

GATE Strategies

HOW DO I APPLY THEM IN MY
CLASSROOM???

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California GATE Standards

Acceleration

Acceleration of thinking and knowing involves differentiating the core curriculum to provide challenge and opportunities above and beyond the core content.

Depth

Depth refers to approaching or studying the core curriculum in various thinking patterns (complex to simple, parts to whole, abstract to complex) in order to pursue the topic in greater detail with a greater degree of understanding.

Complexity

Complexity involves moving beyond a surface level understanding, from an analysis of what is intended to what is inferential. Differentiation using complexity involves extending the content to the study of issues, topics, and themes.

Novelty

Novelty provides inquiry and exploration into the core curriculum that provides students with opportunities to create new, original, and/or reorganized knowledge structures.

Which
Pathway
will you
choose?

A photograph of a dirt path winding through a sun-dappled forest. The path is covered in fallen leaves and leads into the distance. Four bright green rounded rectangular boxes are overlaid on the image, each containing text. The text in the boxes is as follows:

**THINK LIKE A
DISCIPLINARIAN**

**DEPTH AND
COMPLEXITY
PROMPTS**

**UNIVERSAL
CONCEPTS BIG
IDEAS**

**SKILLS OF
CRITICAL AND
CREATIVE
THINKING**

8 Approaches To Differentiate

using

Depth, Complexity, Acceleration and Novelty

Content

Depth and Complexity

Classics (A/N)

Think Like A Disciplinarian (A)

Current Events (A/N)

Technology (A/N)

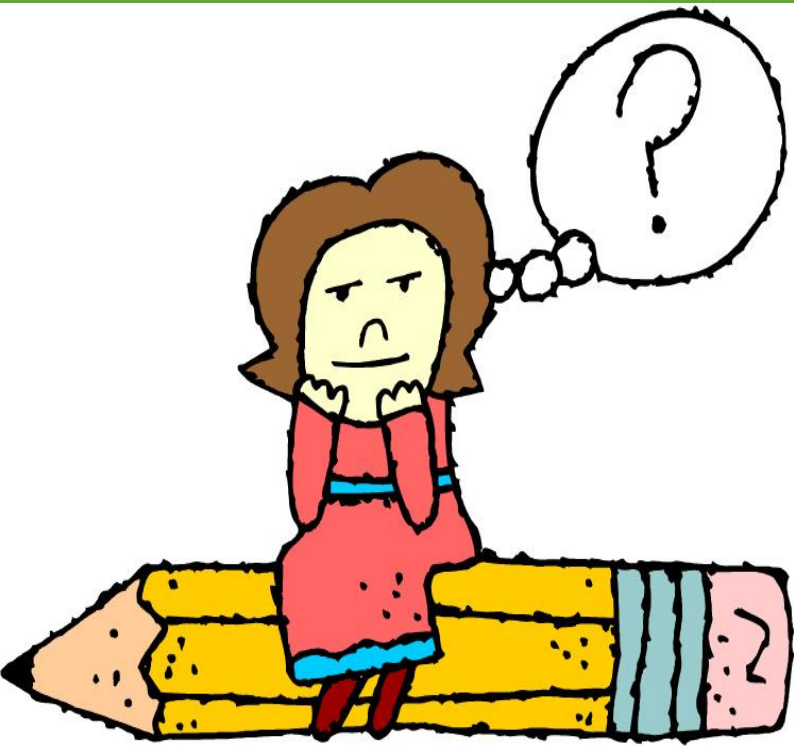
Independent Study (N)

Learning To Learn (N)

Suggested How To's...

Acceleration	Depth	Complexity	Novelty
Think Like A Disciplinarian	Language of the Discipline	Changes Over Time	Critical Thinking
Universal Concepts	Details	Multiple Perspectives	Creative Thinking
Big Ideas	Patterns	Interdisciplinary	Problem Solving
	Trends	Context	Independent Study
	Unanswered Questions	Translate	
	Rules	Original	
	Ethics	Judgment	
	Big Ideas		
	Impact		
	Proof		
	Motive		
	Process		

Teacher Implementation Choices



Thinking Skill –

Action, Cognition

Content-

What Standard, What Discipline?

Resources –

How?

Product-

Output, Assessment, Show What You Know

WHAT YOU NEED TO THINK ABOUT WHEN CREATING YOUR LESSON....

- HIGHLIGHT** •WHAT PART OF THE STANDARD AM I GOING TO
WITH ONE OR MORE GATE STANDARDS?
- MODIFY** •WHAT PART OF THE STANDARD AM I GOING TO
WITH ONE OR MORE GATE STANDARDS?
- EXTEND** •WHAT PART OF THE STANDARD AM I GOING TO
WITH ONE OR MORE GATE STANDARDS?

Curricular Structure

Standards/Objective

Depth and Complexity

Classics

Think Like A Disciplinarian

Current Events


Technology

Independent Study

Learning to Learn



Frames



Thinking Prompts



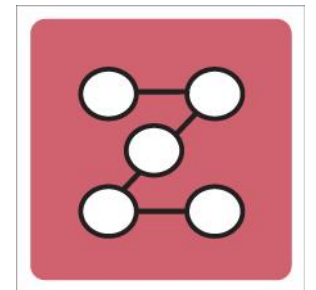
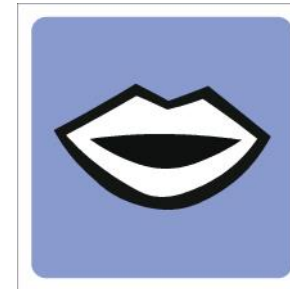
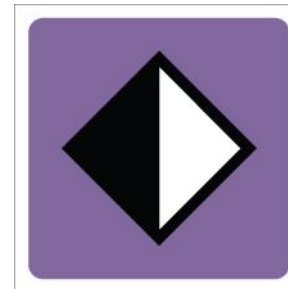
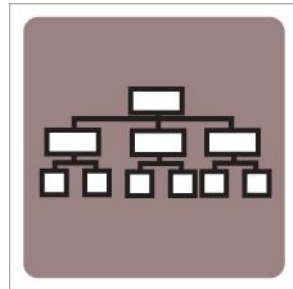
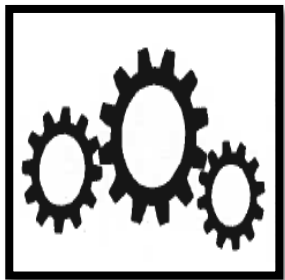
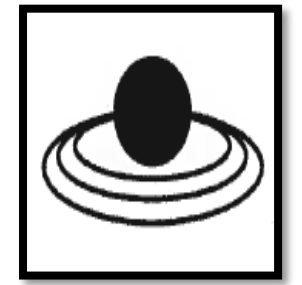
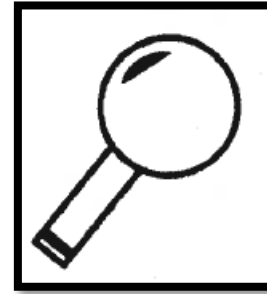
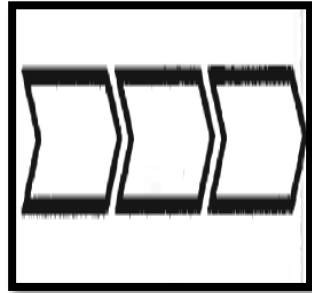
Concentric Circles

Thinking Prompts of
Depth and Complexity!

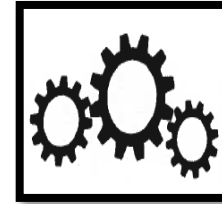
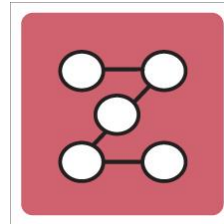




Depth...going down into the content



The ability to go into **depth** allows you to take information to a higher level of knowing. The prompts do not live in isolation but work together.



Example:

Impact of ***patterns*** on an idea.

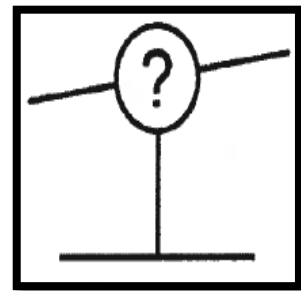
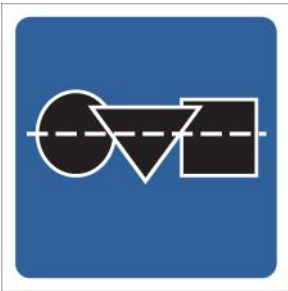
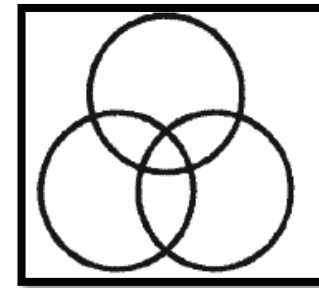
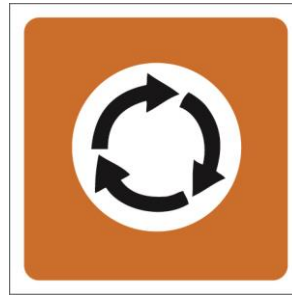
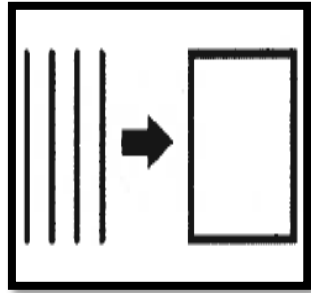
Impact of a ***motive***.

Proof of an ***original*** idea and the ***impact*** it has on individuals.

