**D**	**M**
	2.29	Develops an understanding of the concept of multiplication and division through the use of models and representations, which involve combining equal groups (NE 4.1.3; PS #1, 4, 5)			**I**
	3	**MEASUREMENT and DATA**			
	3.1	Uses non-standard units of measurement (NE 0.2.5; PS #1, 4)	**I,D,M**		
	3.2	Identifies tools of measurement and their appropriate use: clocks, calendar, ruler, balance scale, thermometer (NE 2.2.5; PS #1, 4, 5)	**I**	**D**	**M**
	3.3	Understands a calendar –days of the week/months of the year (PS #4)	**I**	**D,M**	
		Identifies and uses standard and metric units of measurement (NE 3.2.5; PS #1, 4)			
	3.4	-inches, feet, yard, centimeter	**I**	**D**	**D**
	3.5	-cups, pints, quarts, gallons, liters		**I**	**D**
	3.6	-pounds, grams, kilograms		**I**	**D**
	3.7	-cents, dollars	**I**	**D**	**D**
	3.8	-Fahrenheit, Celsius		**I**	**D**
		Tells and records time using analog and digital clock (NE 3.2.5, 4.2.5; PS #2, 4, 5)			
	3.9	-hour	**I,D**	**D,M**	
	3.10	-half hour	**I**	**D**	**M**
	3.11	-quarter hour			**I,D**
	3.12	-minutes		**I**	**D**
	3.13	-A.M. and P.M.		**I**	**D**
	3.14	-elapsed time			**I**
	3.15	Identifies past, present, and future (NE 1.2.5; PS #2, 4)	**I**	**D,M**	
	3.16	Identifies name and value of penny, nickel, dime, quarter, dollar (PS #4, 5)	**I**	**D**	**M**
	3.17	Counts like coins to a dollar ($1.00) (NE 1.2.5; PS #4, 5)	**I**	**D,M**	
	3.18	Counts mixed coins to a dollar ($1.00) (NE 2.2.5; PS #4, 5)	**I**	**D**	**M**
	3.19	Calculates change using subtraction (PS #4, 5)			**I**
	3.20	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Primary Grades K-2

			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	4	**GEOMETRY/SPATIAL CONCEPTS**			
		Compares positions (NE 0.2.4, 1.2.4; PS #4)			
	4.1	-above/below	**I,D,M**		
	4.2	-over/under	**I,D,M**		
	4.3	-up/down	**I,D,M**		
	4.4	-near/far	**I,D,M**		
	4.5	-before/after	**I,D,M**		
	4.6	-left/right	**I,D**	**M**	
		Identifies and describes two and three dimensional shapes (NE 1.2.1, 2.2.1, 3.2.1, 4.2.1; PS #4, 5)			
	4.7	-2-Dimensional Shapes: square, circle, triangle, rectangle	**I,D**	**M**	
	4.8	-2-Dimensional Shapes: trapezoid, hexagon, parallelogram,	**I**	**D**	**M**
	4.9	-3-Dimensional Shapes: cubes, sphere, rectangular prism, cone, cylinder, triangular prism, pyramid	**I**	**D**	**D**
	4.10	- open/closed polygons		**I**	**D,M**
	4.11	- edges/vertices/faces		**I**	**D**
	4.12	Describes direction on a positive number line (NE 2.2.2; PS #4, 5)	**I**	**D**	**M**
	4.13	Recognizes and identifies lines of symmetry (NE 1.2.3, 2.2.3; PS #2)	**I**	**D**	**M**
	4.14	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**
	4.15	Determines perimeter and area of a many sided figure (NE 5.2.5; PS #1, 3, 4, 5)			**I**

Archdiocese of Omaha Math Content Checklist
Primary Grades K-2

			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	5	**DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS**			
	5.1	Sorts, classifies, describes and compares sets of objects (NE 0.4.1; PS #1, 2, 3, 4, 5)	**I,D,M**		
	5.2	Organizes and displays collected information using objects and pictures (NE 1.4.1; PS #5)	**I**	**D,M**	
	5.3	Compares and interprets information from displayed data using more, less, and fewer (NE 1.4.1; PS #1, 2)	**I**	**D,M**	
		Creates graphs and tables (NE 4.3.1; PS #5)			
	5.4	- bar graphs up to four categories	**I**	**D**	**M**
	5.5	- picture graphs up to four categories	**I**	**D**	**M**
	5.6	- simple tables (tally sheet)	**I**	**D**	**M**
	5.7	- simple chart		**I**	**D**
	5.8	Describes the likelihood of an event (probability) (NE 3.4; PS #1, 2, 3, 4, 5)		**I**	**D**
	5.9	Recognizes and applies math ideas in everyday experience (PS #1, 2, 3, 4, 5)	**I**	**D**	**D**
	6	**ALGEBRAIC CONCEPTS**			
	6.1	Sorts objects by color, shape or size (NE 0.3.1; PS #1, 3, 4)	**I,D,M**		
	6.2	Identifies simple patterns of colors, shapes, numbers (NE 1.3.1; PS #3)	**I,D**	**M**	
	6.3	Creates patterns (NE 1.3.1; PS #3)	**I**	**D,M**	
	6.4	Identifies and creates patterns using words, tables and graphs (NE 3.3.1; PS #3, 5)		**I**	**D**
	6.5	Sorts and classifies objects according to one attribute then identifies the classifying attribute (NE 1.3.1; PS #1, 3)	**I,D**	**M**	
	6.6	Describes and extends simple patterns (NE 2.3.1; PS #3)	**I**	**D**	**M**
	6.7	Uses input/output table to identify patterns (PS #1, 3, 4, 5)		**I**	**D**
	6.8	Sorts and classifies objects according to more than one attribute (NE 3.3.1; PS #1, 3)	**I**	**D**	**D**
	6.9	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**

Curriculum Guide Glossary

Assessment - The deliberate use of many methods (teacher observation, self-assessment, survey, test, interview, performance, task, etc.) to gather evidence that indicates if students are meeting Standards through essential learning. Through thoughtful observations and professional judgment, a teacher is able to assess individual student's strengths and weaknesses. The teacher is then able to offer the student clear and helpful feedback. Assessment results are used: to identify instructional practices that need to change; to provide a focus for on-going professional development; and to provide supplemental instructional resources for learners.

Assessment Task Guidelines - Specific directions for students to follow as they complete the Assessment Task.

Essential Question - Points to the essence of what you believe students should examine and know in their course of study. The Essential Question is a conceptual commitment. When a teacher or group of teachers selects a question to frame and guide curriculum design, it is a declaration of intent. In a sense you are saying, "This is our focus for learning. I will put my teaching skills into helping my students examine the key concept implicit in the Essential Question." Student Assessment should focus on essential learning.

Essential Standards - Target what students will know and be able to do at each grade level. Essential Standards support Program Standards, are few in number, and move from simple to complex through grade levels. They address many of the same concepts and topics from primary to senior high school, but the sophistication and detail will increase. Essential Standards define the goals set forth in the Program Standards and state concepts and skills of significance taught at each level. They provide a bridge between the Program Standards and the Content. They require mastery by all students and are able to be assessed.

Grade Level Tally Sheet – The reporting form that records Assessment results completed by grade level teacher(s). The form is given to the building administrator who then completes the Building Level Tally Sheet that is sent to the Catholic Schools Office.

Performance Assessment - A variety of tasks and real life situations in which students are given opportunities to demonstrate their understanding and to thoughtfully apply knowledge, skills, and lifelong learning skills in a variety of contexts. These Assessments often occur over time and result in a tangible product or observable performance. They encourage self-evaluation and revision, require judgment to score, reveal degrees of proficiency based on established criteria, and make public the scoring criteria. Performance Assessments recognize that there is more than one way to show a "right" answer.

Program Standards - Concept-based, general expectations of what a student should know and be able to do. They are few in number and general in scope. They reflect the scope of the total program in a given subject area. They require mastery by all students and are able to be assessed.

Standards - General expectations of academic excellence that indicate what a student should know and be able to do.

Standards-based curriculum – A curriculum based on Standards with use of Standards-based Assessments. The premise is that all students will learn and achieve, and ideally all students can achieve proficiency. Time is variable but expectations of students are consistent. The curriculum provides a framework for the teachers. Teachers align their instruction to meet the Standards by asking themselves to what Standard does this activity relate.

Student Scoring Guide - A document that describes student performance on a specific task. The descriptions in the Student Scoring Guide clearly differentiate levels of performance, such as "Exceeds Standard, Meets Standard, Progressing Toward Standard, or Does Not Meet Standard". The Student Scoring Guide contains the rubrics which are the specific rules written in student language and linked to the Standards.

Task - An activity, exercise, or problem given to students to perform.

Time Frame - The recommended time allotted for students to complete the Assessment.

INTERMEDIATE GRADES 3-5

For successful implementation, all teachers need to read, understand and utilize all pieces of information within their section beginning with the Curriculum Implementation Map.

- **MATH PROGRAM AND ESSENTIAL STANDARDS**
- **CURRICULUM IMPLEMENTATION MAP**
- **DIRECTIONS FOR ADMINISTRATION OF PERFORMANCE ASSESSMENT**
- **DIRECTIONS FOR USE OF SCORING GUIDE**
- **TEACHER NOTES/RESOURCES**
- **PERFORMANCE ASSESSMENT**
- **STUDENT SCORING GUIDE**
- **DIRECTIONS FOR USE OF GRADE LEVEL TALLY SHEET**
- **GRADE LEVEL TALLY SHEET**
- **DIRECTIONS FOR USE OF CONTENT CHECKLIST**
- **CONTENT CHECKLIST**
- **CURRICULUM GUIDE GLOSSARY**

Math Program and Essential Standards Grade 3-5

Program Standard #1: PROBLEM SOLVING

Essential Standard #1: Identify and demonstrate strategies to solve problems

Standard #2: COMMUNICATION

Essential Standard #2: Explain mathematical terminology and processes

Standard #3: REASONING

Essential Standard #3: Demonstrate and justify mathematical processes

Standard #4: CONNECTIONS

Essential Standard #4: Show how mathematics relates to real-world situations

Standard #5: REPRESENTATIONS

Essential Standard #5: Demonstrate mathematical understanding

Curriculum Implementation Map

ONGOING ACTIVITIES

Administrator's role:

- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:

- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

AUGUST

Administrator's role:

- Begin looking at calendar to schedule time for faculty to work on curriculum implementation. Allow time each quarter for curriculum work.
- Meet with faculty to review and study Assessments and Student Scoring Guides that will be used for the year.
- Meet with faculty to align school curriculum with the Archdiocesan Curriculum.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

Teacher's role:

- Plan instruction based on the Standards.
- After you have aligned the curriculum, meet by grade levels (K-2, 3-5, etc) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for the year.
- Determine pieces of content, lessons, or units that are essential to meeting the Standards and Assessments.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

SEPTEMBER

Administrator's role:

- Consider sending home communication to parents via newsletter briefly explaining the implementation of the Standards, Curriculum and the Assessments. We recommend that you attach a copy of the Program Standards.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used, and determine Assessment dates for first semester Assessments. Discussion needs to begin on determining dates for the second semester Assessments as well.

Teacher's role:

- Meet with Level teachers to create an example of a completed Assessment that can be shared with students.
- Display the Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Explain Essential Standards to students.
- Work with Level teachers to schedule dates for the Assessment.
- Report Assessment dates to the Key Person (grade level coordinator/curriculum coordinator) in charge of your level or the Key Person in your building.
- Distribute the assigned Assessment Task Guidelines and Student Scoring Guide sheet to students.
- Go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age-appropriate language if needed.
- Share the Assessment example with students.
- Begin teaching to the Standards.

OCTOBER

Administrator's role:

- Contact the CSO for assistance as needed.
- In early October, receive Assessment dates from Key People (grade level coordinator/curriculum coordinator) and place in the school calendar.
- Share information with faculty checking progress; allow time for work in levels.

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Continue to share the Assessment example with students.

NOVEMBER

Administrator's role:

- Share information with faculty checking for progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Allow time for teachers to work in levels.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Administer the first semester Assessment.

DECEMBER

Administrator's role:

- Collect Grade Level Tally Sheets from the faculty who administered an Assessment.
- Share information with faculty and allow time for work in levels.
- Allow time with faculty to review the curriculum implementation process and discuss questions or concerns in planning next semester.
- Collect comments to be shared with CSO.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- Meet with Level teachers to discuss student's ratings on first semester Assessments in order to plan for the rest of the year.
- Turn in Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the first semester Assessment and Student Scoring Guide to be used in the future.
- Place Student Scoring Guide in student's cumulative folder.

Spring Semester Time Line

ONGOING ACTIVITIES

Administrator's role:
- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

JANUARY

Administrator's role:
- Look at calendar to schedule time for faculty to work on curriculum implementation.
- Consider sending home communication to parents via newsletter briefly explaining the implementation of Standards, Curriculum, and Assessments.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used second semester.
- Remind faculty that the deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:
- If you have not done so yet, align the curriculum by grade level (K-2, 3-5, etc.) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for second semester.
- Meet with Level teachers to create an example of the Assessment that can be shared with students.
- Work with Level teachers to schedule dates for the Assessment. Report Assessment dates to Key Person (grade level coordinator/curriculum coordinator) in charge in your building.
- If you have not done so yet, display the Program Standards and Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Continue working with students on curriculum as they prepare for the Assessment.
- Explain/Review Standards displayed in the classroom with students.
- Distribute the assigned Assessment and Student Scoring Guide sheet to students.
- Explain/Review the Assessment Task Guidelines, Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age appropriate language if needed.
- Share your Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send the Grade Level Tally Sheet to administrator.

FEBRUARY

Administrator's role:
- Share information with faculty checking progress.
- Allow time for faculty to work in levels.
- Check with Key People (grade level coordinator/curriculum coordinator) on dates for the Assessments.
- Place Assessment dates in the school calendar.
- Contact the CSO as needed for assistance.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue working with students on curriculum as they prepare for the Assessment.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send Grade Level Tally Sheet to administrator.

MARCH

Administrator's role:

- Share information with faculty checking progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Share information with faculty and allow time for work in levels.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.

APRIL

Administrator's role:

- Share information with faculty and allow time for work in levels.
- Remind teachers of deadline for reporting to the building administrator is the **week of April 22.**
- Collect Grade Level Tally Sheets and transfer information to the Building Level Tally Sheet.
- Send the completed Building Level Tally Sheet to the **Catholic Schools Office by May 1.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.

MAY

Administrator's role:

- Send completed Building Level Tally Sheet to the CSO if you have not done so yet.
- Allow time with faculty to review the curriculum implementation program and discuss questions or concerns in planning next year.
- Collect comments/revisions to be shared with CSO.
- Submit comments/revisions to the CSO.

Teacher's role:

- Meet with Level teachers to discuss student's ratings on Assessment in order to plan for next year.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the Assessment and Student Scoring Guide to be used next year.
- Place individual Student Scoring Guide in student's cumulative folder.

Directions for Administration of the Performance Assessment

*Refer to the **Curriculum Guide Glossary** found in this section of the Math Curriculum Guide to assist you with the terminology.*

Before the school year begins, the teacher will read through the entire curriculum to assist with mapping instruction for the year. In doing so, the teacher will have read through the Assessment Task Guidelines and Student Scoring Guide to know when in the year to place the instruction that will precede the administration of the Assessment. The Assessment should flow from the curriculum. The Assessment should not be an "add on" tacked on at the end of the school year merely to meet minimum guidelines from the Archdiocese and the State of Nebraska. When used properly, the Assessment and Student Scoring Guide provide the teacher with additional information about individual student learning.

1. **At the beginning of the school year**, the teacher will have gone through the curriculum guide and mapped an instructional plan for the year based on the Curriculum Implementation Map found in the Math Curriculum Guide. The teacher will then base the foundation of planning on the M-mastery (proficiency) identified pieces of content in the grade level Content Checklist.

2. The teacher will find the Assessment Task Guidelines and Student Scoring Guide in the specific grade level section of the curriculum. The teacher will provide each student with both the Assessment and the Student Scoring Guide at the beginning of instruction so that expectations about performance are clearly understood. The teacher will explain the purpose for the Assessment and Student Scoring Guide to the class and allow time for questions about the Assessment process.

3. It is important for the teacher and the students to understand that students are rated for proficiency on the Assessment which is recorded on the Student Scoring Guide. As a criterion-referenced test, the Performance Assessments are designed for the individual student to show what he/she knows. Scoring results from all K-12 Archdiocesan schools will be reported to the Catholic Schools Office.

4. The instruction of all guidelines for the Assessment must take place before the Assessment is administered. The teacher will accomplish this by preparing and teaching one piece of content from the guideline at a time. The teacher will always refer back to how this instruction will assist students when they take the Assessment. The teacher may need to seek additional resources to teach some of the guidelines as some of the content may not be present in the textbook.