Complexity -



Breadth of knowledge

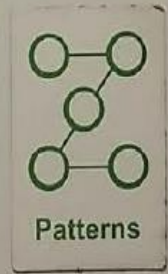
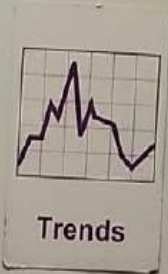




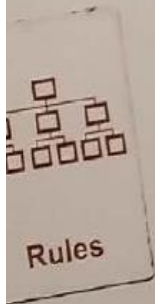
What contributions were made by early civilizations?

metacognition

knowing what you know -
knowing how you know -
(think)

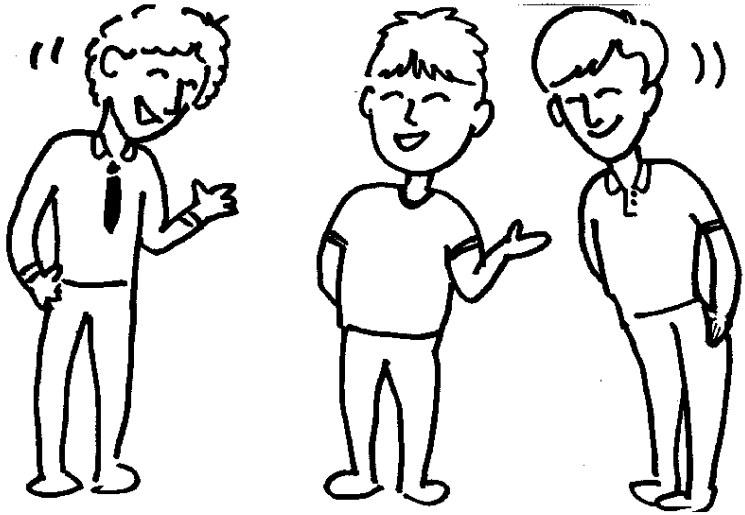


Expository
Informa



AWESOME

1	consolation	5	available
	indispensable		basically
	glimmer		factors
	heinous		fluctuat
	perception		formula
	phobic		manufac
	threshold		
	sarcastic		
	alliance		



How to introduce????

Goldilocks

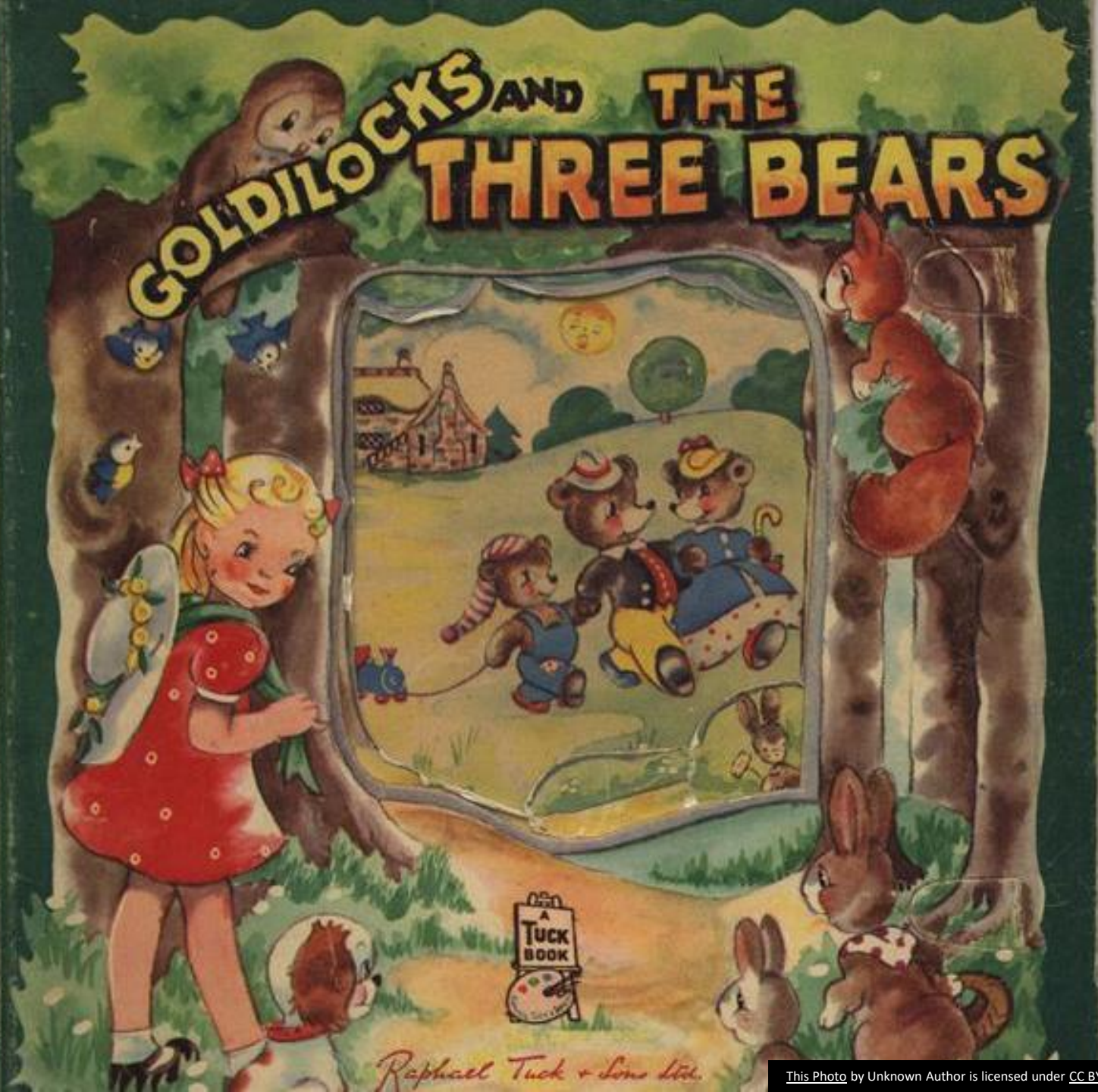
The Giving Tree

Little Red Riding Hood

Something familiar

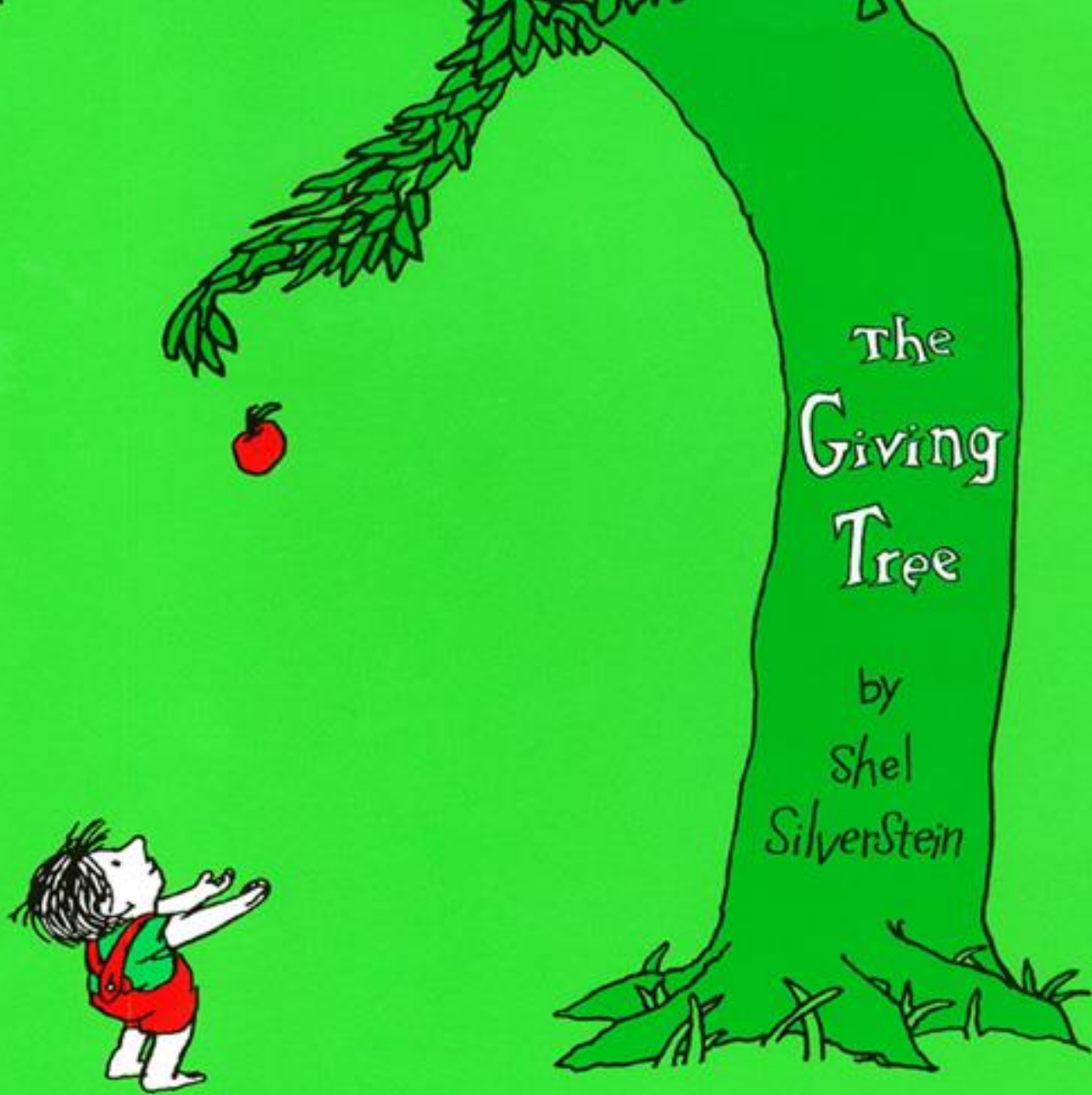
1. Define
2. Relate to previous knowledge (personal)
3. Apply to new knowledge: Core Curriculum
4. Integrate to the real world: what does it mean to you: current events, the world today

GOLDILOCKS AND THE THREE BEARS



Raphael Tuck & Sons Ltd.