5. While successful instruction of the Assessment Task Guidelines is taking place, the teacher will assign the Assessment Task to the students providing them with class time as directed by the teacher.

6. The students will be given a date for completion determined by the teacher. The Assessment may need to be modified for some students. Consideration will need to be given to those students on an IEP or 504 Plan. The teacher will determine any adjustments needed with the help of the administrator or school counselor.

7. The teacher will collect the Assessments and rate them for proficiency completing the Student Scoring Guides.

8. We know that all students can learn and succeed but not on the same day or in the same way. Teachers may need to allow a student(s) some additional time or give the student(s) another chance to show what they know if the student(s) have not achieved a proficiency rating of Level 3, "Meets Standard".

9. When the teacher has completed the rating on all students, the teacher will then complete the Grade Level Tally Sheet for reporting to the Archdiocese. Once the Grade Level Tally Sheet has been completed, the teacher will place the Student Scoring Guide in the individual student's cumulative file.

10. The teacher will then take the completed Grade Level Tally Sheet to the building administrator who will then complete the Building Level Tally Sheet and send it to the Catholic Schools Office.

Directions for Use of the Student Scoring Guide

The teacher will note the information that was shared in the **"Directions for Administration of the Performance Assessment"**. If the teacher has not read this information, please do so before proceeding.

It is important to understand that the teacher is rating student proficiency in the identified areas listed on the "Student Scoring Guide" for Archdiocesan reporting purposes.

1. Initially, the teacher will fill in the student name information and the date assessed unless the student has completed this for the teacher.

2. The teacher will read the Student Scoring Guide and rate each piece of criteria that is required. For example, "Problem Solving" might be the first criterion listed. The teacher will go to the column with the Level 3 heading, "Meets Standard", to check if the student completed the required work assigned under "Content". If the student completed all the required pieces, then the teacher will mark a "3" under the Results column for "Content". If a student has exceeded the Standard by completing the required work in Level 4, "Exceeds Standard", then the teacher will mark a "4" under the Results column. If the student is missing some of the required work, the teacher will look at Level 2, "Progressing Toward Standard", and Level 1, "Does Not Meet Standard", to mark the appropriate rating in the Results column.

3. The teacher will repeat this process for each identified criterion that needs to be rated.

4. The teacher's next step is to transfer the students' totals from the Student Scoring Guide to the "**Grade Level Tally Sheet"**. Directions for use of the Grade Level Tally Sheet follow in this section.

5. The teacher will then place the Student Scoring Guide in the individual student's cumulative file to fulfill the State of Nebraska's requirement for criterion-referenced testing. As an official document, the Student Scoring Guide is considered part of the student's permanent file.

Grade 5 Math Assessment: Party Time
Teacher Notes

Essential Question: What math skills do you need to plan a party?

Administration Time: Grade 5, 2nd Semester

Suggested Time Frame: Approximately 2 weeks

Guidelines:

1. Use the prewrite as an introduction to the assessment task.

   Prewrite Essay Question (must be completed before the task is presented): *If you could give a party, what type would you give, how many people would you invite, what would you do? Include a total cost estimate for your party.*

2. Sample forms for tables are included. You may want to give students copies of the Brainstorming Tables and Final Expenses Tables to use for their presentation.
3. All work on assessment must be done in school except for research on prices of supplies. Prices may be obtained from newspapers, actual store ads, online, etc.
4. Students are required to spend at least $75 but not more than $100.
5. Remind students to include themselves in the guest count.
6. This Assessment is meant to be used as an individual student project, not a group project.
7. Computation errors are inevitable. Require at least 80% accuracy for computation proficiency.

BRAINSTORMING TABLES

DECORATIONS			
ITEM	QUANTITY	COST PER UNIT/PACKAGE	TOTAL

ENTERTAINMENT			
ITEM/ACTIVITY TYPE	*Quantity*	*Cost Per Guest*	*Total*

BRAINSTORMING TABLES

REFRESHMENTS					
ITEM	NUMBER OF SERVINGS PER UNIT/PACKAGE	NUMBER OF GUESTS	UNITS/PACKAGES NEEDED	UNIT/PACKAGE PRICE	TOTAL

Miscellaneous Items			
Item	Quantity	Cost Per Unit	Total

FINAL EXPENSES TABLES

DECORATIONS			
ITEM	QUANTITY	COST PER UNIT/PACKAGE	TOTAL

ENTERTAINMENT			
Item/Activity Type	Quantity	Cost Per Guest	Total

FINAL EXPENSES TABLES

REFRESHMENTS					
ITEM	NUMBER OF SERVINGS PER UNIT/PACKAGE	NUMBER OF GUESTS	UNITS/ PACKAGES NEEDED	UNIT/ PACKAGE PRICE	TOTAL

Miscellaneous Items			
Item	Quantity	Cost Per Unit	Total

Grade 5 Math Assessment: Party Time
FINAL EXPENSE TOTALS

Student Name:_____

Party Categories

Decorations	$
Entertainment	$
Refreshments	$
Miscellaneous Items	$
Total	$

Grade 5 Math Assessment: Party Time
Student Copy

Program and Essential Standards: Problem Solving, Communication, Reasoning, Connections, Representations

Essential question: What math skills do you need to plan a party?

Prewrite Essay Question (must be completed before the task is presented): If you could give a party, what type would you give, how many people would you invite, what would you do? Include a total cost estimate for your party.

Task: Plan an enjoyable party for your family or friends spending at least $75 dollars but not more than $100.
*(**NOTE:** All calculations, research and a list of your resources will be submitted to your teacher.)*

Guidelines:

1. Decide what type of party you will have and include an explanation of your choice.
2. List items needed on the Brainstorming Tables and calculate the expenses you would incur to make this an enjoyable party.
   NOTE: You must spend your money in two or more of the party categories-Decorations, Entertainment, Refreshments, or Miscellaneous Items.
3. Stay within the given budget spending at least $75 but not more than $100.
4. Calculate and record the expenses for the party on the Final Expenses Tables.
5. Provide your sources of information for the cost of supplies such as store ads, websites, list of store prices, etc.
6. Graph expenses on a graph of your choice. Rounding may be used for the purpose of graphing.
7. In paragraph form, explain at least five math skills used in planning your party; for example: "I used addition when I figured the total cost of my party."
8. Prepare an organized presentation including:
   - An introduction and description of the party - activities, menu, length of time allotted for the party
   - One visual aide such as props, poster, food, etc.
   - An explanation of your graphed expenses
9. Turn in to the teacher an organized portfolio including:
   - Your response to the Prewrite Essay Question from above
   - Tables and graphs of expenses
   - All documentation of costs including your sources
   - Your paragraph with your explanation of at least five math skills used to plan the party

Name: _____ Assessment Completion Date: _____

Grade 5 Math Scoring Guide
Assessment Task: Party Time

Plan an enjoyable party for your family or friends spending at least $75 dollars but not more than $100.

Criteria	Level 1 Does Not Meet Standard	Level 2 Progressing Toward Standard	Level 3 Meets Standard	Level 4 Exceeds Standard	Results
Problem Solving, Reasoning	Demonstrates only two criteria listed in Level 3	Demonstrates only three criteria listed in Level 3	▪ Decides on type of party ▪ Lists items needed including cost ▪ Shows calculations with at least 80% accuracy ▪ Stays within budget	In addition to meeting all criteria in Level 3, explains how to invite more people without expanding the budget	
Communication	Demonstrates only one criteria from Guideline #8	Demonstrates only two criteria from Guideline #8	▪ Prepares an organized presentation including all criteria in Guideline #8 to describe the party	In addition to meeting all criteria in Level 3, explains party modifications made from the prewrite essay to the final party plan	
Connections	Explains only three math skills used in planning the party	Explains only four math skills used in planning the party	▪ Explains at least five math skills used in planning the party	In addition to meeting all criteria in Level 3, provides an alternative example of a real-life application using math skills	
Representations	Demonstrates only one criteria listed in Level 3	Demonstrates only two criteria listed in Level 3	▪ Accurately records information on tables ▪ Accurately graphs expenses ▪ Completes portfolio including all items in Guideline #9	In addition to meeting all criteria in Level 3, graphs cost comparisons from two sources	

List any modifications made:

GUIDELINE #8 CRITERIA	GUIDELINE #9 CRITERIA
• Introduce and describe the party - activities, menu, length of time allotted for the party • One visual aide - props, poster, food, etc. • An explanation of graphed expenses	• Prewrite Essay Question • Tables and graphs of expenses • All documentation of costs including sources • Your paragraph with your explanation of at least five math skills used to plan the party

Directions for Use of Grade Level Tally Sheet

1. The teacher will administer the Assessment to his/her students and then rate the individual student's Assessment using the individual **Student Scoring Guide** included in the curriculum guide before proceeding to Step Two.

2. The teacher will need to make copies of the Grade Level Tally Sheet as needed.

3. Once the teacher has completed rating the entire class, the teacher will then complete the Grade Level Tally Sheet transferring the class totals in each category onto the tally sheet.

4. Complete one Grade Level Tally Sheet per grade. Individual classroom teachers from the same grade must gather the results from the individual Student Scoring Guides, combine the results, and enter the total numbers for the entire grade onto one sheet.

5. Submit only <u>one</u> completed Grade Level Tally Sheet to your administrator by the **week of April 22**.

6. The individual teacher will then file the individual Student Scoring Guide in the student's cum folder.

7. The building administrator will then complete the Building Level Tally Sheet using the information from the Grade Level Tally Sheets. The Building Level Tally Sheet is due to the **Catholic School Office by May 1**.

Grade Level Tally Sheet for Grade 5
Math Assessment Task
Party Time

School Name/City:

Assessment Date:

Total # Students Assessed:

Total # Students:

Directions: Complete one sheet per **grade level**. Classroom teacher(s) must gather the results from the individual student scoring guides and enter the totals. Submit only one sheet per grade level to your administrator.

Criteria	Level 1 # Students Not Meeting Standard	Level 2 # Students Progressing Toward Standard	Level 3 # Students Meeting Standard	Level 4 # Students Exceeding Standard	Total Number of Students
Problem Solving, Reasoning					
Communication					
Connections					
Representations					

Directions for Use of Content Checklist

The grade level Content Checklist is designed to accompany the Essential Standards. Faculty discussion will need to take place to ensure consistency in teaching. The administrator should reproduce the Content Checklist and distribute it to all teachers.

The format for the Content Section is as follows:

1. Blank box to record date of instruction of content or to use as a check-off to indicate that instruction of content occurred
2. Numeric system that identifies the specific content statement
3. Content Statement
4. Nebraska Math Standard Reference **(NE)**
5. Program Standard Reference **(PS)**
6. Level of Teacher Instruction:
   Introduce (**I**), Develop **(D**), Master (**M)**

Introduce **(I)**: To provide with a beginning knowledge or first experience of something. No assessment.

Develop **(D**): To progress from simple to more complex through practice. Check for understanding as needed.

Master **(M)**: To gain control over content; to understand and be able to retrieve the specified material for use as needed to maintain proficiency. Must be assessed.

Teachers will use this curriculum as the basis for planning their lessons for the year. Use of the curriculum will assist students in attaining the Standards for which all are accountable. Teachers are required to spend 80% of their time teaching strictly from the curriculum guide with the remaining 20% of their time teaching concepts that enhance the curriculum.

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
	1	**NUMERATION/NUMBER SENSE**			
		Reads and writes place value of: (NE 4.1.1, 5.1.1; PS #5)			
	1.1	-Whole numbers to 1,000,000	**I**	**D,M**	
	1.2	-Decimals to 100ths		**I**	**D,M**
	1.3	-Decimals to 1,000ths		**I**	**D,M**
		Communicates in written, expanded, and standard form using: (NE 3.1.1, 4.1.1; PS #5)			
	1.4	-Whole numbers	**D**	**M**	
	1.5	-Decimals	**I**	**D,M**	
		Orders and compares: (NE 3.1.1, 4.1.1, 5.1.1; PS #1, 5)			
	1.6	-Whole numbers greater than 1,000	**D**	**M**	
	1.7	-Decimals		**I**	**D,M**
	1.8	-Fractions	**I**	**D**	**D,M**
	1.9	-Skip count by 3's	**D,M**		
	1.10	Classifies odd and even numbers (NE 4.1.1; PS #2)	**M**		
		Rounds a given number: (NE 3.1.1, 4.1.1, 5.1.1; PS #1, 5)			
	1.11	-Whole numbers to tens, hundred, thousands	**D**	**M**	
	1.12	-Decimals to any place		**I**	**D,M**
		Identifies and classifies relationships among numbers: (NE 4.1.1, 5.1.1, 6.1.1; #1, 5)			
	1.13	-Divisibility Rule		**I**	**D,M**
	1.14	-Equivalent Fractions	**I**	**D**	**M**
	1.15	-Ratios/Proportions			**I**
	1.16	-Percents			**I**
	1.17	-Prime Numbers/Composite Numbers		**I**	**D,M**
	1.18	-Greatest Common Factor		**I**	**D**
	1.19	-Factors and Multiples		**I,D**	**M**
	1.20	-Least Common Multiple		**I,D**	**D**
	1.21	-Prime Factorization		**I**	**D**
	1.22	-Exponents			**I**
	1.23	Represents a fraction as part of a whole or part of a set (NE 4.1.1; PS #5)	**I,D**	**M**	
	1.24	Locates fractions on a number line (NE 4.1.1; PS #1, 5)	**I,D**	**M**	
	1.25	Writes decimals as fractions (NE 7.1.1; PS #5)		**I**	**D**

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
		NUMERATION/NUMBER SENSE continued			
	1.26	Demonstrates the meaning of multiplication with whole numbers from 0-10 (NE 3.1.3; PS # 1, 5)	**D,M**		
	1.27	Multiplies and divides positive rational numbers fluently (NE 6.1.3; PS #1, 3)	**I**	**D**	**M**
		Recognizes different properties in mathematics: (NE 5.1.2; PS #1, 5)			
	1.28	-Commutative	**D**	**D**	**M**
	1.29	-Distributive			**I,D,M**
	1.30	-Associative	**I**	**D**	**M**
	1.31	-Identity	**I**	**D**	**M**
	1.32	-Zero	**I**	**D**	**M**
	1.33	Orders and compares relationships between whole numbers, fractions and decimals through 1000ths (NE 5.1.1; PS #1, 5)		**I**	**D,M**
	1.34	Uses objects, diagrams and pictures to show mathematical concepts (NE 3.1.2, 4.1.2; PS # 1, 2, 4, 5)	**D**	**M**	
	1.35	Uses related facts to solve and check problems (PS #1)	**I,D**	**M**	
	1.36	Demonstrates simple concepts of integers using temperature (PS #5)	**I**	**D**	**M**
		Uses money to: (PS #4, 5)			
	1.37	-Add combinations with coins and bills	**D**	**M**	
	1.38	-Count back change using fewest coins possible	**I**	**D**	**M**
	1.39	-Calculate change using subtraction	**D**	**D**	**M**
	1.40	-Rounds money to nearest dollar	**I,D**	**M**	
	1.41	Recognizes and applies math ideas in everyday life. (PS #4)	**D**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
	2	**COMPUTATION/ESTIMATION**			
	2.1	Makes estimations and comparisons to actual results (NE 3.1.4; PS #1, 3)	**D,M**		
	2.2	Recognizes symbols of $<, >, \times, \div$ (NE 5.1.2; PS #2)	**D**	**D,M**	
		Develops fluency in estimation of whole numbers: (NE 4.1.3, 5.1.3; PS #1, 2)			
	2.3	-Adding	**D**	**D,M**	
	2.4	-Subtracting	**D**	**D,M**	
	2.5	-Multiplying	**I**	**D**	**M**
	2.6	-Dividing	**I**	**D**	**M**
	2.7	Adds and regroups multi-digit and whole numbers with or without technology (NE 3.1.3, 4.1.3, 5.1.3, 6.1.3; PS #1, 2, 5)	**D**	**M**	
		Subtracting:			
	2.8	-Three digit numbers	**D**	**M**	
	2.9	-Four digit numbers	**I,D**	**M**	
	2.10	-Five digit numbers	**I**	**D,M**	
	2.11	-Six digit numbers	**I**	**D,M**	
	2.12	-Seven digit numbers	**I**	**D**	**M**
		Multiplying:			
	2.13	-Basic facts	**D**	**M**	
	2.14	-Two digit by one digit	**I,D**	**M**	
	2.15	-Two digit numbers	**I**	**D**	**M**
	2.16	-Three digit by one digit	**I,D**	**M**	
	2.17	-Three digit by two digit		**I**	**D,M**
	2.18	-Three digit numbers		**I**	**D**
		Dividing:			
	2.19	-Basic facts	**I**	**D**	**M**
	2.20	-Two digit by one digit	**I**	**D**	**M**
	2.21	-Three digit by one digit		**I,D**	**M**
	2.22	-Four digit by one digit		**I,D**	**M**
	2.23	-Three digit by two digit		**I**	**D**
	2.24	-Four digit by two digit		**I**	**D**
	2.25	Chooses correct operations and solves problems involving one-step solutions (NE 3.1.3; PS #1, 3, 4, 5)	**M**		
	2.26	Chooses correct operations and solves multi-step word problems (NE 3.1.3; PS #1, 2, 3, 4, 5)	**D,M**		
	2.27	Demonstrates and communicates solutions to problems (NE 3.1.3; PS #1, 2, 3, 4, 5)	**M**		
	2.28	Adds, subtracts, and estimates decimals including money with or without technology to 100ths place (NE 4.1.3; PS #2, 5)	**I**	**D,M**	