Goldilocks



<https://safeYouTube.net/w/YZhw>

DIC
PATTERNS

The Giving Tree

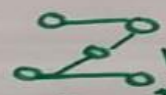
Thinking
Tools

CONFLICT

???

Was the boy greedy or was the tree too generous?

Past
The tree changed each time the boy came



The boy came back once in a while and the tree gave him stuff

2 / 5/5 The boy gets, the tree gives

ORDER

???

Was the boy ever happy? Why didn't the tree grow back after it was cut down?

RELATIONSHIPS

EXPLORATION

???

How could the tree talk? Why was the tree in pain?

CHANGE

POWER

???

Why did the tree sacrifice herself for the greedy, unhappy boy?



Every time the boy visited the tree the tree lost something. And the boy got something.

???

What did the boy want next, and who would he get it from?

◇ The tree gave, but didn't take.

∞ The boy took the tree for granted. The tree loved him though.

◇ Was it ethical for the boy to take away everything from the tree?

SYSTEMS

INFLUENCE



How does the tree influence the boy? The tree makes grows great.

- ???
- 1. How does the tree talk?
- 2. Where did the boy sail?

Over time, the tree lost more things and the "boy" got more things

GAME TIME!!

Which Prompt Goes with which Idea??

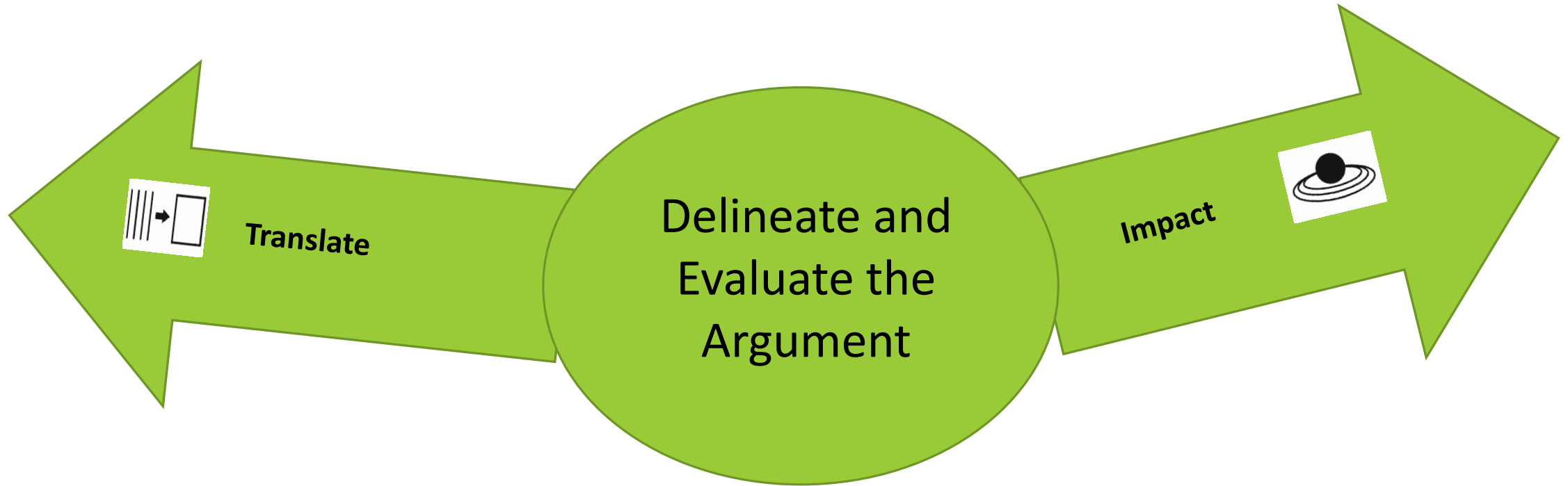


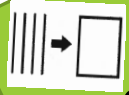
CCSS

The best way to begin is with your standard.

If you rewrite the standard to include language from the prompts this will help, ensure that you address them throughout your lesson.

One approach to enhance, extend the standard.





What multiple implications can you associate with agriculture and Global Warming? How can it be interpreted in different ways?




Global Warming has a direct impact on our agriculture.

What are the various influences of Global Warming on our food source? What are the effects?



RI6.5: Analyze how a particular sentence, paragraph, chapter. Or section fits into the overall structure of a text and contributes to the development of the ideas.

*Rewrite the standard with the **Depth and Complexity Prompts**.*

RI6.5: Analyze the impact  of how a particular sentence, paragraph, chapter, or section fits into the  big idea of the structure of a text and contributes to the  process of the development of the idea or ideas.

Close Read with the thinking prompts

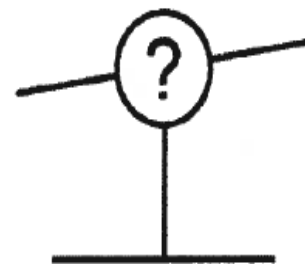
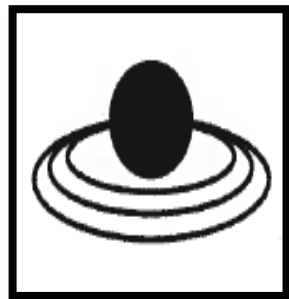
Read the article

Divide class into groups

Assign each group a different prompt of depth and complexity

Reread article looking specifically for evidence of your prompt

Jigsaw findings to the whole group



One way to approach Prompts for Close Reading

Read for the gist:



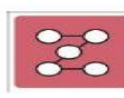
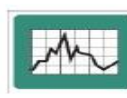
Details,



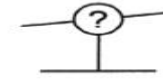
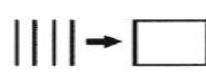
Big Idea

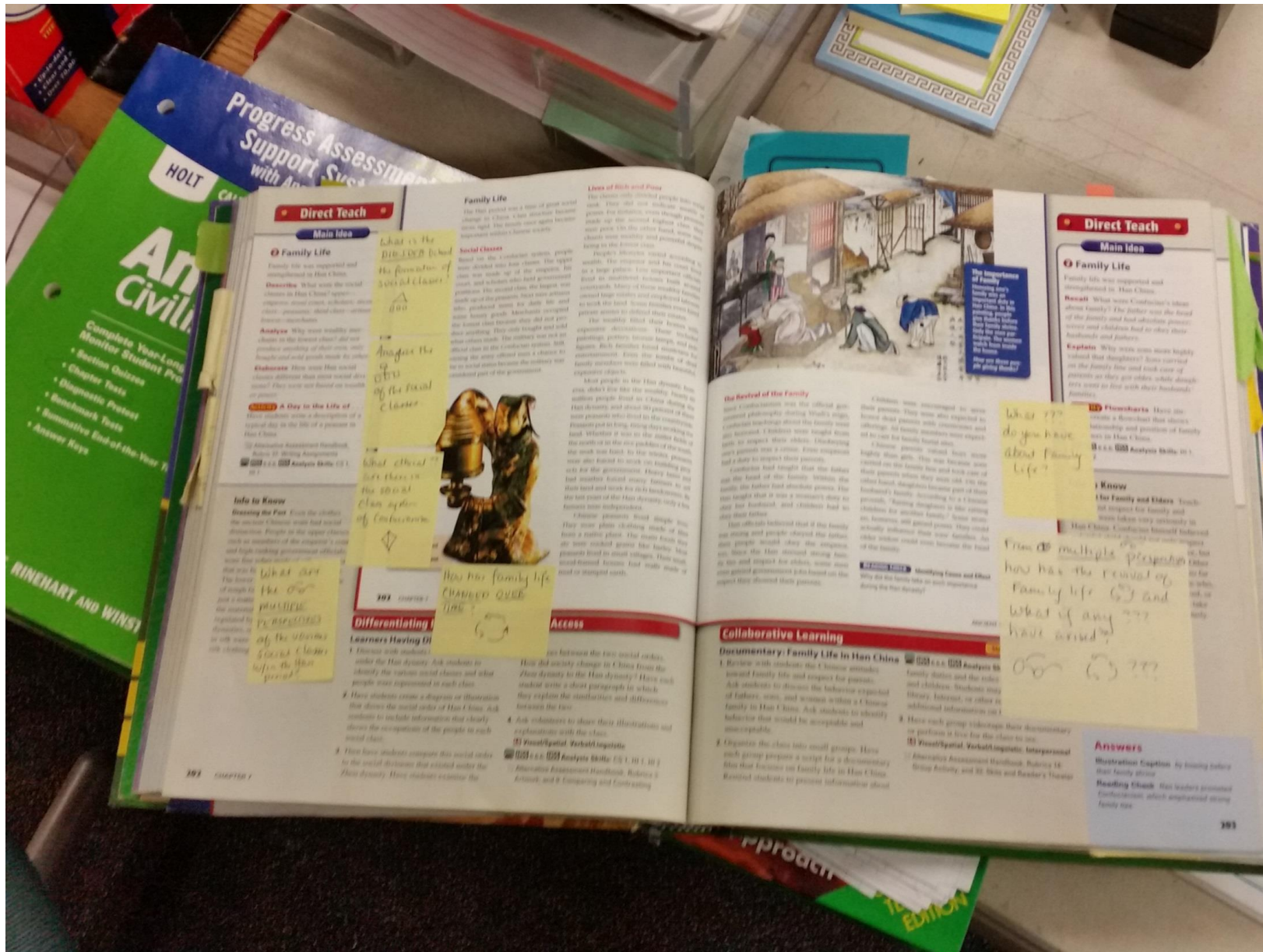


Read for a more through critical analysis using depth:



Reading for a broader breadth of knowledge using complexity:





Direct Teach

Main Idea

Family Life
 Family life was supported and strengthened in Han China.
Describe What were the social classes in Han China? Explain how the social classes were supported and strengthened in Han China.
Analyze Why were families important in Han China? Explain how the social classes were supported and strengthened in Han China.
Explain How was Han social hierarchy different from other social hierarchies? Explain how the social classes were supported and strengthened in Han China.
Compare A Day in the Life of a Han Dynasty Farmer and a Day in the Life of a Roman Farmer.