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
		COMPUTATION/ESTIMATION continued			
	2.29	Multiplies decimals including money with or without technology (NE 5.1.3; PS #2, 5)		**I**	**D,M**
	2.30	Divides decimals by a whole number with or without technology (NE 5.1.3; PS #2, 5)		**I**	**D,M**
		Adds, subtracts, and estimates fractions with our without technology (NE 5.1.3, 6.1.3, 7.1.3; PS #2, 5)			
	2.31	-Proper fractions with common denominators		**I,D**	**M**
	2.32	-Proper fractions with uncommon denominators		**I**	**D**
	2.33	-Improper fractions with common denominators		**I**	**D**
	2.34	-Improper fractions with uncommon denominators		**I**	**D**
	2.35	-Mixed numbers with common denominators		**I**	**D**
	2.36	-Mixed numbers with uncommon denominators		**I**	**D**
	2.37	Multiplies fractions with or without technology (NE 7.1.3; PS #2, 5)			**I**
	2.38	Selects, applies and explains the appropriate method of computation when problem solving (NE 4.1.3, 5.1.3; NE #1, 3)	**I**	**D**	**M**
		Applies multiple strategies when problem solving (NE 4.1.4, 5.1.4, 6.1.4; PS #1, 5)			
	2.39	-Estimation	**D**	**D**	**D**
	2.40	-Rounding	**I**	**D**	**D**
	2.41	-Illustrations	**D**	**D**	**D**
	2.42	-Patterns	**D**	**D**	**D**
	2.43	-Tables	**D**	**D**	**D**
	2.44	-Logic		**I**	**D**
	2.45	-Work backwards	**I**	**D**	**D**
	2.46	-Trial and error	**I**	**D**	**D**
	2.47	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
	3	**MEASUREMENT**			
		Identifies and uses standard and metric units of measurement (NE 3.2.5, 4.2.5; PS #1, 4)			
	3.1	-inches, feet, yard, centimeter	**M**		
	3.2	-cups, pints, quarts, gallons, liters	**D**	**M**	
	3.3	-pounds, grams, kilograms	**D**	**M**	
	3.4	-cents, dollars	**M**		
	3.5	-Fahrenheit, Celsius	**D**	**M**	
		Uses tools to estimate and measure quantities using standard units: (NE 5.25; PS #1, 4, 5)			
	3.6	-Linear measure	**I**	**D**	**M**
	3.7	-Mass/weight	**I**	**D**	**M**
	3.8	-Capacity	**I**	**D**	**M**
	3.9	-Temperature	**I**	**D**	**M**
	3.10	-Angles	**I**	**D**	**M**
		Selects and uses tools to estimate, measure, and solve word problems using metric units: (NE 6.2.5; PS #1, 4, 5)			
	3.11	-Linear measure	**I**	**D**	**D**
	3.12	-Mass/weight	**I**	**D**	**D**
	3.13	-Capacity	**I**	**D**	**D**
	3.14	-Temperature	**I**	**D**	**D**
		Identifies and writes correct time using an analog clock (NE 4.2.5, 5.2.5; PS #1, 2, 4, 5)			
	3.15	-Seconds	**I**	**D**	**M**
	3.16	-Minutes	**D**	**M**	
	3.17	-Decades and centuries	**I**	**D**	**M**
	3.18	-A.M. and P.M.	**D**	**M**	
	3.19	-Elapsed time	**D**	**D**	**M**
	3.20	-Different ways (minutes until, minutes after)	**I**	**D**	**M**
		Converts from one unit to another within the same system: (NE 6.2.5; PS #1, 2, 5)			
	3.21	-Standard	**I**	**D**	**D**
	3.22	-Metric unit	**I**	**D**	**D**
	3.23	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
	4	**GEOMETRY AND SPATIAL CONCEPTS**			
		Identifies, creates, and describes two and three dimensional figures: (NE 5.2.1, 6.2.1, 7.2.1; PS #2, 3, 5)			
		Triangles			
	4.1	-Isosceles, Equilateral, Scalene		**I**	**D**
	4.2	-Acute, Right, Obtuse		**I**	**D**
		Quadrilaterals			
	4.3	-Parallelograms		**I**	**D**
	4.4	-Rectangle, Square	**D**	**D**	**M**
	4.5	-Rhombus		**I**	**D**
	4.6	-Trapezoid		**I**	**D**
		Identifies, creates, and describes geometrical terms: (NE 3.2.1, 4.2.1, 5.2.1, 7.2.5; PS #2, 3, 5)			
	4.7	-Point, Line, Line Segment, Ray	**I, D,M**		
	4.8	-Perpendicular lines. Parallel lines, Intersecting lines	**I**	**D,M**	
	4.9	-Vertex, Face, Edge	**D**	**D,M**	
	4.10	-Space Shapes: cubes, sphere, cone, cylinder, triangular and rectangular prisms and pyramids	**D**	**D**	**M**
	4.11	-Angles -Acute, Obtuse, Right	**I**	**D**	**M**
	4.12	-Straight			**I**
	4.13	-Plane			**I**
	4.14	-Diameter		**I**	**D**
	4.15	-Radius		**I**	**D**
	4.16	-Chord			**I**
	4.17	-Circumference			**I**
	4.18	Measures angles (NE 8.2.1; PS #2, 3)			**I**

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
		GEOMETRY AND SPATIAL CONCEPTS continued			
		Identifies and compares two-dimensional geometrical figures: (NE 3.2.3, 4.2.3, 5.2.3; PS #3, 4, 5)			
	4.19	-Congruence	**I,D**	**M**	
	4.20	-Symmetry	**D,M**		
	4.21	-Similarities	**D**	**D,M**	
	4.22	-Simple transformations	**I**	**D**	**M**
	4.23	Identifies an ordered pair of a plotted point in first quadrant by its location (NE 4.2.2; PS #1, 3)	**I,D**	**M**	
	4.24	Plots the location of an ordered pair in the first quadrant (NE 5.2.2; PS #1, 3)	**I**	**D**	**M**
		Finds perimeter: (NE 5.2.5, 6.2.5; PS #1, 5)			
	4.25	-Triangle, Square, Rectangle	**D**	**D**	**M**
	4.26	-Parallelogram	**I**	**D**	**D**
	4.27	-Trapezoid		**I**	**D**
		Finds area using a formula: (NE 5.2.5, 6.2.5; PS #1, 5)			
	4.28	-Square, Rectangle		**I**	**D,M**
	4.29	-Parallelogram, Trapezoid			**I,D**
		Finds volume using a formula: (NE 6.2.5; PS #1 5)			
	4.30	-Square prism, Rectangular prism		**I**	**D**
	4.31	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**
	4.32	Applies geometric term representations to the real world (NE 4.2, 5.2; PS #4)	**I**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Intermediate Grades 3-5

			Grade	Grade	Grade
		Intermediate Grades	**3**	**4**	**5**
	5	**DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS**			
		Collects, organizes, displays, compares and interprets data: (NE 3.4.1, 4.4.1, 5.4.1, 6.4.1, 8.4.1; PS #5)			
	5.1	-Tables	**I**	**D**	**M**
	5.2	-Charts	**D**	**D**	**M**
	5.3	-Pie graphs	**I**	**D**	**D**
	5.4	-Single bar graphs with more than four categories	**I**	**D**	**M**
	5.5	-Double bar graphs		**I**	**D**
	5.6	-Pictographs	**I**	**D**	**M**
	5.7	-Line graphs	**I**	**D**	**M**
	5.8	Makes predictions based on data to answer questions from tables, bar graphs, line graphs (NE 4.4.2, 5.4.2; PS #1)	**I**	**D**	**M**
		Computes and identifies the probability of outcomes and statistical methods: (NE 6.4.1; PS #1)			
	5.9	-Mean, Median, Mode		**I**	**D**
	5.10	-Range			**I**
	5.11	Performs and records results from a probability experiment (NE 4.4.3, 5.4.3; PS #1, 5)	**I**	**D**	**M**
	5.12	Describes the likelihood of an event (NE 3.4, 6.4.2; PS #1)	**D**	**D**	**D**
	5.13	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**
	6	**ALGEBRAIC CONCEPTS**			
	6.1	Sorts and classifies objects according to more than one attribute (NE 3.3.1; PS #1, 3)	**D,M**		
	6.2	Identifies and creates patterns using words, tables and graphs (NE 3.3.1; PS #3, 5)	**M**		
	6.3	Solves simple one-step whole number equations using addition and subtraction (NE 3.3.3; PS #1, 5)	**I,D,M**		
	6.4	Represents the idea of a variable as an unknown quantity using a letter or symbol (NE 4.3.3; PS #1, 5)	**I**	**D,M**	
	6.5	Explains the procedure used in solving simple one-step whole number equations (NE 4.3.3; PS #1, 2)	**I**	**D,M**	
	6.6	Uses and interprets variables and mathematical symbols to write and solve one-step equations (NE 6.3; PS #2, 5)	**I**	**D**	**D**
	6.7	Uses symbols to understand orders of operation (NE 6.3; PS #2, 5)		**I**	**D**
	6.8	Uses input/output table to identify and extend patterns (PS #1, 3, 4, 5)	**D**	**D**	**D**
	6.9	Identifies and graphs ordered pairs using positive integers (PS #1, 2, 3, 4, 5)	**I**	**D**	**D**
	6.10	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**

Curriculum Guide Glossary

Assessment - The deliberate use of many methods (teacher observation, self-assessment, survey, test, interview, performance, task, etc.) to gather evidence that indicates if students are meeting Standards through essential learning. Through thoughtful observations and professional judgment, a teacher is able to assess individual student's strengths and weaknesses. The teacher is then able to offer the student clear and helpful feedback. Assessment results are used: to identify instructional practices that need to change; to provide a focus for on-going professional development; and to provide supplemental instructional resources for learners.

Assessment Task Guidelines - Specific directions for students to follow as they complete the Assessment Task.

Essential Question - Points to the essence of what you believe students should examine and know in their course of study. The Essential Question is a conceptual commitment. When a teacher or group of teachers selects a question to frame and guide curriculum design, it is a declaration of intent. In a sense you are saying, "This is our focus for learning. I will put my teaching skills into helping my students examine the key concept implicit in the Essential Question." Student Assessment should focus on essential learning.

Essential Standards - Target what students will know and be able to do at each grade level. Essential Standards support Program Standards, are few in number, and move from simple to complex through grade levels. They address many of the same concepts and topics from primary to senior high school, but the sophistication and detail will increase. Essential Standards define the goals set forth in the Program Standards and state concepts and skills of significance taught at each level. They provide a bridge between the Program Standards and the Content. They require mastery by all students and are able to be assessed.

Grade Level Tally Sheet – The reporting form that records Assessment results completed by grade level teacher(s). The form is given to the building administrator who then completes the Building Level Tally Sheet that is sent to the Catholic Schools Office.

Performance Assessment - A variety of tasks and real life situations in which students are given opportunities to demonstrate their understanding and to thoughtfully apply knowledge, skills, and lifelong learning skills in a variety of contexts. These Assessments often occur over time and result in a tangible product or observable performance. They encourage self-evaluation and revision, require judgment to score, reveal degrees of proficiency based on established criteria, and make public the scoring criteria. Performance Assessments recognize that there is more than one way to show a "right" answer.

Program Standards - Concept-based, general expectations of what a student should know and be able to do. They are few in number and general in scope. They reflect the scope of the total program in a given subject area. They require mastery by all students and are able to be assessed.

Standards - General expectations of academic excellence that indicate what a student should know and be able to do.

Standards-based curriculum – A curriculum based on Standards with use of Standards-based Assessments. The premise is that all students will learn and achieve, and ideally all students can achieve proficiency. Time is variable but expectations of students are consistent. The curriculum provides a framework for the teachers. Teachers align their instruction to meet the Standards by asking themselves to what Standard does this activity relate.

Student Scoring Guide - A document that describes student performance on a specific task. The descriptions in the Student Scoring Guide clearly differentiate levels of performance, such as "Exceeds Standard, Meets Standard, Progressing Toward Standard, or Does Not Meet Standard". The Student Scoring Guide contains the rubrics which are the specific rules written in student language and linked to the Standards.

Task - An activity, exercise, or problem given to students to perform.

Time Frame - The recommended time allotted for students to complete the Assessment.

MIDDLE SCHOOL GRADES 6-8

For successful implementation, all teachers need to read, understand and utilize all pieces of information within their section beginning with the Curriculum Implementation Map.

- **MATH PROGRAM AND ESSENTIAL STANDARDS**
- **CURRICULUM IMPLEMENTATION MAP**
- **DIRECTIONS FOR ADMINISTRATION OF PERFORMANCE ASSESSMENT**
- **DIRECTIONS FOR USE OF SCORING GUIDE**
- **TEACHER NOTES/RESOURCES**
- **PERFORMANCE ASSESSMENT**
- **STUDENT SCORING GUIDE**
- **DIRECTIONS FOR USE OF GRADE LEVEL TALLY SHEET**
- **GRADE LEVEL TALLY SHEET**
- **DIRECTIONS FOR USE OF CONTENT CHECKLIST**
- **CONTENT CHECKLIST**
- **CURRICULUM GUIDE GLOSSARY**

Math Program and Essential Standards
Grades 6-8

Program Standard #1: PROBLEM SOLVING

Essential Standard #1: Apply strategies to solve problems

Program Standard #2: COMMUNICATION

Essential Standard #2: Describe and differentiate between mathematical processes

Program Standard #3: REASONING

Essential Standard #3: Apply fundamental properties of mathematics to justify answers

Program Standard #4: CONNECTIONS

Essential Standard #4: Explain how mathematical ideas interconnect

Program Standard #5: REPRESENTATIONS

Essential Standard #5: Collect and draw conclusions using mathematical data

Curriculum Implementation Map

ONGOING ACTIVITIES

Administrator's role:

- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:

- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

AUGUST

Administrator's role:

- Begin looking at calendar to schedule time for faculty to work on curriculum implementation. Allow time each quarter for curriculum work.
- Meet with faculty to review and study Assessments and Student Scoring Guides that will be used for the year.
- Meet with faculty to align school curriculum with the Archdiocesan Curriculum.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

Teacher's role:

- Plan instruction based on the Standards.
- After you have aligned the curriculum, meet by grade levels (K-2, 3-5, etc) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for the year.
- Determine pieces of content, lessons, or units that are essential to meeting the Standards and Assessments.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

SEPTEMBER

Administrator's role:

- Consider sending home communication to parents via newsletter briefly explaining the implementation of the Standards, Curriculum and the Assessments. We recommend that you attach a copy of the Program Standards.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used, and determine Assessment dates for first semester Assessments. Discussion needs to begin on determining dates for the second semester Assessments as well.

Teacher's role:

- Meet with Level teachers to create an example of a completed Assessment that can be shared with students.
- Display the Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Explain Essential Standards to students.
- Work with Level teachers to schedule dates for the Assessment.
- Report Assessment dates to the Key Person (grade level coordinator/curriculum coordinator) in charge of your level or the Key Person in your building.
- Distribute the assigned Assessment Task Guidelines and Student Scoring Guide sheet to students.
- Go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age-appropriate language if needed.
- Share the Assessment example with students.
- Begin teaching to the Standards.

OCTOBER

Administrator's role:

- Contact the CSO for assistance as needed.
- In early October, receive Assessment dates from Key People (grade level coordinator/curriculum coordinator) and place in the school calendar.
- Share information with faculty checking progress; allow time for work in levels.

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Continue to share the Assessment example with students.

NOVEMBER

Administrator's role:

- Share information with faculty checking for progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Allow time for teachers to work in levels.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Administer the first semester Assessment.