392 CHAPTER 7

What is the difference between the formation of social classes?

Analyze the effects of the social classes on Han China.

What ethical issues arise from the revival of Confucianism?

How has family life changed over time?



How has family life changed over time?

Differentiating Learners Having Different Needs

1. Use the social classes as a starting point for discussion.
2. Have students create a diagram or illustration that shows the social order of Han China.
3. Have students compare their social order to the social structure that existed under the Zhou dynasty.

Access

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Collaborative Learning

1. Review with students the Chinese attitudes toward family life and respect for parents.
2. Have each group videotape their documentary or perform it live for the class to see.

392 CHAPTER 7



The importance of family life in Han China is reflected in the Han Dynasty's emphasis on family values. Families were the backbone of Han society, and the government supported families in many ways. Families were the basic unit of Han society, and the government supported families in many ways.

Direct Teach

Main Idea

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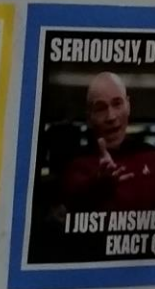
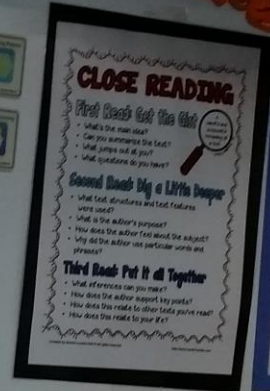
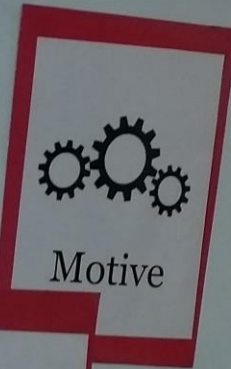
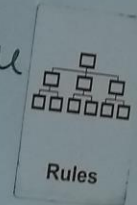
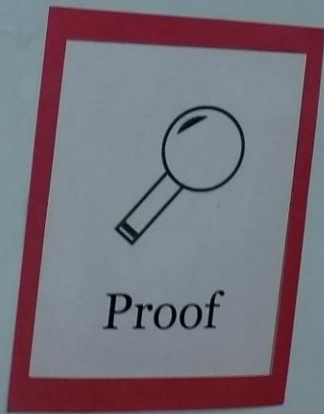
Answers

Illustration Caption By honoring fathers and mothers, Han leaders promoted Confucianism, which emphasized strong family ties.

392 CHAPTER 7

With a partner, read pages 56-62
paying special attention to the

Be prepared to share your
findings.



Han Dynasty

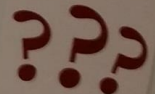
From a  view, how

Multiple Perspectives

has the revival of family life



Relate Over Time

and what if any 

Unanswered Questions

do you have?

Original

Jud

1st Graders!

Use Illustrations and Details in a text to Describe Key Ideas



Details in the Pictures

What the details in the picture on page 1-2 tell me:

The students were afraid of Jean. Jean was mean.

What the details in the picture on page _____ tell me:

Katie Sue was not afraid of Jean. Jean is surprised/shocked.

The Big Idea

The big idea in _____ is _____

Details in the words

What the details of the author's words on page 1-2 tell me:

"Mean Jean was Recess Queen and nobody said any different."

What the details of the author's words on page 4 tell me:

"If kids ever crossed her, she'd push 'em and smash 'em, blap! bash 'em, hammer 'em, slammer 'em..."

Examples from across the disciplines

LANGUAGE ARTS

- Identify the *patterns* in an author's use of *language*.
- Analyze how a character *changes over time*.
- Investigate the *rules* and *processes* a poet follows when creating a poem.

MATH

- Learn the *rules* of the order of operations.
- Study the *patterns* of multiplying by fractions and decimals.
- How can you *translate* algebra to real world situations?

SOCIAL STUDIES

- Analyze the different *points of view* of a historical event within a particular *context* of events.
- Investigate how a civilization *changes over time*.
- Determine the *ethical* choices a ruler had to make.

SCIENCE

- Examine the *rules* that allow a plants to grow.
- What are the *unanswered questions* of ultraviolet light?
- Identify the different *points of view* and *motives* of nuclear power.

Exit Ticket

What was the big idea



of our learning today?

Write one unanswered question
learning.



do you have about today's

Did your thinking/opinion change
How?



in the course of the lesson?

Exit Slip

- What would the big idea of our learning look like from a different perspective?
- What are the three most important details from today's learning?
- Across Disciplines: The big idea from today relates to...

Math:




















Science:

Social Studies:

LA:

Iconic intersection Questions for Advanced Reading Journals

Use specific examples from the text to answer _____ questions from below. Write one paragraph (Minimum) per question. Sometimes the teacher will assign a question, other times students may choose. Please ask for help if you choose a question that includes a technique we have not yet learned.

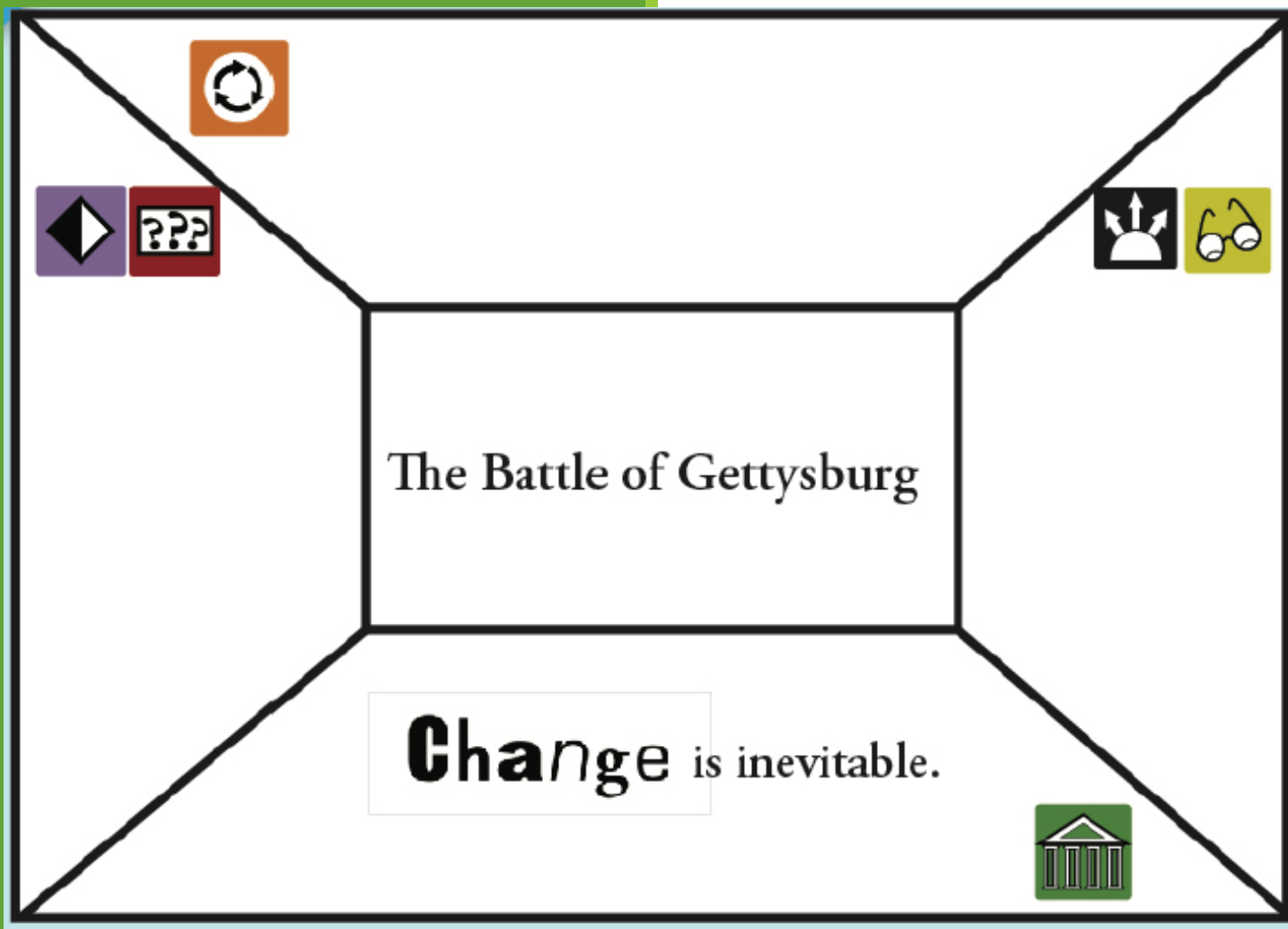
1. Describe the author's philosophical beliefs about an  conflict and define any evidence of those beliefs in the text. Are those views expressed implicitly or explicitly? 
2. How does the setting  to the mood in the passage/text?
3. How does the author establish the conditions or  context of time and place in the passage/text?
4. How do the conditions or  context of the novel  impact the traits and motives  of the characters?
5. Define how any social, economic, or political systems in the novel's setting influence/impact  the story's characters of plot.
6. SIFT the  details: Describe how symbols, imagery, and figurative language  contribute to the theme of the novel/poem/passage.
7. Describe how a  paradox influences/impacts  changes over time  in a character's motives  and traits.
8. Describe any significant diction, syntax, and vocabulary  that reveal the author's purpose. Is there a  pattern in syntax, vocabulary?
9. How do suspense, flashback, or foreshadowing reveal  changes over time in the traits and motives of the characters?
10. How does the narrative's  multiple perspectives  influence/impact the mood and tone of the text?