DECEMBER

Administrator's role:

- Collect Grade Level Tally Sheets from the faculty who administered an Assessment.
- Share information with faculty and allow time for work in levels.
- Allow time with faculty to review the curriculum implementation process and discuss questions or concerns in planning next semester.
- Collect comments to be shared with CSO.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- Meet with Level teachers to discuss student's ratings on first semester Assessments in order to plan for the rest of the year.
- Turn in Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the first semester Assessment and Student Scoring Guide to be used in the future.
- Place Student Scoring Guide in student's cumulative folder.

Spring Semester Time Line

ONGOING ACTIVITIES

Administrator's role:
- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

JANUARY

Administrator's role:
- Look at calendar to schedule time for faculty to work on curriculum implementation.
- Consider sending home communication to parents via newsletter briefly explaining the implementation of Standards, Curriculum, and Assessments.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used second semester.
- Remind faculty that the deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:
- If you have not done so yet, align the curriculum by grade level (K-2, 3-5, etc.) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for second semester.
- Meet with Level teachers to create an example of the Assessment that can be shared with students.
- Work with Level teachers to schedule dates for the Assessment. Report Assessment dates to Key Person (grade level coordinator/curriculum coordinator) in charge in your building.
- If you have not done so yet, display the Program Standards and Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Continue working with students on curriculum as they prepare for the Assessment.
- Explain/Review Standards displayed in the classroom with students.
- Distribute the assigned Assessment and Student Scoring Guide sheet to students.
- Explain/Review the Assessment Task Guidelines, Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age appropriate language if needed.
- Share your Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send the Grade Level Tally Sheet to administrator.

FEBRUARY

Administrator's role:
- Share information with faculty checking progress.
- Allow time for faculty to work in levels.
- Check with Key People (grade level coordinator/curriculum coordinator) on dates for the Assessments.
- Place Assessment dates in the school calendar.
- Contact the CSO as needed for assistance.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue working with students on curriculum as they prepare for the Assessment.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send Grade Level Tally Sheet to administrator.

MARCH

Administrator's role:

- Share information with faculty checking progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Share information with faculty and allow time for work in levels.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.

APRIL

Administrator's role:

- Share information with faculty and allow time for work in levels.
- Remind teachers of deadline for reporting to the building administrator is the **week of April 22.**
- Collect Grade Level Tally Sheets and transfer information to the Building Level Tally Sheet.
- Send the completed Building Level Tally Sheet to the **Catholic Schools Office by May 1.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.

MAY

Administrator's role:

- Send completed Building Level Tally Sheet to the CSO if you have not done so yet.
- Allow time with faculty to review the curriculum implementation program and discuss questions or concerns in planning next year.
- Collect comments/revisions to be shared with CSO.
- Submit comments/revisions to the CSO.

Teacher's role:

- Meet with Level teachers to discuss student's ratings on Assessment in order to plan for next year.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the Assessment and Student Scoring Guide to be used next year.
- Place individual Student Scoring Guide in student's cumulative folder.

Directions for Administration of the Performance Assessment

*Refer to the **Curriculum Guide Glossary** found in this section of the Math Curriculum Guide to assist you with the terminology.*

Before the school year begins, the teacher will read through the entire curriculum to assist with mapping instruction for the year. In doing so, the teacher will have read through the Assessment Task Guidelines and Student Scoring Guide to know when in the year to place the instruction that will precede the administration of the Assessment. The Assessment should flow from the curriculum. The Assessment should not be an "add on" tacked on at the end of the school year merely to meet minimum guidelines from the Archdiocese and the State of Nebraska. When used properly, the Assessment and Student Scoring Guide provide the teacher with additional information about individual student learning.

1. **At the beginning of the school year**, the teacher will have gone through the curriculum guide and mapped an instructional plan for the year based on the Curriculum Implementation Map found in the Math Curriculum Guide. The teacher will then base the foundation of planning on the M-mastery (proficiency) identified pieces of content in the grade level Content Checklist.

2. The teacher will find the Assessment Task Guidelines and Student Scoring Guide in the specific grade level section of the curriculum. The teacher will provide each student with both the Assessment and the Student Scoring Guide at the beginning of instruction so that expectations about performance are clearly understood. The teacher will explain the purpose for the Assessment and Student Scoring Guide to the class and allow time for questions about the Assessment process.

3. It is important for the teacher and the students to understand that students are rated for proficiency on the Assessment which is recorded on the Student Scoring Guide. As a criterion-referenced test, the Performance Assessments are designed for the individual student to show what he/she knows. Scoring results from all K-12 Archdiocesan schools will be reported to the Catholic Schools Office.

4. The instruction of all guidelines for the Assessment must take place before the Assessment is administered. The teacher will accomplish this by preparing and teaching one piece of content from the guideline at a time. The teacher will always refer back to how this instruction will assist students when they take the Assessment. The teacher may need to seek additional resources to teach some of the guidelines as some of the content may not be present in the textbook.

5. While successful instruction of the Assessment Task Guidelines is taking place, the teacher will assign the Assessment Task to the students providing them with class time as directed by the teacher.

6. The students will be given a date for completion determined by the teacher. The Assessment may need to be modified for some students. Consideration will need to be given to those students on an IEP or 504 Plan. The teacher will determine any adjustments needed with the help of the administrator or school counselor.

7. The teacher will collect the Assessments and rate them for proficiency completing the Student Scoring Guides.

8. We know that all students can learn and succeed but not on the same day or in the same way. Teachers may need to allow a student(s) some additional time or give the student(s) another chance to show what they know if the student(s) have not achieved a proficiency rating of Level 3, "Meets Standard".

9. When the teacher has completed the rating on all students, the teacher will then complete the Grade Level Tally Sheet for reporting to the Archdiocese. Once the Grade Level Tally Sheet has been completed, the teacher will place the Student Scoring Guide in the individual student's cumulative file.

10. The teacher will then take the completed Grade Level Tally Sheet to the building administrator who will then complete the Building Level Tally Sheet and send it to the Catholic Schools Office.

Directions for Use of the Student Scoring Guide

The teacher will note the information that was shared in the **"Directions for Administration of the Performance Assessment"**. If the teacher has not read this information, please do so before proceeding.

It is important to understand that the teacher is rating student proficiency in the identified areas listed on the "Student Scoring Guide" for Archdiocesan reporting purposes.

1. Initially, the teacher will fill in the student name information and the date assessed unless the student has completed this for the teacher.

2. The teacher will read the Student Scoring Guide and rate each piece of criteria that is required. For example, "Problem Solving" might be the first criterion listed. The teacher will go to the column with the Level 3 heading, "Meets Standard", to check if the student completed the required work assigned under "Content". If the student completed all the required pieces, then the teacher will mark a "3" under the Results column for "Content". If a student has exceeded the Standard by completing the required work in Level 4, "Exceeds Standard", then the teacher will mark a "4" under the Results column. If the student is missing some of the required work, the teacher will look at Level 2, "Progressing Toward Standard", and Level 1, "Does Not Meet Standard", to mark the appropriate rating in the Results column.

3. The teacher will repeat this process for each identified criterion that needs to be rated.

4. The teacher's next step is to transfer the students' totals from the Student Scoring Guide to the "**Grade Level Tally Sheet"**. Directions for use of the Grade Level Tally Sheet follow in this section.

5. The teacher will then place the Student Scoring Guide in the individual student's cumulative file to fulfill the State of Nebraska's requirement for criterion-referenced testing. As an official document, the Student Scoring Guide is considered part of the student's permanent file.

Math Assessment Grade 7
Christmas Shopping Trip
Teacher Notes

Essential Question: **How does the use of percents apply to a real-life situation?**

Program and Essential Standards

- **Problem Solving**
- **Communication**
- **Reasoning**
- **Connections**
- **Representations**

Lifelong Learning Skills

- **Percent Use**
- **Research**
- **Problem Solving**
- **Reasoning Skills**
- **Presentation**

Administration Time: Grade 7, 2nd Semester

Suggested Time Frame: One week

Guidelines for Teachers

1. Although the Administration Time says 2nd Semester, the Assessment can be completed after your percent unit but before the deadline.
2. Students should collect all purchasing information, including restaurant items, outside of class. If the student does not have access to newspapers or computers at home, accommodations may need to be made at school. Many restaurant menus are available online.
3. Teachers should talk with students about sales tax in the area that the student is shopping, restaurant tax if applicable, and a customary/appropriate amount to tip.
4. All students should show work with the percent problems. Teachers should allow for use of calculators to provide accuracy when students are working the percent problems.
5. Allow 2 class periods for calculations, 1 period for compiling report information, and 2 periods for presentations.
6. Reports may be presented orally to the whole class (via power point or verbally) or to the classroom teacher. (Teacher discretion)
7. **Students who wish to score Level 4 on the rubric must complete all aspects of the project without teacher intervention or assistance.**
8. **Optional:** Supplemental worksheets and an Optional Scoring Guide are provided, and may be used at the teacher's discretion.

The Optional Scoring Guide may be used to convert the score to a letter or percent grade It is not meant to replace the Archdiocesan Scoring Guide, but can be used in addition to the Scoring Guide.

Archdiocesan Math Assessment
Christmas Shopping Trip

Name _____

Directions: Fill in the blanks and show your work.

FOUR GIFTS

Gift One: _____

a.)Regular Price $_____

b.)Percent of Discount _____c.)Amount of Discount $_____

d.)Sale Price after discount $_____

e.)Sales Tax Percent _____f.)Amount of Tax $_____

g.)Total Price of Gift $_____

WORK :

Gift Two:_____

a.)Regular Price $_____

b.)Percent of Discount _____c.)Amount of Discount $_____

d.)Sale Price after discount $_____

e.)Sales Tax Percent _____f.)Amount of Tax $_____

g.)Total Price of Gift $_____

WORK :

Gift Three:_____

a.)Regular Price $_____

b.)Percent of Discount _____c.)Amount of Discount $_____

d.)Sale Price after discount $_____

e.)Sales Tax Percent _____f.)Amount of Tax $_____

g.)Total Price of Gift $_____

WORK :

Gift Four:_____

a.)Regular Price $_____

b.)Percent of Discount _____c.)Amount of Discount $_____

d.)Sale Price after discount $_____

e.)Sales Tax Percent _____f.)Amount of Tax $_____

g.)Total Price of Gift $_____

WORK :

5. **Restaurant Bill for 4 People**

Main Entrée _____ a.)Amount_____

Drink _____ b.)Amount_____

Dessert _____ c.)Amount_____

d.)Total $_____

e.)Restaurant Tax _____f.)Amount of Tax $_____

g.)Total with Tax $_____

h.)Tip _____% or greater _____i.)Amount of Tip $_____

j.)Total with Tip $_____

WORK :

6.) **Grand Total for the day (Shopping Trip and Meal) $_____**
WORK:

7.) Address the following questions either orally or in writing:

a.) Do you think you made wise purchases? Why or why not?

_____

_____

_____

_____

_____

b.) Would you make any changes to what you purchased? Why or why not?

_____

_____

_____

_____

_____

c.) Was the amount you spent realistic? Explain your reasoning.

d.) Explain another situation in which you could use percents outside of the classroom?

e.) Do you think this project strengthened your understanding of how to use percents outside of the classroom? Why or why not?

Christmas Shopping Trip
Optional Scoring Guide

Problem Solving

_____(15) Calculations correct for presents purchased (including tax 7%)

_____(15) Calculations correct for the restaurant bill/tip (15%)

_____(10) Correct grand total

_____ Total (40) Arch score _____

Written Report – Communication, Reasoning, Representations

_____(5) Includes cover page

_____(5) Includes copies of ads from Shopping Trip and menu list from the Meal

_____(10) Calculations included – neat and organized

_____(5) List final grand total of the day's cost

_____(10) Answers all questions asked

_____ (5) Neat, organized, and easy to read

_____ Total (40) Arch score _____

Connections

_____(5) Lists the four presents purchased with original price, percent of discount, sale price

_____(5) Accurately completes all required Shopping Trip Guidelines

_____(5) Lists the food items purchased and price for each of the four (or more) family members/friends, which includes drink, main entrée, and dessert

_____ (5) Accurately completes all required Meal Guidelines

_____ Total (20) Arch score _____

_____ (100) **Total Project Score** **<u>Equivalent to One Chapter Test Score</u>**

Math Assessment Grade 7
Christmas Shopping Trip
Student Copy

Program and Essential Standards

- **Problem Solving**
- **Communication**
- **Reasoning**
- **Connections**
- **Representations**

Essential Question: How does the use of percents apply to a real-life situation?

Task: You are going Christmas shopping and are to buy presents for at least four family members and/or friends. At the end of your shopping trip, you will go out to eat at a sit-down restaurant.

Guidelines:

For the Shopping Trip

1. List the four presents you choose to purchase.
2. Find items either in newspaper ads or online that are on sale.
3. The ad should include the percent of discount or you will need to calculate the percent of discount given the original price and discount price.
4. In class, you will use the rules for percents to show the original price, the sale price, percent discount, and final purchase price including the sales tax for each item.
5. Calculate a grand total for your shopping trip.

For the Meal

6. Choose a restaurant where a tip would be expected. (Not a fast food place.)
7. List the name of the restaurant, each food item you ordered, and the price of each item. The meal should include a drink, main entrée, and dessert for at least four people.
8. In class, use the rules for percents to show your grand total including tax and tip.

Presentation

9. Your written report should have a cover page and be neat, organized and easy to read.
10. It should include a hard copy of the ads from the Shopping trip and the menu list from the Meal.
11. All calculations should be included in the report.
12. A final grand total for the day of shopping and eating should be included.
13. Address the following questions either in writing or orally.
    a. Do you think you made wise purchases? Why or why not?
    b. Would you make any changes to what you purchased? Why or why not?
    c. Was the amount you spent realistic? Explain your answer.
    d. Explain another situation in which you could use percents outside of the classroom.
    e. Do you think this project strengthened your understanding of how to use percents outside of the classroom? Why or why not?

Name:_____ Date:_____

Student Scoring Guide Grade 7
Assessment Task: Christmas Shopping Trip

Task: You are going Christmas shopping and are to buy presents for at least four family members and or friends. At the end of your shopping trip, you will go out to eat at a sit down restaurant.

Criteria	Level 1 Does Not Meet Standard	Level 2 Progressing Toward Standard	Level 3 Meets Standard	Level 4 Exceeds Standard	Results
Problem Solving	No formulas or calculations are correct	Some formulas are correct with some calculation errors	▪ All formulas and calculations are correct	Meets Level 3 criteria without teacher intervention or assistance	
Communication, Reasoning, Representations	Demonstrates none of the criteria listed in Level 3	Demonstrates only one of the criteria listed in Level 3	▪ Submits an organized, neat written report with cover page, ads, menu list, and calculations ▪ Thoroughly answers and explains all Presentation questions	Meets Level 3 criteria without teacher prompts	
Connections	Does not complete Guidelines	Completes Guidelines with some inaccuracies	▪ Accurately completes all required Shopping Trip Guidelines (below) ▪ Accurately completes all required Meal Guidelines (below)	Meets Level 3 criteria without teacher intervention or assistance	

SHOPPING TRIP GUIDELINES

1. List the four presents you choose to purchase.
2. Find items in newspaper ads or online that are on sale.
3. The ad should include the percent of discount or you will need to calculate the percent of discount given the original price and discount price.
4. Use the rules for percents to show the original price, the sale price, percent discount, and final purchase price including the sales tax for each item.
5. Calculate a grand total for your shopping trip.

MEAL GUIDELINES

1. Choose a restaurant where a tip would be expected. (Not a fast food place.)
2. List the name of the restaurant, each food item you ordered, and the price of each item. The meal should include a drink, main entrée, and dessert for at least four people.
3. Use the rules for percents to show your grand total including tax and tip.

List any modifications made:

Directions for Use of Grade Level Tally Sheet

1. The teacher will administer the Assessment to his/her students and then rate the individual student's Assessment using the individual **Student Scoring Guide** included in the curriculum guide before proceeding to Step Two.

2. The teacher will need to make copies of the Grade Level Tally Sheet as needed.

3. Once the teacher has completed rating the entire class, the teacher will then complete the Grade Level Tally Sheet transferring the class totals in each category onto the tally sheet.

4. Complete one Grade Level Tally Sheet per grade. Individual classroom teachers from the same grade must gather the results from the individual Student Scoring Guides, combine the results, and enter the total numbers for the entire grade onto one sheet.

5. Submit only <u>one</u> completed Grade Level Tally Sheet to your administrator by the **week of April 22**.

6. The individual teacher will then file the individual Student Scoring Guide in the student's cum folder.

7. The building administrator will then complete the Building Level Tally Sheet using the information from the Grade Level Tally Sheets. The Building Level Tally Sheet is due to the **Catholic School Office by May 1**.