Let's talk Frames!!

- How to frame an idea, concept or standard
- Multiple ways to approach the topic
- Easily differentiated

Allows for higher levels of thinking

Regarding the topic



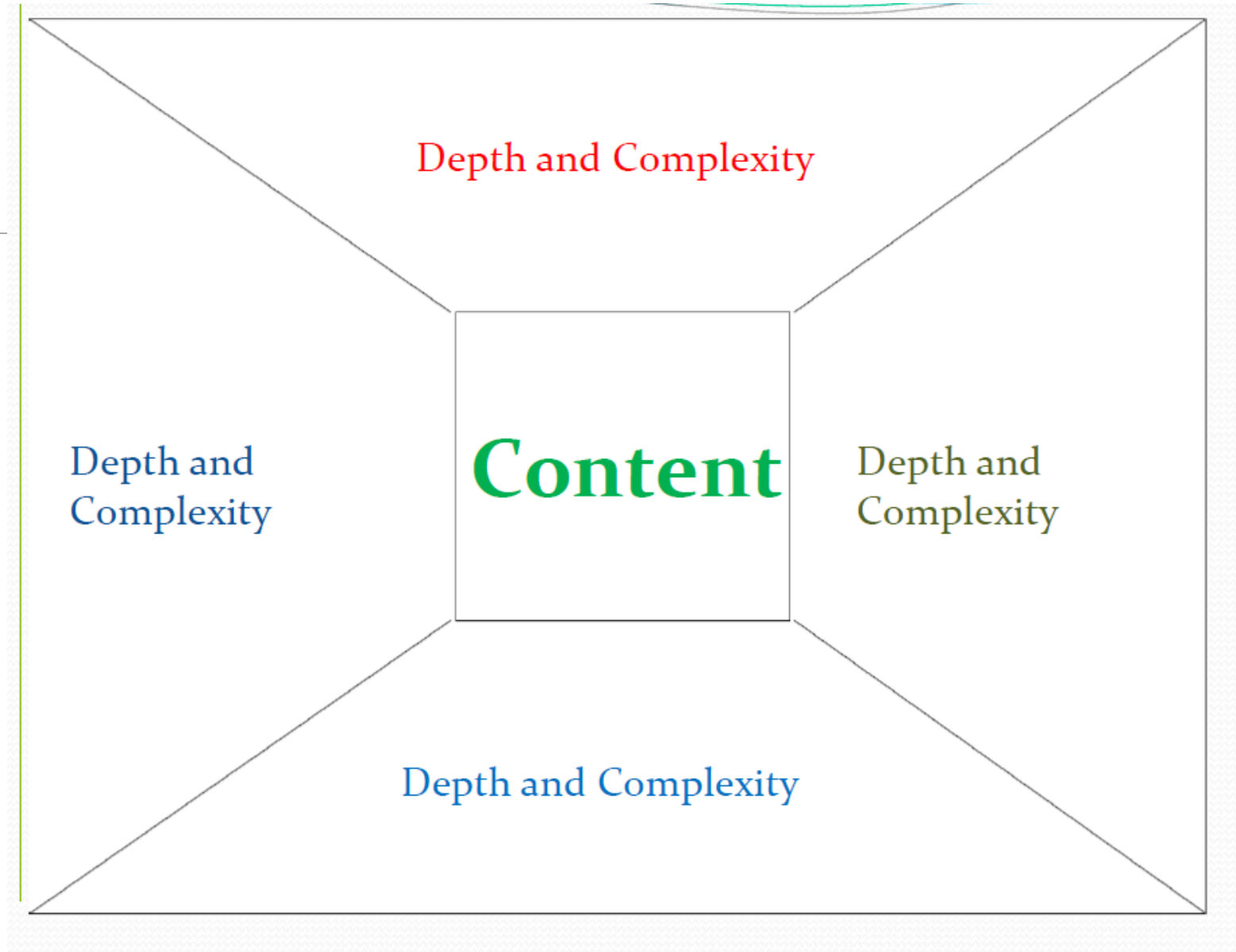
FRAME the Learning

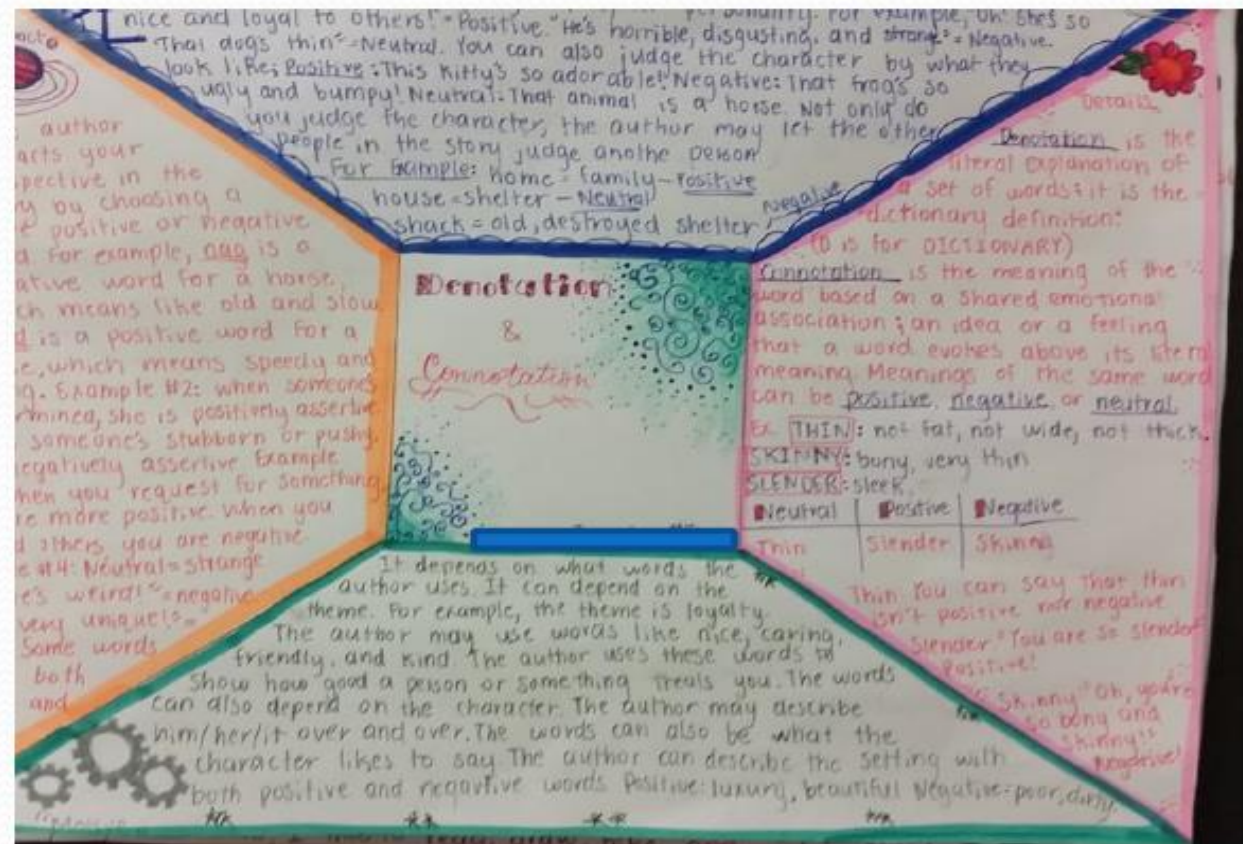
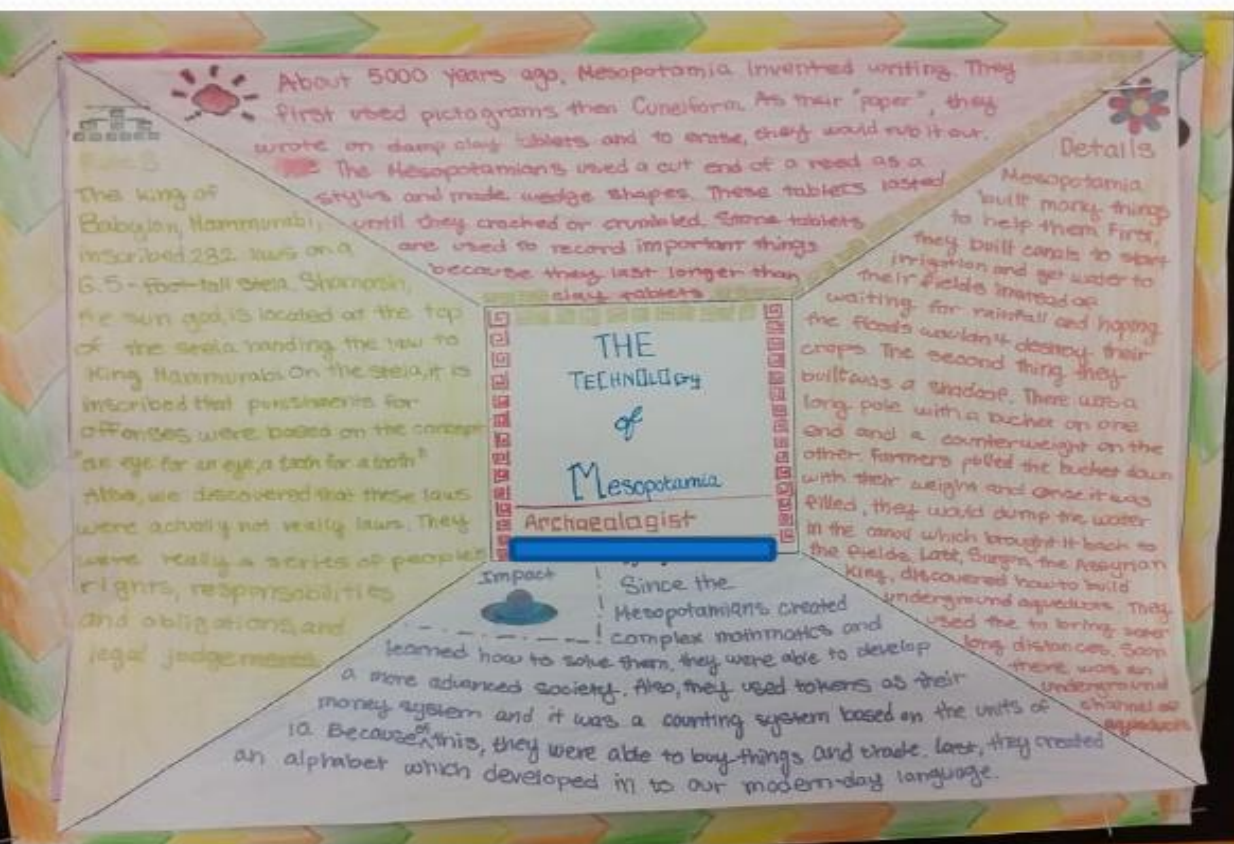
Content in the middle
Depth