Grade Level Tally Sheet for Grade 7
Math Assessment Task
Christmas Shopping Trip

School Name/City:

Assessment Date:

Total # Students Assessed:

Total # Students:

Directions: Complete one sheet per **grade level**. Classroom teacher(s) must gather the results from the individual student scoring guides and enter the totals. Submit only one sheet per grade level to your administrator by the **week of April 22**.

Criteria	Level 1 # Students Not Meeting Standard	Level 2 # Students Progressing Toward Standard	Level 3 # Students Meeting Standard	Level 4 # Students Exceeding Standard	Total Number of Students
Problem Solving					
Communication, Reasoning, Representations					
Connections					

Directions for Use of Content Checklist

The grade level Content Checklist is designed to accompany the Essential Standards. Faculty discussion will need to take place to ensure consistency in teaching. The administrator should reproduce the Content Checklist and distribute it to all teachers.

The format for the Content Section is as follows:

1. Blank box to record date of instruction of content or to use as a check-off to indicate that instruction of content occurred
2. Numeric system that identifies the specific content statement
3. Content Statement
4. Nebraska Math Standard Reference **(NE)**
5. Program Standard Reference **(PS)**
6. Level of Teacher Instruction:
   Introduce (**I**), Develop **(D**), Master (**M)**

Introduce **(I)**: To provide with a beginning knowledge or first experience of something. No assessment.

Develop **(D**): To progress from simple to more complex through practice. Check for understanding as needed.

Master **(M)**: To gain control over content; to understand and be able to retrieve the specified material for use as needed to maintain proficiency. Must be assessed.

Teachers will use this curriculum as the basis for planning their lessons for the year. Use of the curriculum will assist students in attaining the Standards for which all are accountable. Teachers are required to spend 80% of their time teaching strictly from the curriculum guide with the remaining 20% of their time teaching concepts that enhance the curriculum.

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	1	**NUMERATION/NUMBER SENSE**			
		Reads and writes place values of: (NE 6.1.1; PS #5)			
	1.1	--Whole numbers from millions to trillions	**D,M**		
	1.2	--Decimals from thousandths to the millionths	**D,M**		
		Recognizes, classifies and compares: (NE 6.1.1, 7.1.1, 8.1.1, 12.1.1; PS #1, 2, 3, 4, 5)			
	1.3	--Natural numbers	**I,D,M**		
	1.4	--Whole numbers	**M**		
	1.5	--Integers	**I**	**D**	**M**
	1.6	--Rational numbers	**I**	**D**	**M**
	1.7	--Real numbers	**I**	**D**	**M**
	1.8	--Irrational numbers	**I**	**D**	**M**
	1.9	--Absolute values	**I**	**D**	**D**
		Determines and recognizes equivalences among fractions, decimals, and percents: (NE 7.1.3, 8.1.3; PS #1, 4)			
	1.10	--Ratios	**D**	**M**	
	1.11	--Proportions	**D**	**M**	
	1.12	--Percents	**D**	**M**	
		Writes numbers in: (NE 6.1.1, 7.1.1; PS #5)			
	1.13	--Prime factorization form	**D,M**		
	1.14	--Expanded exponential form	**D,M**		
	1.15	--Scientific notation	**I, D**	**M**	
		Identifies and uses: (NE 6.1.1, 7.1.1, 8.1.1; PS #1, 2, 3, 4, 5)			
	1.16	--Greatest common factor	**D**	**M**	
	1.17	--Least common multiple	**D**	**M**	
	1.18	--Rules of divisibility	**I**	**D**	**M**
	1.19	Solves problems involving percents (NE 7.1.3; PS #1, 2)	**I**	**D,M**	

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	1	**NUMERATION/NUMBER SENSE continued**			
		Understands the meaning of: (NE 8.1.3; PS #1, 2, 3, 4, 5)			
	1.20	--Powers	**I**	**D**	**M**
	1.21	--Square roots	**I**	**D**	**M**
		Identifies and uses: (NE 8.3.3; PS #1, 2, 3, 4, 5)			
	1.22	--Commutative Properties	**I**	**D**	**M**
	1.23	--Associative Properties	**I**	**D**	**M**
	1.24	--Distributive Property	**I**	**D**	**M**
	1.25	--Identity Properties	**I**	**D**	**M**
	1.26	--Inverse Properties	**I**	**D**	**M**
	1.27	Understands and applies the order of operations (NE 8.1.3; PS #1, 2, 3, 4, 5)	**D**	**D**	**M**
	1.28	Demonstrates the meaning of arithmetic operations with integers (NE 8.1.2; PS #1, 2, 3)	**I**	**D**	**M**
	1.29	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	2	**COMPUTATION/ESTIMATION**			
	2.1	Multiplies and divides positive rational numbers fluently (NE 6.1.3; PS #1, 3)	**D,M**		
		Adds, subtracts, multiplies, and divides with or without appropriate use of technology: (NE 8.1.3; PS #1, 5)			
	2.2	--Whole Numbers	**M**		
	2.3	--Decimals	**D,M**		
	2.4	--Proper fractions with common and uncommon denominators	**D**	**M**	
	2.5	--Improper fractions with common and uncommon denominators	**D**	**M**	
	2.6	--Mixed numbers with common and uncommon denominators	**D**	**M**	
	2.7	--Integers	**I**	**D**	**M**
	2.8	Uses estimation with decimal operations (NE 8.1.4; PS #1, 5)	**I,D,M**		
	2.9	Identifies the appropriate operation and does the correct calculations when solving word problems (NE 8.1.3; PS# 1)	**D**	**D**	**M**
		Solves problems with or without appropriate use of technology: (NE 6.1.3, 7.1.3, 8.1.3, 12.1.3; PS #1)			
	2.10	--Whole numbers	**D,M**		
	2.11	--Rational numbers	**D**	**D**	**M**
	2.12	--Decimals	**D**	**M**	
	2.13	--Ratios	**I**	**D,M**	
	2.14	--Proportions	**I**	**D,M**	
	2.15	--Percents	**I,D**	**M**	
	2.16	--Integers		**I**	**D**
		Uses proportions to solve scale-model problems using: **(**NE 8.1.3; PS #1, 3, 4, 5)			
	2.17	-- Whole numbers	**I,D**	**M**	
	2.18	-- Fractions/mixed numbers	**I,D**	**M**	
	2.19	-- Decimals	**I,D**	**M**	

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	2	**COMPUTATION/ESTIMATION continued**			
	2.20	Applies the order of operations to solve problems with or without appropriate use of technology (NE 8.1.3, 12.1.3; PS #1)	**D**	**D**	**D**
		Applies strategies when solving problems with and without appropriate use of technology: (NE 7.1.3, 8.1.3, 12.1.3; PS #1, 3, 4)			
	2.21	--Estimation	**D**	**M**	
	2.22	--Rounding	**D**	**M**	
	2.23	--Illustrations	**D**	**D**	**M**
	2.24	--Patterns	**D**	**D**	**M**
	2.25	--Tables	**D**	**M**	
	2.26	--Logic	**D**	**D**	**D**
	2.27	--Trial and error	**D**	**D**	**D**
	2.28	--Working backwards	**D**	**D**	**D**
	2.29	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**
	3	**MEASUREMENT and DATA**			
		Selects and uses measurement tools to measure quantities for: (NE 6.2.5, 8.25; PS #1, 2, 4, 5)			
	3.1	--Temperature	**M**		
	3.2	--Time, Elapsed Time	**M**		
	3.3	--Distance	**M**		
	3.4	--Capacity	**D**	**M**	
	3.5	--Weight/mass in standard units	**D**	**M**	
	3.6	--Weight/mass in metric units	**D**	**M**	
		Converts from one unit to another within the same system: (NE 8.2.5; PS #1, 2, 3, 4, 5)			
	3.7	--Standard units	**D**	**D,M**	
	3.8	--Metric units	**D**	**D,M**	
	3.9	Identifies solutions using rates (NE 8.1.3; PS #1, 4, 5)	**I**	**D**	**M**
	3.10	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	4	**GEOMETRY/SPATIAL CONCEPTS**			
		Identifies, classifies, and describes two-dimensional geometric polygons: (NE 7.2.1, 8.2.1; PS #2, 3)			
		--Triangles			
	4.1	--Classification by Sides	**D**	**M**	
	4.2	--Classification by Angles	**D**	**M**	
		--Quadrilaterals			
	4.3	--Parallelogram	**D**	**M**	
	4.4	--Rectangle	**D**	**M**	
	4.5	--Square	**D**	**M**	
	4.6	--Rhombus	**D**	**M**	
	4.7	--Trapezoid	**D**	**M**	
	4.8	--Multisided figures up to 10 sides	**D**	**M**	
	4.9	--Prisms	**I,D**	**M**	
	4.10	--Pyramids	**I,D**	**M**	
	4.11	--Cylinders	**I,D**	**M**	
	4.12	--Spheres	**I,D**	**M**	
	4.13	--Cones	**I,D**	**M**	
		Identifies and describes basic plane geometric figures: (NE 8.2.1 12.2.1; PS #2, 3)			
	4.14	--Planes	**D**	**D**	**M**
	4.15	--Transversal	**I**	**D**	**D**
	4.16	--Measures Angles	**D,M**		
	4.17	--Classifies Angles – Acute, Right, Obtuse, Straight	**M**		
	4.18	--Complementary	**I**	**D**	**D**
	4.19	--Supplementary	**I**	**D**	**D**
	4.20	--Vertical		**I,D**	**D**
	4.21	--Corresponding		**I,D**	**D**
	4.22	--Alternate Interior		**I,D**	**D**
	4.23	--Alternate Exterior		**I,D**	**D**

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	4	**GEOMETRY/SPATIAL CONCEPTS continued**			
		Describes relationships of: (NE 8.2.1; PS #1, 2, 3, 5)			
	4.24	--Congruence	**I**	**D**	**M**
	4.25	--Similarity	**I**	**D**	**M**
	4.26	--Symmetry	**I**	**D**	**M**
	4.27	Identifies and uses the Pythagorean Theorem (NE 8.2.5 12.2.1; PS # 1, 2, 3, 5)		**I**	**D**
		Uses formulas to solve perimeter/circumference: (NE 6.2.5, 8.2.5; PS #1, 2, 3, 4, 5)			
	4.28	--Triangle	**I**	**D**	**M**
	4.29	--Parallelogram	**M**		
	4.30	--Trapezoid	**D**	**D**	**M**
	4.31	--Circle	**I**	**D**	**M**
		Uses formulas to solve area: (NE 8.2.5; PS #1, 2, 3, 4, 5)			
	4.32	--Triangle	**I**	**D**	**M**
	4.33	--Parallelogram	**D**	**D**	**M**
	4.34	--Trapezoid	**D**	**D**	**M**
	4.35	--Circle	**I**	**D**	**M**
		Uses formulas to solve surface area and volume: (NE 8.2.5, 12.2.5; PS #1, 2, 3, 4, 5)			
	4.36	--Rectangular Prisms	**I**	**D**	**D**
	4.37	--Cylinders		**I,D**	**D**
	4.38	--Cones		**I,D**	**D**
	4.39	--Pyramids		**I,D**	**D**
	4.40	--Spheres		**I,D**	**D**
		Applies transformations to two- and three-dimensional geometric figures by using: (NE 12.2.3; PS #1, 3, 4, 5)			
	4.41	--Translations	**I**	**D**	**D**
	4.42	--Rotation	**I**	**D**	**D**
	4.43	--Reflection	**I**	**D**	**D**
	4.44	--Scale (dilations)		**I**	**D**
	4.45	Applies geometric terms and representations to the real world (NE 12.2.5; PS #4, 5)	**I**	**D**	**D**

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	5	**DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS**			
		Selects and creates appropriate graphical representations of data: (NE 7.4.1, 8.4.1, 12.4.1; PS #1, 3, 4, 5)			
	5.1	-- Multiple Bar graphs	**D**	**M**	
	5.2	--Histograms	**I**	**D**	**D**
	5.3	--Circle graphs	**D**	**D**	**D**
	5.4	--Line graphs	**D**	**D**	**M**
	5.5	--Scatter plots	**I**	**D**	**D**
	5.6	--Venn diagrams	**I**	**D**	**D**
	5.7	Computes mean, median, mode, and range (NE 6.4.1; PS #1, 2, 3, 5)	**D,M**		
	5.8	Compares the mean, median, mode and range from two sets of data (NE 6.4.1; PS #1, 2, 3, 5)	**I,D,M**		
	5.9	Explains the difference between a population and a sample (NE 7.4.1; PS #1, 5)	**I**	**D,M**	
	5.10	Uses graphical representations to make comparisons and predictions (NE 7.4.2; PS #1, 3, 4, 5)	**I, D**	**M**	
		Solves problems using probability with or without appropriate use of technology: (NE 12.4.3; PS #1, 3, 4, 5)			
	5.11	--Experimental	**I**	**D**	**D**
	5.12	--Sample spaces	**I**	**D**	**D**
	5.13	--Simulations	**I**	**D**	**D**
	5.14	--Predictions	**I**	**D**	**D**
	5.15	--Theoretical		**I**	**D**
	5.16	Evaluates predictions and makes inferences based on data (NE 7.4.2, 8.4.2; PS #1, 4)	**I**	**D**	**M**

Archdiocese of Omaha Math Content Checklist
Middle School Grades 6-8

			Grade	Grade	Grade
		Middle School Grades	**6**	**7**	**8**
	6	**ALGEBRAIC CONCEPTS**			
	6.1	Uses and interprets variables and mathematical symbols to solve one-step equations (NE 6.3; PS #2, 5)	**M**		
	6.2	Uses symbols to understand orders of operation (NE 6.3; PS #2, 5)	**M**		
	6.3	Describes relationships using algebraic expressions, equations and inequalities (NE 8.3.1; PS #2, 5)	**I**	**D**	**M**
		Demonstrates knowledge and use of the one-dimensional coordinate system: (NE 12.3.1; PS #2, 3, 4, 5)			
	6.4	--Graphing equalities		**I**	**D**
	6.5	--Graphing inequalities		**I**	**D**
	6.6	--Graphing real numbers		**I**	**D**
		Demonstrates knowledge and use of the two-dimensional coordinate system: (NE 7.2.2, 12.3.1; PS #1, 3, 4, 5)	**I**	**D**	**D**
	6.7	--Graphing ordered pairs	**I**	**D**	**M**
	6.8	--Generate a table of ordered pairs to graph an equation with two variables		**I**	**D**
	6.9	Applies algebraic concepts and operations to solve one-step equations in one variable (NE 8.3.3; PS #1, 3, 5)	**D**	**D**	**M**
	6.10	Applies algebraic concepts and operations to solve two-step equations in one variable (NE 8.3.3; PS #1, 3, 5)		**I,D**	**M**
	6.11	Describes and represents relations and functions using tables, graphs, and rules (NE 12.3.1; PS #1, 2, 3, 4, 5)		**I**	**D**
	6.12	Translates word problems into algebraic expressions or equations using variables and mathematical symbols (NE 12.3.1; PS #1, 2, 3, 4, 5)	**I**	**D**	**D**
	6.13	Uses input/output table to identify and extend patterns (PS #1, 3, 4, 5)	**D**	**D**	**D**
	6.14	Recognizes and applies math ideas in everyday life (PS #4)	**D**	**D**	**D**

Curriculum Guide Glossary

Assessment - The deliberate use of many methods (teacher observation, self-assessment, survey, test, interview, performance, task, etc.) to gather evidence that indicates if students are meeting Standards through essential learning. Through thoughtful observations and professional judgment, a teacher is able to assess individual student's strengths and weaknesses. The teacher is then able to offer the student clear and helpful feedback. Assessment results are used: to identify instructional practices that need to change; to provide a focus for on-going professional development; and to provide supplemental instructional resources for learners.

Assessment Task Guidelines - Specific directions for students to follow as they complete the Assessment Task.

Essential Question - Points to the essence of what you believe students should examine and know in their course of study. The Essential Question is a conceptual commitment. When a teacher or group of teachers selects a question to frame and guide curriculum design, it is a declaration of intent. In a sense you are saying, "This is our focus for learning. I will put my teaching skills into helping my students examine the key concept implicit in the Essential Question." Student Assessment should focus on essential learning.

Essential Standards - Target what students will know and be able to do at each grade level. Essential Standards support Program Standards, are few in number, and move from simple to complex through grade levels. They address many of the same concepts and topics from primary to senior high school, but the sophistication and detail will increase. Essential Standards define the goals set forth in the Program Standards and state concepts and skills of significance taught at each level. They provide a bridge between the Program Standards and the Content. They require mastery by all students and are able to be assessed.

Grade Level Tally Sheet – The reporting form that records Assessment results completed by grade level teacher(s). The form is given to the building administrator who then completes the Building Level Tally Sheet that is sent to the Catholic Schools Office.

Lifelong Learning Skills - Deal with knowledge and skills that cut across all disciplines and are applicable to life outside the classroom. Skills that develop mental habits which will enable individuals to learn on their own whatever they want or need to know at any point in their lives.

Performance Assessment - A variety of tasks and real life situations in which students are given opportunities to demonstrate their understanding and to thoughtfully apply knowledge, skills, and lifelong learning skills in a variety of contexts. These Assessments often occur over time and result in a tangible product or observable performance. They encourage self-evaluation and revision, require judgment to score, reveal degrees of proficiency based on established criteria, and make public the scoring criteria. Performance Assessments recognize that there is more than one way to show a "right" answer.

Program Standards - Concept-based, general expectations of what a student should know and be able to do. They are few in number and general in scope. They reflect the scope of the total program in a given subject area. They require mastery by all students and are able to be assessed.

Standards - General expectations of academic excellence that indicate what a student should know and be able to do.

Standards-based curriculum – A curriculum based on Standards with use of Standards-based Assessments. The premise is that all students will learn and achieve, and ideally all students can achieve proficiency. Time is variable but expectations of students are consistent. The curriculum provides a framework for the teachers. Teachers align their instruction to meet the Standards by asking themselves to what Standard does this activity relate.

Student Scoring Guide - A document that describes student performance on a specific task. The descriptions in the Student Scoring Guide clearly differentiate levels of performance, such as "Exceeds Standard, Meets Standard, Progressing Toward Standard, or Does Not Meet Standard". The Student Scoring Guide contains the rubrics which are the specific rules written in student language and linked to the Standards.

Task - An activity, exercise, or problem given to students to perform.

Time Frame - The recommended time allotted for students to complete the Assessment.

HIGH SCHOOL GRADES 9-12

- **MATH PROGRAM AND ESSENTIAL STANDARDS**
- **CURRICULUM IMPLEMENTATION MAP**
- **DIRECTIONS FOR ADMINISTRATION OF PERFORMANCE ASSESSMENT**
- **DIRECTIONS FOR USE OF SCORING GUIDE**
- **TEACHER NOTES – ALGEBRA "OLYMPICS"**
- **PERFORMANCE ASSESSMENT ALGEBRA**
- **STUDENT SCORING GUIDE ALGEBRA**
- **DIRECTIONS FOR USE OF GRADE LEVEL TALLY SHEET**
- **GRADE LEVEL TALLY SHEET ALGEBRA**
- **DIRECTIONS FOR ADMINISTRATION OF PERFORMANCE ASSESSMENT**
- **DIRECTIONS FOR USE OF SCORING GUIDE**
- **TEACHER NOTES – GEOMETRY "BEDROOM RENOVATION"**
- **PERFORMANCE ASSESSMENT GEOMETRY**
- **STUDENT SCORING GUIDE GEOMETRY**
- **DIRECTIONS FOR USE OF GRADE LEVEL TALLY SHEET**
- **GRADE LEVEL TALLY SHEET GEOMETRY**
- **DIRECTIONS FOR USE OF CONTENT CHECKLIST**
- **CONTENT CHECKLIST**
- **CURRICULUM GUIDE GLOSSARY**

Math Program and Essential Standards
Grades 9-12

Program Standard #1: PROBLEM SOLVING

Essential Standard #1: Adapt and analyze strategies to solve problems

Program Standard #2: COMMUNICATION

Essential Standard #2: Express mathematical concepts precisely

Program Standard #3: REASONING

Essential Standard #3: Formulate, analyze and test conjectures

Program Standard #4: CONNECTIONS

Essential Standard #4: Apply knowledge in contexts outside of mathematics

Program Standard #5: REPRESENTATIONS

Essential Standard #5: Design and analyze mathematical models of real-world situations

Curriculum Implementation Map

ONGOING ACTIVITIES

Administrator's role:

- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:

- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

AUGUST

Administrator's role:

- Begin looking at calendar to schedule time for faculty to work on curriculum implementation. Allow time each quarter for curriculum work.
- Meet with faculty to review and study Assessments and Student Scoring Guides that will be used for the year.
- Meet with faculty to align school curriculum with the Archdiocesan Curriculum.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

Teacher's role:

- Plan instruction based on the Standards.
- After you have aligned the curriculum, meet by grade levels (K-2, 3-5, etc) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for the year.
- Determine pieces of content, lessons, or units that are essential to meeting the Standards and Assessments.
- Plan time to go over the curriculum guides paying special attention to directions that have been inserted throughout the guides.

SEPTEMBER

Administrator's role:

- Consider sending home communication to parents via newsletter briefly explaining the implementation of the Standards, Curriculum and the Assessments. We recommend that you attach a copy of the Program Standards.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used, and determine Assessment dates for first semester Assessments. Discussion needs to begin on determining dates for the second semester Assessments as well.

Teacher's role:

- Meet with Level teachers to create an example of a completed Assessment that can be shared with students.
- Display the Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Explain Essential Standards to students.
- Work with Level teachers to schedule dates for the Assessment.
- Report Assessment dates to the Key Person (grade level coordinator/curriculum coordinator) in charge of your level or the Key Person in your building.
- Distribute the assigned Assessment Task Guidelines and Student Scoring Guide sheet to students.
- Go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age-appropriate language if needed.
- Share the Assessment example with students.
- Begin teaching to the Standards.

OCTOBER

Administrator's role:

- Contact the CSO for assistance as needed.
- In early October, receive Assessment dates from Key People (grade level coordinator/curriculum coordinator) and place in the school calendar.
- Share information with faculty checking progress; allow time for work in levels.

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedures.
- Continue to share the Assessment example with students.

NOVEMBER

Administrator's role:

- Share information with faculty checking for progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Allow time for teachers to work in levels.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Administer the first semester Assessment.

DECEMBER

Administrator's role:

- Collect Grade Level Tally Sheets from the faculty who administered an Assessment.
- Share information with faculty and allow time for work in levels.
- Allow time with faculty to review the curriculum implementation process and discuss questions or concerns in planning next semester.
- Collect comments to be shared with CSO.

Teacher's role:

- Continue working with students on Standards, Curriculum, and Assessment.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- Meet with Level teachers to discuss student's ratings on first semester Assessments in order to plan for the rest of the year.
- Turn in Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the first semester Assessment and Student Scoring Guide to be used in the future.
- Place Student Scoring Guide in student's cumulative folder.

Spring Semester Time Line

ONGOING ACTIVITIES

Administrator's role:

- Collect questions and suggestions at every faculty meeting.
- Report challenges and suggestions to the CSO.
- Discuss observations and share successes and challenges at monthly faculty meetings.
- Provide professional resources on Standards and Performance Assessment.
- Share successes at Administrator meetings.

Teacher's role:

- Discuss observations and share successes and challenges at monthly faculty meetings.
- Report challenges and suggestions to the administrator.
- Track instruction of content that has occurred on Content Checklist.
- Study professional resources on Standards and Performance Assessment.

JANUARY

Administrator's role:

- Look at calendar to schedule time for faculty to work on curriculum implementation.
- Consider sending home communication to parents via newsletter briefly explaining the implementation of Standards, Curriculum, and Assessments.
- Have Key People (grade level coordinator/curriculum coordinator) meet with their level and review Assessments that will be used second semester.
- Remind faculty that the deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- If you have not done so yet, align the curriculum by grade level (K-2, 3-5, etc.) to determine who is responsible for specific content based on the Content Checklist.
- Meet with Level teachers and review and study Assessments and Student Scoring Guides that will be used for second semester.
- Meet with Level teachers to create an example of the Assessment that can be shared with students.
- Work with Level teachers to schedule dates for the Assessment. Report Assessment dates to Key Person (grade level coordinator/curriculum coordinator) in charge in your building.
- If you have not done so yet, display the Program Standards and Essential Standards that you will be using in individual classrooms. The display should use grade level appropriate language.
- Continue working with students on curriculum as they prepare for the Assessment.
- Explain/Review Standards displayed in the classroom with students.
- Distribute the assigned Assessment and Student Scoring Guide sheet to students.
- Explain/Review the Assessment Task Guidelines, Scoring Guide, and administration time with students explaining terminology and procedures.
- Rewrite the Student Scoring Guide with students using age appropriate language if needed.
- Share your Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send the Grade Level Tally Sheet to administrator.

FEBRUARY

Administrator's role:

- Share information with faculty checking progress.
- Allow time for faculty to work in levels.
- Check with Key People (grade level coordinator/curriculum coordinator) on dates for the Assessments.
- Place Assessment dates in the school calendar.
- Contact the CSO as needed for assistance.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue teaching to the Standards.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue working with students on curriculum as they prepare for the Assessment.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessment from students, rate them, and send Grade Level Tally Sheet to administrator.

MARCH

Administrator's role:

- Share information with faculty checking progress.
- Share Standards/Assessment information with pastor, president, parents, and board members via school newsletter.
- Share information with faculty and allow time for work in levels.
- Remind faculty of deadline for reporting to the building administrator is the **week of April 22.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.

APRIL

Administrator's role:

- Share information with faculty and allow time for work in levels.
- Remind teachers of deadline for reporting to the building administrator is the **week of April 22.**
- Collect Grade Level Tally Sheets and transfer information to the Building Level Tally Sheet.
- Send the completed Building Level Tally Sheet to the **Catholic Schools Office by May 1.**

Teacher's role:

- Continue working with students on Standards and Curriculum as they prepare for the Assessment.
- Continue displaying Standards in your classroom reviewing them with your students.
- Continue to go through the Assessment Task Guidelines, Student Scoring Guide, and administration time with students explaining terminology and procedure.
- Continue to share Assessment example with students.
- Administer Assessment if students have achieved mastery over the material.
- Collect Assessments from students, rate them, and send Grade Level Tally Sheet to administrator.
- Collaborate with other faculty members to rate Assessments.
- Compare results with other faculty.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.

MAY

Administrator's role:

- Send completed Building Level Tally Sheet to the CSO if you have not done so yet.
- Allow time with faculty to review the curriculum implementation program and discuss questions or concerns in planning next year.
- Collect comments/revisions to be shared with CSO.
- Submit comments/revisions to the CSO.

Teacher's role:

- Meet with Level teachers to discuss student's ratings on Assessment in order to plan for next year.
- If you have not done so yet, turn in your Grade Level Tally Sheet to administration.
- Choose a piece of student work to be used as an exemplary piece to accompany the Assessment and Student Scoring Guide to be used next year.
- Place individual Student Scoring Guide in student's cumulative folder.

Directions for Administration of the Performance Assessment

*Refer to the **Curriculum Guide Glossary** found in this section of the Math Curriculum Guide to assist you with the terminology.*

Before the school year begins, the teacher will read through the entire curriculum to assist with mapping instruction for the year. In doing so, the teacher will have read through the Assessment Task Guidelines and Student Scoring Guide to know when in the year to place the instruction that will precede the administration of the Assessment. The Assessment should flow from the curriculum. The Assessment should not be an "add on" tacked on at the end of the school year merely to meet minimum guidelines from the Archdiocese and the State of Nebraska. When used properly, the Assessment and Student Scoring Guide provide the teacher with additional information about individual student learning.

1. **At the beginning of the school year**, the teacher will have gone through the curriculum guide and mapped an instructional plan for the year based on the Curriculum Implementation Map found in the Math Curriculum Guide. The teacher will then base the foundation of planning on the M-mastery (proficiency) identified pieces of content in the grade level Content Checklist.

2. The teacher will find the Assessment Task Guidelines and Student Scoring Guide in the specific grade level section of the curriculum. The teacher will provide each student with both the Assessment and the Student Scoring Guide at the beginning of instruction so that expectations about performance are clearly understood. The teacher will explain the purpose for the Assessment and Student Scoring Guide to the class and allow time for questions about the Assessment process.

3. It is important for the teacher and the students to understand that students are rated for proficiency on the Assessment which is recorded on the Student Scoring Guide. As a criterion-referenced test, the Performance Assessments are designed for the individual student to show what he/she knows. Scoring results from all K-12 Archdiocesan schools will be reported to the Catholic Schools Office.

4. The instruction of all guidelines for the Assessment must take place before the Assessment is administered. The teacher will accomplish this by preparing and teaching one piece of content from the guideline at a time. The teacher will always refer back to how this instruction will assist students when they take the Assessment. The teacher may need to seek additional resources to teach some of the guidelines as some of the content may not be present in the textbook.

5. While successful instruction of the Assessment Task Guidelines is taking place, the teacher will assign the Assessment Task to the students providing them with class time as directed by the teacher.

6. The students will be given a date for completion determined by the teacher. The Assessment may need to be modified for some students. Consideration will need to be given to those students on an IEP or 504 Plan. The teacher will determine any adjustments needed with the help of the administrator or school counselor.

7. The teacher will collect the Assessments and rate them for proficiency completing the Student Scoring Guides.

8. We know that all students can learn and succeed but not on the same day or in the same way. Teachers may need to allow a student(s) some additional time or give the student(s) another chance to show what they know if the student(s) have not achieved a proficiency rating of Level 3, "Meets Standard".

9. When the teacher has completed the rating on all students, the teacher will then complete the Grade Level Tally Sheet for reporting to the Archdiocese. Once the Grade Level Tally Sheet has been completed, the teacher will place the Student Scoring Guide in the individual student's cumulative file.

10. The teacher will then take the completed Grade Level Tally Sheet to the building administrator who will then complete the Building Level Tally Sheet and send it to the Catholic Schools Office.

Directions for Use of the Student Scoring Guide

The teacher will note the information that was shared in the **"Directions for Administration of the Performance Assessment"**. If the teacher has not read this information, please do so before proceeding.

It is important to understand that the teacher is rating student proficiency in the identified areas listed on the "Student Scoring Guide" for Archdiocesan reporting purposes.

1. Initially, the teacher will fill in the student name information and the date assessed unless the student has completed this for the teacher.

2. The teacher will read the Student Scoring Guide and rate each piece of criteria that is required. For example, "Problem Solving" might be the first criterion listed. The teacher will go to the column with the Level 3 heading, "Meets Standard", to check if the student completed the required work assigned under "Content". If the student completed all the required pieces, then the teacher will mark a "3" under the Results column for "Content". If a student has exceeded the Standard by completing the required work in Level 4, "Exceeds Standard", then the teacher will mark a "4" under the Results column. If the student is missing some of the required work, the teacher will look at Level 2, "Progressing Toward Standard", and Level 1, "Does Not Meet Standard", to mark the appropriate rating in the Results column.

3. The teacher will repeat this process for each identified criterion that needs to be rated.

4. The teacher's next step is to transfer the students' totals from the Student Scoring Guide to the "**Grade Level Tally Sheet"**. Directions for use of the Grade Level Tally Sheet follow in this section.

5. The teacher will then place the Student Scoring Guide in the individual student's cumulative file to fulfill the State of Nebraska's requirement for criterion-referenced testing. As an official document, the Student Scoring Guide is considered part of the student's permanent file.

Math Assessment for Algebra
Assessment Task: Olympics
Teacher Edition

Program and Essential Standards: Problem Solving, Reasoning, Communication, Connections, Representations

Administration Time: At the discretion of the teacher upon student completion of Algebra II or honors Algebra I.

The assessment must be completed so that the Tally Sheet is submitted to your Administrator by the week of April 22nd.

Suggested Time Frame: Allow appropriate time for completion of project. Use of class time is at the discretion of the teacher.

Essential Question: How can algebraic equations be used to predict the outcome of an Olympic event?

Task: You have been selected to predict the results of an Olympic event in the upcoming Olympic Games.

Guidelines:

1. Select an Olympic event where the winner is determined by time or distance.
2. Research all past results for your event. Include and submit your documentation. (Note: Almanacs and internet web sites would be a logical place to start.)
3. Create a model of past results using a spreadsheet or table. Then, graph your information using year versus time or distance. Use appropriate labels and correct scales.
4. Using an algebraic method, find a possible linear equation for the information.
5. Provide the following information:
   a. Predict the gold medal time or distance of your event in the next Olympics.
   b. Predict the gold medal time or distance of your event in the year 4000.
   c. Go back in time and determine the gold medal time or distance for the year 1824.
6. Write a report including, but not limited to, the following items:
   a. Predictions about future results
   b. Observations of trends
   c. Discussion about missing data if applicable
   d. Predictions about when maximum distances or minimum times may be reached
   e. Comment on the slope and intercept of your line in relation to the problem
   f. Include answers to Guideline 5 and comments on the reasonableness of your answers

Math Assessment for Algebra
Assessment Task: Olympics
Student Edition

Program and Essential Standards: Problem Solving, Reasoning, Communication, Connections, Representations

Essential Question: How can algebraic equations be used to predict the outcome of an Olympic event?