Complexity

Universal Themes

TLAD





Frames with Depth and Complexity



Details

A mineral is a inorganic solid with a crystal structure and definite chemical composition. A mineral is a naturally occurring, inorganic solid that forms on or beneath Earth's surface. Geologists classify rocks into three major groups: igneous, sedimentary, and metamorphic rocks. To produce metal from an ore, the ore must be mined.



Impact

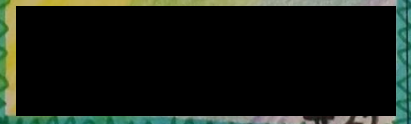
The impact of the rock cycle is a process of events that changes a rock to another. The impact of the metamorphic rock melting is that an igneous rock is created. The impact of sediment getting pressed and cemented together is that a sediment rock is created. The impact of sedimentary rock gets heated and pressed together is that a metamorphic rock is created.



Big Idea

The big idea in this chapter is about mechanical and chemical weathering. It is also about minerals and rocks. The last thing that the chapter is about metal. To produce metal from an ore, the ore must be mined and smelted. Soil is a natural resource. Soil is very limited because fertile soil is very limited.

Weathering and Soil



Process



In the rock cycle, there are many processes. First, the sediment get pressed and cemented together. Then the heat and pressure will turn the rock to a metamorphic rock. Then the rock is heated and melted. Then the rock becomes an igneous rock!



A biodiversity is the number of different species in an area. On earth, there is more than 1.5 million species that have been identified, but no one knows the exact number of species on earth. There are a lot of factors that affect, such as area, climate, diversity of niches. A large area will contain more species than a small area. Tropical forests have constant temperatures and climate, providing a continuous food supply. A reef supports many different niches for organisms that live under, on, and among the coral.



Extinction is the disappearance of all members of a species from Earth. Species in danger of becoming extinct in the near future are called endangered species. Species that could become endangered in the near future are called threatened species. Over time, these species can become extinct. Human activities can also extinct species, such as habitat destruction, poaching, pollution, and nonactive species. Habitat destruction is the lost of a natural habitat, poaching is the illegal killing or removal of wild-life from their habitats.

BIODIVERSITY



Lucy Hsu #9

A keystone species is a species that influences the survival of many other species in an ecosystem. An example of a keystone species is a sea otter. Sea otters can impact other species in many ways. The sea otters eats sea urchins, so when the hunters killed most of the sea otters for fur, the sea urchins reproduced and ate up the kelp. When the sea otters were reintroduced, the kelp population recovered, the ecosystem has balanced.

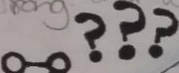


While others are harming biodiversity, other people are trying to protect it. Some good ideas are, captive breeding, laws and treaties, and habitat preservation. Captive breeding is the mating of animals in zoos or wildlife preserves. Laws can protect species. The convention on International Trade in Endangered Species lists more than 500 species that can't be traded for profit. Habitat preservation is to make sure it is large enough, it must contain a variety of niches, and the air, land, and water is clean.



Increase rigor with more than a single prompt.

Impact/Ethics


There are patterns through out Kush's history. First, Kush was wealthy and became strong. Then, when Egypt conquered Kush, it became weak. But, Kush was independant like before. After being free, we don't know their history untill when Kush became strong again and it conquere Egypt. And due to Assyrians, Kush was weaken. As they increased agriculture and trade, Kush had become powerful. Kush's history is full of Kush being strong and weak. 

Kush had a great impact on trading. By trading alot, they became rich and wealthy. When they were weak, their trading made them powerful again. Another impact was that while they were ruling Egypt, the kushite dynasty tried to bring back old Egypt cultures, like pyramids. It was a good thing to Egypt because kush was bringing back their cultural practices.

Parallels/Big Idea

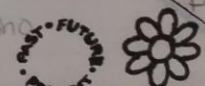
Kush is simillian to Egypt. Kush and Egypt were neighbors. They both had the Nile across its land. Their kings were called pharaohs and later, Kush's pharaohs were buried in pyramids like Egypt. Also, when Kush was part of Egypt, they adopted lot of Egyptian cultures. Bot still, Kush had its own language and they served their own gods. Their daily lifes were different from other places.

Ancient Kush

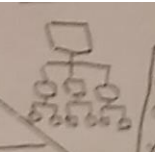


Kush changed over time by Egypt. As Kush get wealthy along and the army grew stronger, Egypt conquered Kush because they were afraid. After 450years, Kush was free while Egypt's pharaohs lost power. Once again, kush gained its strength. Later, kashita and Pranki attacked Egypt. So now, Kush took control of Egypt. But Assyrians, who had better iron weapons, pushed Kush out of Egypt.

Details/Change over time



Impact
→
State
used to
test
would be
quantities
to organize
ratios
to find
percent
number
of comparing
to do
things,
percent
+ systems
ent units
capacity.



By a colon or "to". For example, if my numbers are a and b, I would write its a:b or a to b. To find an equivalent ratio, multiply or divide the two numbers the same amount of times. So to find an equivalent ratio for 2:5, I can do $\times 2$ for both of them to get 4:10. To find a rate, put a every b, like 24 crayons every 2 boxes. To find a unit rate, divide the b amount so it is one, so the unit rate would be something like 12 crayons per box. To find an equivalent rate, do the same process to find a equivalent ratio. You can't write a ratio as a/b or b/b. You also can't write a rate as a/b every a/b. Rates do not be a/b.



A ratio is a comparison of two quantities. For example, if I had 5 boxes and 2 pens, the ratio of boxes to pens would be 5:2, or 5 to 2. If two ratios describe the same relationship, they are equivalent ratios. To help you find equivalent ratios, you can use a ratio table. If you are told to find a rate, you have to find a ratio of two quantities using different units. For example, if a machine makes 10 boxes in 2 minutes, the rate is 10 boxes in 2 minutes. But if you are told to find a unit rate, you are told to find a quantity to one unit of another quantity, so in the example the unit rate is 5 boxes per minute. Equivalent rates have the same unit rate. A percent is a part-to-whole ratio where the whole is 100. That means you can write a percent as a fraction with a denominator of 100. For example, if 20 people out of 100 people are wearing pants, the percent is 20%.

Rates, Ratios, and Proportions

Rates tell you how fast you are going, so without rates it would be harder to tell how fast you are going. Ratios give you another way to write fractions in part-to-whole situations, and it can help you compare different parts in a whole. Without rates it would also be harder to explain how many things there are in another amount of things, like 24 crayons in 1 box. Without percents, it would be harder for teachers to grade papers in the letter grading system. No percents would also make it harder to split profits in different businesses. Ratios can also help compare quantities.



When you are using a ratio, you are comparing two quantities. When you are using a rate, you are figuring out how much there is of a certain amount of things, like 50 miles per hour, or 14 days in 2 weeks. Information is all found from Big Ideas Learning's Math textbook course 1: a

Common Core Curriculum. Information on the topic about rates is from lesson 5.3 and 5.11.

Athenian democracy and American government changed over time and had an impact. At first, Athenian democracy was based on autocracy. Only the wealthy were able to make laws and be part of the oligarchy, or government of a few. Then, after protests from the poor, Solon changed the government. Solon was a wealthy landowner and used to be poor. He divided the people in classes based on farming produce. A while later, a man called Cleisthenes changed government to direct democracy, people rule. The American colonists went through something similar.

Athenian democracy and American government gave contributions and had multiple perspectives. Both governments made major events, but not to the present. First, Athenian democracy inspired to do a "rule by the people" kind of government. Roman Republic is really also inspired in their three branches of government. These three branches of government inspired us to do the same. We have legislative, executive and judicial.

Early Athenian democracy and Early British rule inspired multiple perspectives. For example, in the eyes of government involved motives and a big idea. Athenian democracy's big idea was rule by the people. Democracy literally means that American government's big idea was, and still is, practically the first three words on the U.S. constitution: "We the People". Both were pushed by motives to get where they are. The poor protested against early democracy, oligarchy. They wanted to have a voice in government, infuriating them. They forced the wealthy to turn to Solon, then laws changed. Like government. Before the Revolutionary War while Americans headed back, a shot rang out. Not knowing who shot, the Americans and British were forced to fight, starting the war. Both Athenian democracy and the American colonists involved motives and had a big idea.

Who Created Democracy?

In both the Revolutionary War and Athenian democracy, there were ethics and rules. Athens' early democracy was quite before Cleisthenes. It was very ethical. First, it was unfair that the poor couldn't have a say in the government. It was not at all fair for the colonists of America under British rule. The colonists were angry that they didn't have a voice in the government, and still got under Acts with harshness. After Cleisthenes, the people were free to say their opinion in democracy. Putting autocracy, self-power, the rules were rules like they alone make the laws and you can only be an aristocrat by wealth. One harsh rule for the American

The Greeks inspired democracy. In 4th century BC, the Athenians and the Romans changed it over time. In 507 BC, a Greek man named Cleisthenes started the first true democracy. Over in Rome, the Romans created the three branches of government. These branches were known as the Senate, Assembly, and the Courts. Both of these groups inspired government today. The American colonists adopted the three branches of government in 1787. The three branches changed to legislative, executive, and judicial.

The big idea for democracy was that the government should be ruled by the people. This idea was spread in both Greece and England. The Greeks had a government called the polis, which was a government ruled by the people. The Romans had a government called the res publica, which was a government ruled by the people. The American colonists had a government called the United States of America, which was a government ruled by the people.

Who Created Democracy?

Democracy was created by the people. The American colonists created it in 1787. The Greeks and Romans created it in 507 BC and 509 BC respectively. The American colonists created it in 1787. The Greeks and Romans created it in 507 BC and 509 BC respectively.

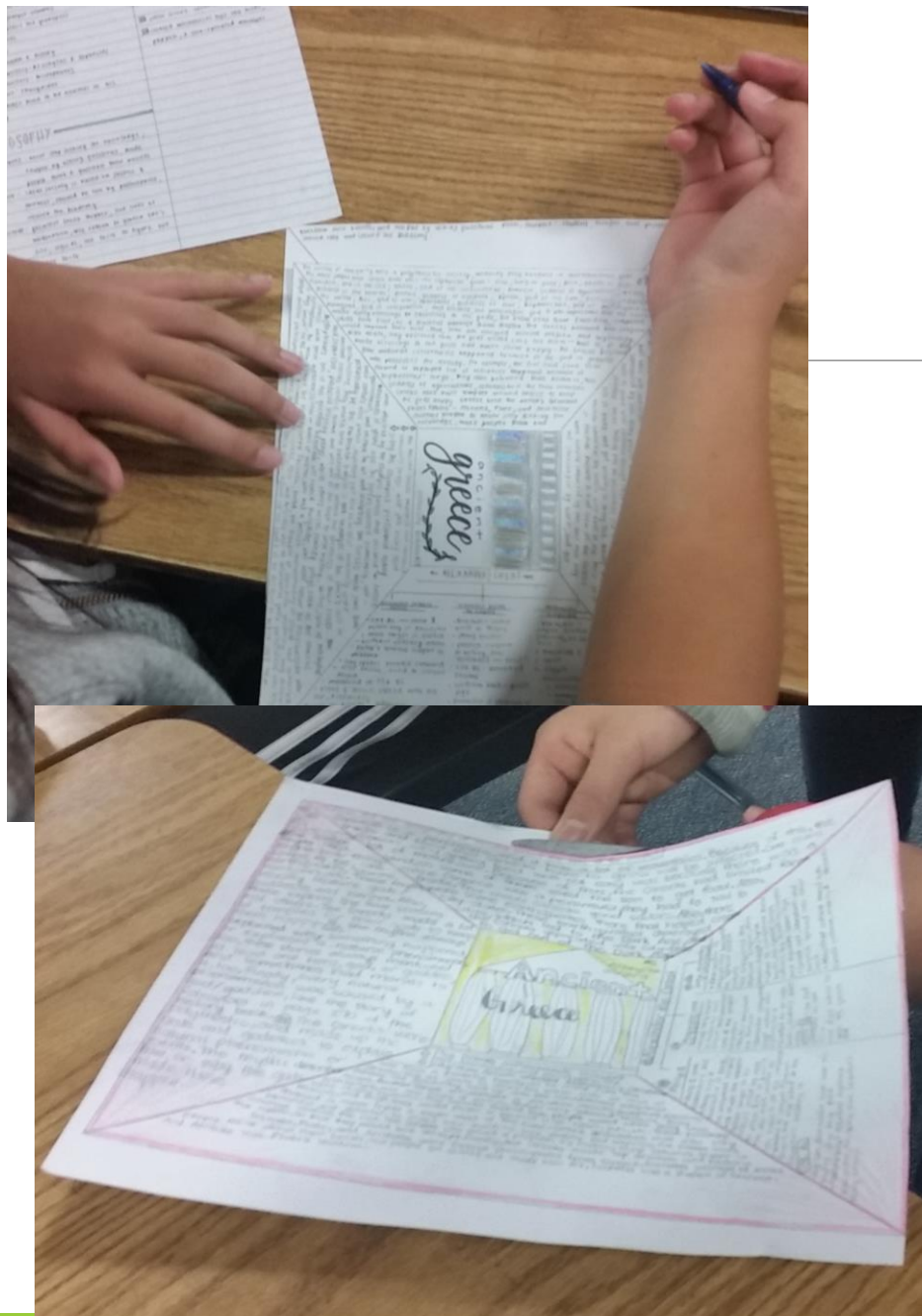
3/5/17

The ethical issues with governments created them to create rules and order. The American and Greek government was that the rich had no power in government. A rule with democracy was that the rich had no power in government. A rule with democracy was that the rich had no power in government.

As the Americans and the Greeks argued, the new government which had new rules and ethical issues. A rule with democracy was that the rich had no power in government. A rule with democracy was that the rich had no power in government.

Another rule was women and slaves could not vote. An ethical idea was that women could vote. The Greeks and American had rules and ethical issues with their government.

More FRAMES!!



Impact: Chinese impacted us very much by their religions. There was the Confucianism, the Daoism, and Legalism. Confucianism taught not only Chinese people, but us too by teaching us ethics also known as moral values. Confucius made rules so that children should obey their parents and more family rules.

Shi Huangdi demanded that everyone followed his policies. He changed this to China's old political ways which were claiming all the powers without sharing it with the lords. He also forced thousands of commoners who were ordinary people to work on government buildings. If things did not go his way commoners faced years of hardship, danger, and possibly death. Another ethics was if citizens didn't obey laws they would face severe punishments. People make mistakes but Shi Huangdi made such a huge deal out of it.

Daoism stressed living in harmony with Dao. In their teachings Dao gave birth to the universe. Opposing forces would live in harmony for Daoism. Legalism is the belief that people were bad by nature and needed to be controlled. There were harsh punishments for any kinds of crimes.

There are many teachings in the Chinese society. There is the Confucianism, Daoism, Buddhism, and Legalism society. Confucius wanted to teach Chinese ethics. He wanted to teach them proper roles in society. He taught them to also be respectful to parents, be loyal to each other, and fathers should display high moral values to inspire their family. Daoism stressed living in harmony with Dao. They didn't have a large government. Daoists said the universe was a balance of opposites. Legalism, the belief that people were bad by nature and needed to be controlled and punishments. They had governments and social controls.

張海珠
Haejoo Chang #4 1/26/18

The Silk Road was hard to get to.

China's Trade

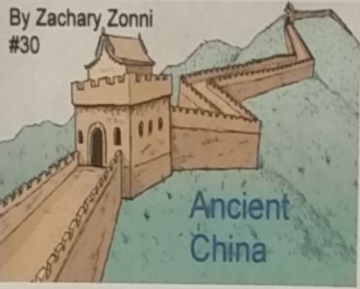
- ← Rome: Wool, horses
- ← Rome: amber
- ← Rome: gold
- silk, silk cloth
- spices (cinnamon, nutmeg, ginger)
- jade, objects, fine pottery

people in the west needed strict laws and punishments. people in Europe. people in Rome.

Rome gave China wool, amber, and gold. Central Asian people gave China horses.

The Impact China had on the World

China has had a huge impact on the world. China has had many achievements in things such as science, art, and medicine. One thing that China made popular was silk. Silk was so popular that Rome would trade China gold and silver for silk. This was good for China because when China's civilization first started not many people would trade with them because of natural barriers. Another one of China's big achievements is family life. To the Chinese, family was very important. Family was so important to them that in the Han dynasty the emperor would sometimes give people jobs because of how much they loved and respected their parents. The Great Wall of China was also one of China's great achievements that had impact on the world. These are only some of the achievements that had impact on the world.

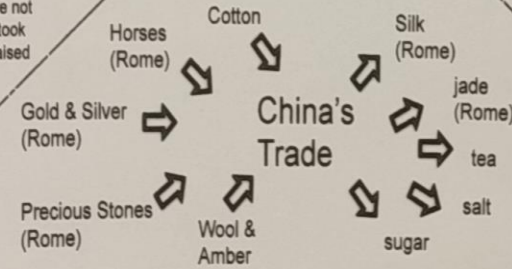


Confucianism:
Confucianism is based on ethics, or moral values. Confucianism is all about family and how we should respect our family. They had the same beliefs for government on how you need to respect your leader.

Daoism:
Daoism stressed living in harmony with the Dao the guiding force of all reality. Daoism also believes in wanting the government to stay out of their lives.

Legalism:
Legalism is the belief that people are bad by nature and need to be controlled. Legalism is also contrasted with both Confucianism and Daoism.

Buddhism:
Buddhism is a religion based on the teachings of Buddha. Buddhism was actually originated in India but the religion spread to China, this is a perfect example of diffusion.



China's trade changed when they started producing silk. They found out that people wanted silk because after Han armies captured land deep in Central Asia leaders told Han generals that people in the west wanted silk. After that, Emperor Wudi wanted to do a lot of trade so they started trading and eventually there was the Silk Road and a lot of trading, and one of China's biggest trade sources was Rome.