Task: You have been selected to predict the results of an Olympic event in the upcoming Olympic Games.

Guidelines:

1. Select an Olympic event where the winner is determined by time or distance.
2. Research all past results for your event. Include and submit your documentation. (Note: Almanacs and internet web sites would be a logical place to start.)
3. Create a model of past results using a spreadsheet or table. Then, graph your information using year versus time or distance. Use appropriate labels and correct scales.
4. Using an algebraic method, find a possible linear equation for the information.
5. Provide the following information:
   a. Predict the gold medal time or distance of your event in the next Olympics.
   b. Predict the gold medal time or distance of your event in the year 4000.
   c. Go back in time and determine the gold medal time or distance for the year 1824.
6. Write a report including, but not limited to, the following items:
   a. Predictions about future results
   b. Observations of trends
   c. Discussion about missing data if applicable
   d. Predictions about when maximum distances or minimum times may be reached
   e. Comment on the slope and intercept of your line in relation to the problem
   f. Include answers to Guideline 5 and comments on the reasonableness of your answers

Name: _____ Assessment Completion Date: _____

Student Scoring Guide for Algebra: Olympics

You have been selected to predict the results of an Olympic event in the upcoming Olympic games.

Criteria	Level 1 Does not meet Standard	Level 2 Progressing toward Standard	Level 3 Meets Standard	Level 4 Exceeds Standard	Results
Problem Solving, Reasoning	• Demonstrates one of the criteria listed in Level 3	• Demonstrates only two of the criteria listed in Level 3	• Utilizes appropriate information-gathering techniques and resources • Utilizes and shows appropriate strategies for problem • Draws conclusion from information and supports this conclusion	• In addition to meeting all criteria in Level 3,draws several conclusions from information and calculations and supports each conclusion	
Communication	• Demonstrates only one of the criteria listed in Level 3	• Demonstrates only two of the criteria listed in Level 3	• Submits written report including all items in Guideline 6 • Communicates clearly in written form • Uses proper sentence structure	• In addition to meeting all criteria in Level 3, report clearly and coherently "tied together" from introduction to conclusion	
Connections, Representations	• Demonstrates less than four of the criteria listed in Level 3	• Demonstrates only four of the criteria listed in Level 3	• Cites and includes documentation of research of past Olympic results • Includes accurate model of past results with appropriate labels and correct scales • Includes graphs showing year vs. time or distance • Includes algebraically discovered linear model • Calculations of linear equation and information provided for Guideline 5 are accurate	• In addition to meeting all criteria in Level 3, uses another calculation method (e.g. computer graphs, spreadsheets, graphing calculator)	

List any modifications made:

Directions for Use of Grade Level Tally Sheet

1. The teacher will administer the Assessment to his/her students and then rate the individual student's Assessment using the individual **Student Scoring Guide** included in the curriculum guide before proceeding to Step Two.

2. The teacher will need to make copies of the Grade Level Tally Sheet as needed.

3. Once the teacher has completed rating the entire class, the teacher will then complete the Grade Level Tally Sheet transferring the class totals in each category onto the tally sheet.

4. Complete one Grade Level Tally Sheet per grade. Individual classroom teachers from the same grade must gather the results from the individual Student Scoring Guides, combine the results, and enter the total numbers for the entire grade onto one sheet.

5. Submit only <u>one</u> completed Grade Level Tally Sheet to your administrator by the **week of April 22**.

6. The individual teacher will then file the individual Student Scoring Guide in the student's cum folder.

7. The building administrator will then complete the Building Level Tally Sheet using the information from the Grade Level Tally Sheets. The Building Level Tally Sheet is due to the **Catholic School Office by May 1**.

Grade Level Tally Sheet for Algebra
Assessment Task: Olympics

School Name/City:

Assessment Date:

Total # Students Assessed:

Total # Students:

Directions: Complete one sheet per **grade level**. Classroom teacher(s) must gather the results from the individual student scoring guides and enter the totals. Submit only one sheet per grade level to your administrator.

Criteria	Level 1 # Students Not Meeting Standard	Level 2 # Students Progressing Toward Standard	Level 3 # Students Meeting Standard	Level 4 # Students Exceeding Standard	Total Number of Students
Problem Solving, Reasoning					
Communication					
Connections, Representations					

Directions for Administration of the Performance Assessment

*Refer to the **Curriculum Guide Glossary** found in this section of the Math Curriculum Guide to assist you with the terminology.*

Before the school year begins, the teacher will read through the entire curriculum to assist with mapping instruction for the year. In doing so, the teacher will have read through the Assessment Task Guidelines and Student Scoring Guide to know when in the year to place the instruction that will precede the administration of the Assessment. The Assessment should flow from the curriculum. The Assessment should not be an "add on" tacked on at the end of the school year merely to meet minimum guidelines from the Archdiocese and the State of Nebraska. When used properly, the Assessment and Student Scoring Guide provide the teacher with additional information about individual student learning.

1. **At the beginning of the school year**, the teacher will have gone through the curriculum guide and mapped an instructional plan for the year based on the Curriculum Implementation Map found in the Math Curriculum Guide. The teacher will then base the foundation of planning on the M-mastery (proficiency) identified pieces of content in the grade level Content Checklist.

2. The teacher will find the Assessment Task Guidelines and Student Scoring Guide in the specific grade level section of the curriculum. The teacher will provide each student with both the Assessment and the Student Scoring Guide at the beginning of instruction so that expectations about performance are clearly understood. The teacher will explain the purpose for the Assessment and Student Scoring Guide to the class and allow time for questions about the Assessment process.

3. It is important for the teacher and the students to understand that students are rated for proficiency on the Assessment which is recorded on the Student Scoring Guide. As a criterion-referenced test, the Performance Assessments are designed for the individual student to show what he/she knows. Scoring results from all K-12 Archdiocesan schools will be reported to the Catholic Schools Office.

4. The instruction of all guidelines for the Assessment must take place before the Assessment is administered. The teacher will accomplish this by preparing and teaching one piece of content from the guideline at a time. The teacher will always refer back to how this instruction will assist students when they take the Assessment. The teacher may need to seek additional resources to teach some of the guidelines as some of the content may not be present in the textbook.

5. While successful instruction of the Assessment Task Guidelines is taking place, the teacher will assign the Assessment Task to the students providing them with class time as directed by the teacher.

6. The students will be given a date for completion determined by the teacher. The Assessment may need to be modified for some students. Consideration will need to be given to those students on an IEP or 504 Plan. The teacher will determine any adjustments needed with the help of the administrator or school counselor.

7. The teacher will collect the Assessments and rate them for proficiency completing the Student Scoring Guides.

8. We know that all students can learn and succeed but not on the same day or in the same way. Teachers may need to allow a student(s) some additional time or give the student(s) another chance to show what they know if the student(s) have not achieved a proficiency rating of Level 3, "Meets Standard".

9. When the teacher has completed the rating on all students, the teacher will then complete the Grade Level Tally Sheet for reporting to the Archdiocese. Once the Grade Level Tally Sheet has been completed, the teacher will place the Student Scoring Guide in the individual student's cumulative file.

10. The teacher will then take the completed Grade Level Tally Sheet to the building administrator who will then complete the Building Level Tally Sheet and send it to the Catholic Schools Office.

Directions for Use of the Student Scoring Guide

The teacher will note the information that was shared in the **"Directions for Administration of the Performance Assessment"**. If the teacher has not read this information, please do so before proceeding.

It is important to understand that the teacher is rating student proficiency in the identified areas listed on the "Student Scoring Guide" for Archdiocesan reporting purposes.

1. Initially, the teacher will fill in the student name information and the date assessed unless the student has completed this for the teacher.

2. The teacher will read the Student Scoring Guide and rate each piece of criteria that is required. For example, "Problem Solving" might be the first criterion listed. The teacher will go to the column with the Level 3 heading, "Meets Standard", to check if the student completed the required work assigned under "Content". If the student completed all the required pieces, then the teacher will mark a "3" under the Results column for "Content". If a student has exceeded the Standard by completing the required work in Level 4, "Exceeds Standard", then the teacher will mark a "4" under the Results column. If the student is missing some of the required work, the teacher will look at Level 2, "Progressing Toward Standard", and Level 1, "Does Not Meet Standard", to mark the appropriate rating in the Results column.

3. The teacher will repeat this process for each identified criterion that needs to be rated.

4. The teacher's next step is to transfer the students' totals from the Student Scoring Guide to the "**Grade Level Tally Sheet"**. Directions for use of the Grade Level Tally Sheet follow in this section.

5. The teacher will then place the Student Scoring Guide in the individual student's cumulative file to fulfill the State of Nebraska's requirement for criterion-referenced testing. As an official document, the Student Scoring Guide is considered part of the student's permanent file.

Math Assessment for Geometry
Assessment Task: Bedroom Renovation
Teacher Edition

Program and Essential Standards: Problem Solving, Reasoning, Connections, Communication, Representations

Title: Bedroom Renovation

Administration Time: At the discretion of the teacher.

Time Frame: Allow appropriate time for completion of project. Use of class time is at the discretion of the teacher.

Essential Question: How can knowledge of geometry skills be used in planning a renovation?

Task: You have been given the opportunity to renovate your bedroom on a budget of $2500. You will need to submit a detailed proposal to your parents/guardians for their approval. You must make the following changes to your room: flooring, wall covering, (paint or wallpaper) and crown moulding. You may also make changes to your furniture, light fixtures, etc., but you must stay under your budget of $2500.

Guidelines:

1. Make a scale drawing of your bedroom; include your closet (if available) and 3 – 5 pieces of furniture. Include scale and actual measurement on drawing.
2. Determine the amount of flooring material needed.
3. Determine the amount of paint or wallpaper required to complete the room.
4. Determine the amount of crown moulding required to go around the ceiling.
5. Prepare a typewritten proposal for your parent/guardian approval that includes the following:
    a. A cover page
    b. Scale drawing of your bedroom
    c. A discussion of the materials chosen to remodel your bedroom with justification for your choices
    d. Formulas applied and mathematical steps for calculations
    e. Materials list and cost list, including labor costs
    f. Pictures or samples of flooring, wall covering, and crown moulding choices
    g. Identify the steps of the renovation process.
    h. Responses to **Making Connections** (See choices below)
    i. Use of technology as appropriate
6. Optional for Level 4 Problem Solving: Determine the capacity of your closet or submit actual samples of construction materials.

Making Connections

1. Cite a different example where you could use the formulas from this project.
2. Summarize your thoughts and reactions to the renovation experience in this project.
3. What were the most challenging aspects of this project and why?
4. Now that you have completed the project, what would you do differently and why?
5. If you determined the current capacity of your closet: How might you redesign your bedroom to change the dimensions of the closet to better suit your needs without changing the capacity?

Teacher Notes for Bedroom Renovation Assessment Task

- You may wish to include a discussion of volume calculations. Example: Closet volume as it relates to storage needs or room volume as it relates to selecting an appropriate window air conditioner for the room.
- It may be helpful to allow students to use graph paper for their scale drawings.
- Possible software packages that may be useful: Geogebra, Geometers' Sketchpad, SketchUp, Word or Paint.
- You may wish to complete portions of this project when applicable throughout the school year. This may require teachers to collect and file away partial projects until they are needed to complete this assessment.
- You may wish to include perspective drawings or 3D drawings to the project.
- You may choose the calculations for baseboards, door casings, or window casings instead of crown moulding or in addition to, as the perimeter calculation for this project.
- If time allows, you may elect to have a classroom presentation.
- The requirement for the parent/guardian approval of the proposal provides assurance that the proposal for the renovation is appropriate. It can be met at the teacher discretion by a parent or guardian signature on the proposal or other means of documentation of parent/guardian approval.
- The final question in the "Making Connections" section is included to prompt students to see how they could change the length, width and height of the closet without changing the capacity. This would require that students apply the formula for volume.

OPTIONAL: Supplemental worksheets and an Optional Scoring Guide are provided, and may be used at the teacher's discretion.

The Optional Scoring Guide may be used to convert the score to a letter or percent grade It is not meant to <u>replace</u> the Archdiocesan Scoring Guide, but can be used <u>in addition to</u> the Scoring Guide.

Geometry Assessment
"Bedroom Renovation"

Optional Scoring Guide

Problem Solving

_____(10) Accurate scale drawing with appropriate scale factor (accuracy, precision, neat)

_____(25) Correct formulas and correct calculations (flooring, walls, crown moulding)

_____(5) Correct total cost of renovation

_____ **Total (40) Arch score _____**

Reasoning

_____(5) Within budget ($2500)

_____(5) Line by line item list of all renovations

_____(5) Justifications for the following (flooring choice, wall covering choice, crown moulding choice, furniture choices) (write one paragraph explaining why)

_____ **Total (15) Arch score _____**

Connections (report) 6 Traits Writing Project

_____ (15) Responses to "Making Connections Prompts" Written with appropriate paragraphs.

_____ **Total (15) Arch score** _____

Communication

_____(10) Includes "a" through "g" from Guideline #5

_____ **Total (10) Arch score _____**

Representations

_____(5) Includes accurate scale drawing with 3 pieces of furniture

_____(10) Shows all formulas used with accurate calculations

_____(5) Submits proof of selections for flooring, wall coverings, and crown moulding

_____ **Total (20) Arch score** _____

_____ (100) **Total Project Score**

Math Assessment for Geometry
Assessment Task: Bedroom Renovation
Student Edition

Program and Essential Standards: Problem Solving, Reasoning, Connections, Communication, Representations

Title: Bedroom Renovation

Essential Question: How can knowledge of geometry skills be used in planning a renovation?

Task: You have been given the opportunity to renovate your bedroom on a budget of $2500. You will need to submit a detailed proposal to your parents/guardians for their approval. You must make the following changes to your room: flooring, wall covering, (paint or wallpaper) and crown moulding. You may also make changes to your furniture, light fixtures, etc., but you must stay under your budget of $2500.

Guidelines:

1. Make a scale drawing of your bedroom; include your closet (if available) and 3 – 5 pieces of furniture. Include scale and actual measurement on drawing.
2. Determine the amount of flooring material needed.
3. Determine the amount of paint or wallpaper required to complete the room.
4. Determine the amount of crown moulding required to go around the ceiling.
5. Prepare a typewritten proposal for your parent/guardian approval that includes the following:
    a. A cover page
    b. Scale drawing of your bedroom
    c. A discussion of the materials chosen to remodel your bedroom with justification for your choices
    d. Formulas applied and mathematical steps for calculations
    e. Materials list and cost list, including labor costs
    f. Submit pictures or actual samples of flooring, wall covering, and crown moulding choices
    g. Identify the steps of the renovation process.
    h. Responses to at least three **Making Connections Prompts** (See choices below)
    i. Use of technology as appropriate
6. Optional for Level 4 Problem Solving: Determine the capacity of your closet or submit actual samples of construction materials.

Making Connections Prompts

1. Cite a different example where you could use the formulas from this project.
2. Summarize your thoughts and reactions to the renovation experience in this project.
3. What were the most challenging aspects of this project and why?
4. Now that you have completed the project, what would you do differently and why?
5. If you determined the current capacity of your closet: How might you redesign your bedroom to change the dimensions of the closet to better suit your needs without changing the capacity?

Student Notes:

- When determining amount of building materials, overestimate by 10% to account for waste.
- When working with carpet you need to account for carpet pad in your materials list.
- Remember to factor in installation costs and labor costs.
- When working with paint you need to account for primer or multiple coats of paint and painting the ceiling, remember that you are not painting trim work, doors or windows.

Student Name_____ **Assessment Completion Date**_____

Student Scoring Guide for Geometry: Bedroom Renovation

Task: You have been given the opportunity to remodel your bedroom on a budget of $2500.

Criteria	Level 1 Does Not Meet Standard	Level 2 Progressing Toward Standard	Level 3 Meets Standard	Level 4 Exceeds Standard	Results
Problem Solving	▪ Demonstrates less than 3 of the criteria listed in level 3	▪ Demonstrates 3 of the 4 criteria listed in level 3	▪ Selects appropriate scale factor for scale drawing as outlined in Guideline #1 ▪ Chooses correct formulas ▪ Calculates accurately construction material needed ▪ Calculates cost accurately	▪ Chooses the correct formula and accurately calculates the capacity of the closet	
Reasoning	▪ Does not meet either of the criteria listed in level 3	▪ Meets only one of the criteria listed in level 3	▪ Stays within budget ▪ Provides justification for construction materials chosen (i.e. paint vs. wallpaper, carpet vs. wood floors, etc.)	▪ In addition to meeting the criteria in Level 3, justifications show advanced thinking and cohesion of thought	
Connections	▪ Includes responses to less than 2 "Making Connections" Prompts	▪ Includes responses to 2 "Making Connections" Prompts	▪ Includes responses to 3 of the "Making Connections" Prompts (See Below)	▪ Includes responses to more than 3 "Making Connections" Prompts	
Communication	▪ Includes less than 4 of the criteria for the report according to guideline #5	▪ Includes 4-6 of the criteria for the report according to guideline #5	▪ Includes at least 7 of the criteria for the proposal according to Guideline #5 (See Below) ▪ Submits proposal for parent/guardian approval	▪ In addition to including 8 criteria for the proposal according to Guideline #5, proposal is clearly and coherently "tied together"	
Representations	▪ Includes 1 of the 3 criteria listed in Level 3	▪ Includes 2 of the 3 criteria listed in Level 3	▪ Includes an accurate scale drawing w/3 pieces of furniture ▪ Shows all formulas used w/accurate calculations ▪ Submits proof of selections for flooring, wall covering, and crown moulding	▪ Uses technology to enhance the scale drawing **OR** ▪ Provides actual samples of renovation materials (i.e. paint swatches and carpet samples)	

Guideline #5 For Proposal

a. A cover page
b. Scale drawing of your bedroom
c. A discussion of the materials chosen to remodel your bedroom with justification for the choices
d. Formulas applied and mathematical steps for calculations
e. Materials list and cost list, including labor costs
f. Submit pictures or samples of flooring, wall covering, and crown moulding choices
g. Identify the steps of the renovation process
h. Responses to at least three **Making Connections Prompts**
i. Use of technology as appropriate

Making Connections Prompts

1. Cite a different example where you could use the formulas from this project.
2. Summarize your thoughts and reactions to the renovation experience in this project.
3. What were the most challenging aspects of this project and why?
4. Now that you have completed the project, what would you do differently and why?
5. If you determined the current capacity of your closet: How might you redesign your bedroom to change the dimensions of the closet to better suit your needs without changing the capacity?

List any modifications made:

Directions for Use of Grade Level Tally Sheet

1. The teacher will administer the Assessment to his/her students and then rate the individual student's Assessment using the individual **Student Scoring Guide** included in the curriculum guide before proceeding to Step Two.

2. The teacher will need to make copies of the Grade Level Tally Sheet as needed.

3. Once the teacher has completed rating the entire class, the teacher will then complete the Grade Level Tally Sheet transferring the class totals in each category onto the tally sheet.

4. Complete one Grade Level Tally Sheet per grade. Individual classroom teachers from the same grade must gather the results from the individual Student Scoring Guides, combine the results, and enter the total numbers for the entire grade onto one sheet.

5. Submit only <u>one</u> completed Grade Level Tally Sheet to your administrator by the **week of April 22**.

6. The individual teacher will then file the individual Student Scoring Guide in the student's cum folder.

7. The building administrator will then complete the Building Level Tally Sheet using the information from the Grade Level Tally Sheets. The Building Level Tally Sheet is due to the **Catholic School Office by May 1**.

Grade Level Tally Sheet for Geometry
Assessment Task: Bedroom Renovation

School Name/City:

Assessment Date:

Total # Students Assessed:

Total # Students:

Directions: Complete one sheet per **grade level**. Classroom teacher(s) must gather the results from the individual student scoring guides and enter the totals. Submit only one sheet per grade level to your administrator.

Criteria	Level 1 # Students Not Meeting Standard	Level 2 # Students Progressing Toward Standard	Level 3 # Students Meeting Standard	Level 4 # Students Exceeding Standard	Total Number of Students
Problem Solving					
Reasoning					
Connections					
Communication					
Representations					

Directions for Use of Content Checklist

The grade level Content Checklist is designed to accompany the Essential Standards. Faculty discussion will need to take place to ensure consistency in teaching. The administrator should reproduce the Content Checklist and distribute it to all teachers.

The format for the Content Section is as follows:

1. Blank box to record date of instruction of content or to use as a check-off to indicate that instruction of content occurred
2. Numeric system that identifies the specific content statement
3. Content Statement
4. Nebraska Math Standard Reference **(NE)**
5. Program Standard Reference **(PS)**
6. Level of Teacher Instruction:
   Introduce (**I**), Develop **(D**), Master (**M)**

Introduce **(I)**: To provide with a beginning knowledge or first experience of something. No assessment.

Develop **(D**): To progress from simple to more complex through practice. Check for understanding as needed.

Master **(M)**: To gain control over content; to understand and be able to retrieve the specified material for use as needed to maintain proficiency. Must be assessed.

Teachers will use this curriculum as the basis for planning their lessons for the year. Use of the curriculum will assist students in attaining the Standards for which all are accountable. Teachers are required to spend 80% of their time teaching strictly from the curriculum guide with the remaining 20% of their time teaching concepts that enhance the curriculum.

Archdiocese of Omaha Math Curriculum
High School Grades 9-12 Content Checklist

		High School Grades	Algebra I	Geometry	Algebra II	Advanced Math
	1	**NUMBER SENSE and COMPUTATION SKILLS**				
	1.1	Identifies the difference between rational and irrational numbers (NE 12.1.1; PS #3, 5)	**D,M**			
	1.2	Describes and compares the relationships between subsets of real numbers (NE 12.1.2; PS #3, 5)	**D**	**D**	**M**	
		Expresses equivalent forms of numbers using: (NE 12.1.1; PS #5)				
	1.3	--fraction, decimals and percents	**M**			
	1.4	--exponents and radicals	**D**	**D**	**M**	
	1.5	--scientific notation	**D**	**D**	**M**	
	1.6	--absolute values	**D**	**M**		
		Solves theoretical and applied problems using: (NE 12.1.3; PS #1, 3)				
	1.7	--fractions, decimals and percents	**I,D,M**			
	1.8	--order of operations	**I,D,M**			
	1.9	--radicals and exponents	**D**	**D**	**M**	
	1.10	--scientific notation	**D**	**D**	**M**	
	1.11	--absolute value	**I**	**D**	**D**	**M**
	1.12	--ratios and proportions	**D**	**M**		
	1.13	--properties of real numbers	**I,D,M**			
		Justifies solutions to mathematical problems through: (NE 12.1.4; PS #2, 3)				
	1.14	--assessing reasonableness of answers	**I,D**	**D**	**M**	
	1.15	--demonstration of progressive algebraic steps	**D**	**D**	**M**	
		Performs estimations and computations of real numbers: (NE 12.1.4; PS #1, 3, 4)				
	1.16	--mentally	**M**			
	1.17	--with paper and pencil	**M**			
	1.18	--with technology	**M**			
	1.19	Recognizes and applies math ideas in everyday life (PS #4)				

Archdiocese of Omaha Math Curriculum
High School Grades 9-12 Content Checklist

		High School Grades	Algebra I	Geometry	Algebra II	Advanced Math
	2	**ALGEBRA**				
		Graphs and interprets: (NE 12.3.1; PS #2, 3, 4, 5)				
	2.1	--algebraic relations	**D**	**D**	**M**	
	2.2	--algebraic inequalities	**D**	**D**	**M**	
		Solves problems involving equations algebraically: (NE 12.3.2; PS #1, 3)				
	2.3	--linear	**D**	**D**	**M**	
	2.4	--quadratic	**I**	**D**	**M**	
		Solves problems involving equations graphically: (NE 12.3.3; PS #1, 5)				
	2.5	--linear	**I**	**D**	**M**	
	2.6	--quadratic	**I**	**D**	**D**	**M**
		Solves problems involving equations with the appropriate use of technology: (NE 12.3.2; PS #1, 4, 5)				
	2.7	--linear	**I**	**D**	**M**	
	2.8	--quadratic	**I**	**D**	**D**	**M**
		Solves problems involving inequalities algebraically: (NE 12.3.2; PS #1, 3)				
	2.9	--linear	**D**	**D**	**M**	
	2.10	--quadratic	**I**	**D**	**M**	
		Solves problems involving inequalities graphically: (NE 12.3.3; PS #1, 5)				
	2.11	--linear	**I**	**D**	**M**	
	2.12	--quadratic	**I**	**D**	**M**	
		Solves systems involving two equations: (NE 12.3.3; PS #1, 3, 4, 5)				
	2.13	--graphically	**I**	**D**	**M**	
	2.14	--algebraically	**I**	**D**	**M**	
	2.15	--using technology	**I**	**D**	**M**	
	2.16	Solves systems involving two or more inequalities (NE 12.3.1; PS #1, 4, 5)	**I**	**D**	**M**	
		Solves problems using patterns: (NE 12.3.1; PS #1, 3, 4, 5)				
	2.17	--direct variation	**D**	**M**		
	2.18	--indirect variation	**I**	**D**	**M**	
		Solves problems using functions: (NE 12.3.1; PS #1, 3, 4, 5)				
	2.19	--linear	**I**	**D**	**M**	
	2.20	--quadratic	**I**	**D**	**D**	**M**
		Writes linear equations given: (NE 12.3.2; PS #1, 2)				
	2.21	--a point and slope of a line	**I**	**D**	**M**	
	2.22	--two points on a line	**I**	**D**	**M**	

Archdiocese of Omaha Math Curriculum
High School Grades 9-12 Content Checklist

		High School Grades	Algebra I	Geometry	Algebra II	Advanced Math
	3	**GEOMETRY**				
	3.1	Selects and uses a variety of measuring units, tools, and/or technology (NE 12.2.5; PS #2, 4, 5)	**D**	**M**		
	3.2	Explains the degree of accuracy of the measurement (NE 12.2.5; PS #2, 4, 5)	**I,D**	**M**		
	3.3	Explains the precision of the measurement tool (NE 12.2.5; PS #2, 4, 5)	**I,D**	**M**		
	3.4	Converts between metric and standard units of measurement given conversion factors (NE 12.2.5; PS #4)	**D**	**D**	**D**	**M**
	3.5	Analyzes characteristics, properties and relationships among geometric shapes (NE 12.2.1; NE # 1, 4, 5)	**I,D**	**M**		
	3.6	Gives examples of definitions and theorems (NE 12.2.1; PS #2, 3, 4)	**I,D**	**M**		
		Calculates surface area and volume of: (NE 12.2.5; PS #1, 4, 5)				
	3.7	--prisms	**D**	**M**		
	3.8	--cylinders	**D**	**M**		
	3.9	--pyramids	**D**	**M**		
	3.10	--cones	**D**	**M**		
	3.11	--spheres	**D**	**M**		
	3.12	Creates geometric models to describe the physical world (NE 12.2.4; PS #4, 5)	**D**	**M**		
		Evaluates characteristics and properties of: (NE 12.2.1; PS #1, 3, 5)				
	3.13	--angles	**D**	**M**		
	3.14	--circles	**D**	**M**		
	3.15	--polygons	**D**	**M**		
	3.16	--prisms	**D**	**M**		
	3.17	--cylinders	**D**	**M**		
	3.18	--pyramids	**D**	**M**		
	3.19	--cones	**D**	**M**		
	3.20	--spheres	**D**	**M**		
		Applies coordinate geometry to: (NE 12.2.2; PS #4, 5)				
	3.21	--graph geometric shapes	**I,D,M**			
	3.22	--find slope and intercepts of lines	**I**	**D**	**M**	
	3.23	--find length and midpoint of segments	**I**	**D**	**M**	
	3.24	--locate missing coordinates	**I**	**D**	**M**	
	3.25	--verify geometric theorems	**I**	**D**	**M**	

Archdiocese of Omaha Math Curriculum
High School Grades 9-12 Content Checklist

		High School Grades	Algebra I	Geometry	Algebra II	Advanced Math
		GEOMETRY continued				
		Applies coordinate geometry to transformations: (NE 12.2.3; PS #4, 5)				
	3.26	--translations	**D**	**M**		
	3.27	--rotations	**D**	**M**		
	3.28	--reflections	**D**	**M**		
	3.29	--dilations	**D**	**M**		
	3.30	Applies right triangle trigonometry to find length and angle measures (NE 12.2.1; PS #1, 4)	**I**	**D**	**M**	
	3.31	Applies geometric properties to solve problems involving: (NE 12.2.1; PS #1, 3 ,4, 5)				
	3.32	--congruence and similarity	**D**	**M**		
	3.33	--Pythagorean theorem	**D**	**M**		
	3.34	--parallelism	**D**	**M**		
		Applies deductive reasoning to arrive at a conclusion using: (NE 12.2.1; PS #1, 2, 3)				
	3.35	--logic statements	**I**	**D,M**		
	3.36	--paragraph proof	**I**	**D**	**D**	**M**
	3.37	--two-column proof	**I**	**D**	**D**	**M**
	3.38	--algebraic proof	**I**	**D**	**M**	

Archdiocese of Omaha Math Curriculum
High School Grades 9-12 Content Checklist

		High School Grades	Algebra I	Geometry	Algebra II	Advanced Math
	4	**STATISTICS AND PROBABILITY**				
	4.1	Selects a sampling technique to gather data (NE 12.4.1; PS #1, 4, 5)	**D**	**D**	**D**	**M**
	4.2	Analyzes sample data (NE 12.4.1; PS #1, 3, 4, 5)	**D**	**D**	**D**	**M**
	4.3	Makes generalizations based on sample data (NE 12.4.1; PS #2, 3, 4)	**D**	**D**	**D**	**M**
	4.4	Writes equations and make predictions from sets of data (NE 12.4.2; PS #1, 2, 3, 4, 5)	**I**	**D**	**D**	**M**
	4.5	Applies theoretical probability to represent problems and make decisions (NE 12.4.3; PS # 4, 5)	**D**	**D**	**D**	**M**
		Evaluates how transformations on data affect: (NE 12.4.1; PS #3, 4)				
	4.6	--mean, median and mode	**I**	**D**	**D**	**M**
	4.7	--standard deviation and range	**I**	**D**	**D**	**M**
	4.8	Interprets data represented by a normal curve (NE 12.4.1; PS #2, 3, 5)	**I**	**D**	**D**	**M**
	4.9	Calculates probabilities of independent events (NE 12.4.3; PS #1, 3, 4)	**D**	**D**	**D**	**M**
	4.10	Compares data sets and evaluates conclusions (NE 12.4.2; PS #1, 3, 4)	**D**	**D**	**D**	**M**

CURRICULUM GUIDE GLOSSARY

Assessment- The deliberate use of many methods to gather evidence to indicate that students are meeting standards. Assessment results are used to identify instructional practices that should be improved, to focus professional development for teachers, and to supply new or different instructional resources for learners.

Essential Question-Points to the essence of what you believe students should examine and know in their course of study. The essential question is a conceptual commitment. When a teacher or group of teachers selects a question to frame and guide curriculum design, it is a declaration of intent. In a sense you are saying, "This is our focus for learning. I will put my teaching skills into helping my students examine the key concept implicit in the essential question." Student assessment should focus on essential learning.

Essential Standards-Target what students will know and be able to do at each grade level. Essential Standards support Program Standards, are few in number, and move from simple to complex through grade levels. They address many of the same concepts and topics from primary to senior high school, but the sophistication and detail will increase. Essential Standards define the goals set forth in the Program Standards and state concepts and skills of significance taught at each level. They provide a bridge between the Program Standards and the Content. They require mastery by all students and are able to be assessed.

Guidelines-Specific directions for students to follow as they complete the assessment task.

Performance Assessment-A variety of tasks and real life situations in which students are given opportunities to demonstrate their understanding and to thoughtfully apply knowledge, skills, and lifelong learning skills in a variety of contexts. These assessments often occur over time and result in a tangible product or observable performance. They encourage self-evaluation and revision, require judgment to score, reveal degrees of proficiency based on established criteria, and make public the scoring criteria. Performance assessments recognize that there is more than one way to show a "right" answer.

Proficiency-Having or demonstrating mastery of knowledge or skill in a particular area.

Program Standards-Concept-based, general expectations of what a student should know and be able to do. They are few in number and general in scope. They reflect the scope of the total program in a given subject area. They require mastery by all students and are able to be assessed.

Scoring Guides-A document that describes student performance on a specific task. The description in the scoring guide clearly differentiate levels of performance, such as exceed the standard, meets the standard, progressing toward the standard, or not yet meeting the standard. The Scoring guide contains the rubrics which are the specific rules written in student language and linked to the standards.

Standards-General expectations of academic excellence that indicate what a student should know and be able to do.

Standards-based curriculum- a curriculum based on standards with use of standards-based assessments. The premise is that all students will learn and achieve, and ideally all students can achieve proficiency. Time is variable but expectations of students are consistent. The curriculum provides a framework for the teachers. Teachers align their instruction to meet the standards by asking themselves to what standard does this activity relate.

Tally Sheet-The reporting form that records assessment results completed by grade level teacher(s). The form is given to the building administrator who reports to the Catholic Schools Office.

Task-An activity, exercise, or problem given to students to perform.

Time Frame-The recommended time allotted for students to complete the assessment.