Impact

There is lots of impact that China had on the rest of the world. They had many innovations such as the sundial, which the Han used as an early type of clock. Also the Han created the seismograph that measured the strength of the earthquakes that occurred. Another impact on the world was the Chinese innovation of acupuncture. Many people around the world still use acupuncture to heal wounds or diseases. The Great Wall of China has greatly impacted the world because many people come from other countries just to see it, since it is one of the seven wonders. Also at the time the silk road made a huge impact, since people came from other countries just to get silk and trade for other necessities. Silk was highly valued so the Chinese got commodities like gold, precious stones, silver, and horses just for trading the silk that they had.

Rules and Perspectives

Legalism: Personally I think my family and I are not bad my nature but under legalism we are controlled.

Confucianism: I love Confucius and his religion. Now my whole family is reunited. We used to always argue but now I listen to my sister and our parents like never before.

Daoism: In my family we let everything happen by itself. We let everything flow like nature. They should let everything flow like water.

Buddhism: As my father was along the silk road he learned about his culture. Now my whole family is Buddhist.

Ethics

There are many ethical issues of the various leaders in China. First, was it right for the lords of the Zhou dynasty to not listen to the King and let invaders attack. Even though the King was bragging and "playing with fire." Also, was it ethical for Shi Huangdi to burn all the writings that disagreed with Legalism and he created such harsh punishments for going against the law? Was it right for Liu Bang to lower the punishments because sometimes harsh punishments are good? Was it right for Wudi to take all the land away and raise the taxes? Was it ethical for Wudi to make it so only wealthy can get a spot in the government?

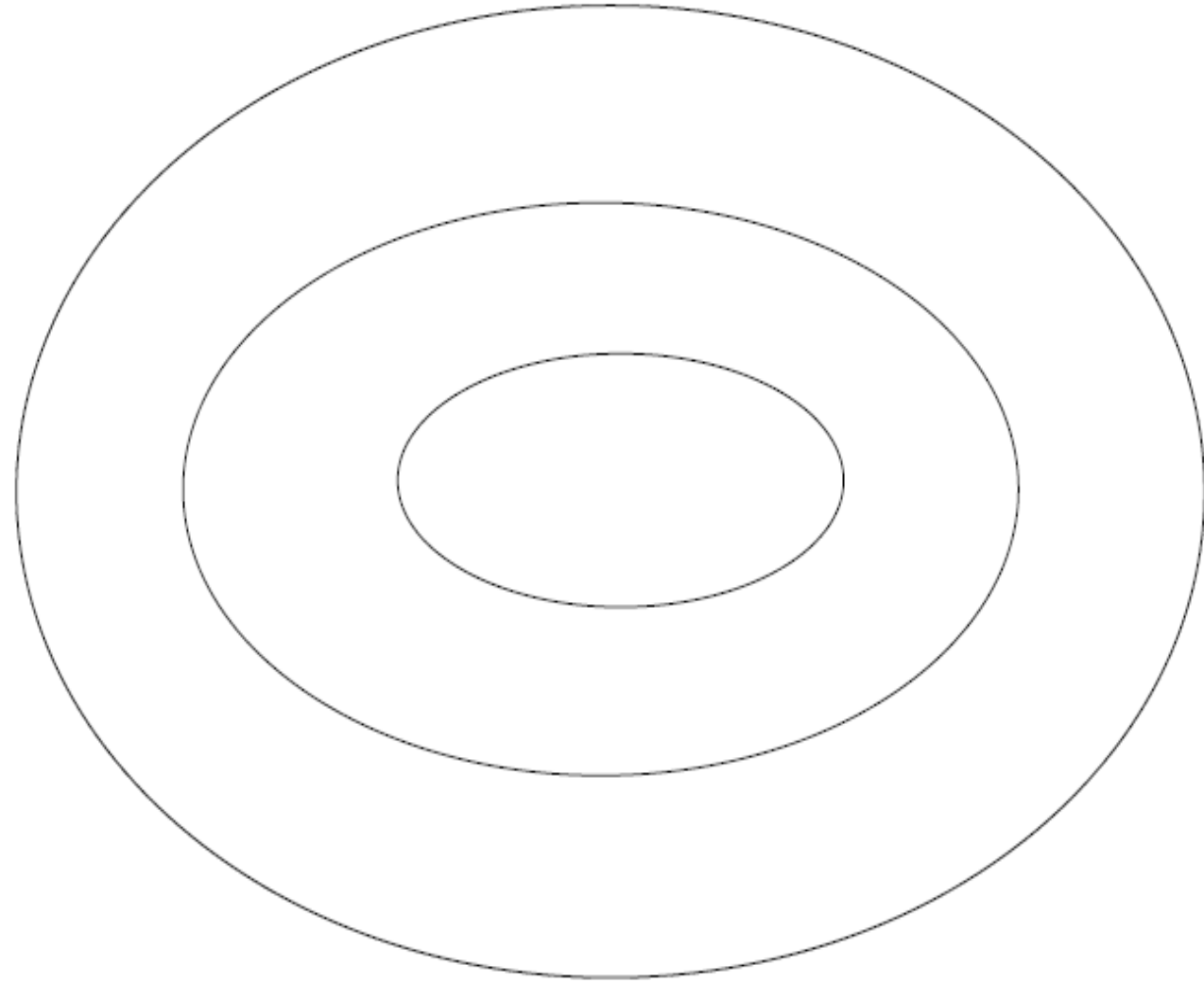
China's Trade

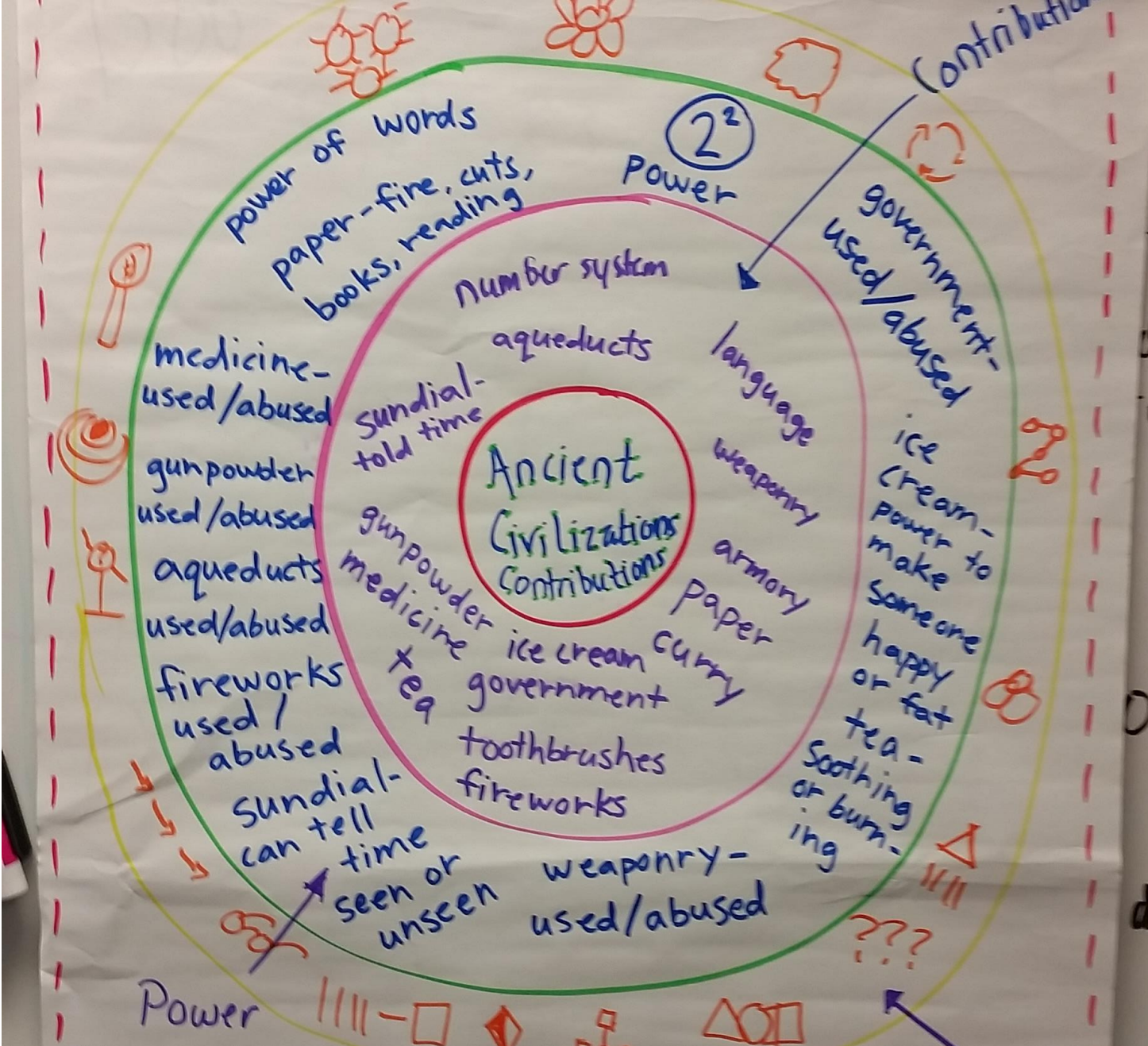
Rome - wool, Rome - amber, Rome - gold, Rome - silver, horses, silk, spices, jade objects, cloth, ginger.

The impact of this is that they got objects from other countries that they did not have. China traded silk for other things Rome had.

Concentric Circles of Knowledge

**Circling a topic
with different
strategies.**





Concentric circles of understanding

- Content
- What do you know?
- Apply universal concept
- Apply d/c

Concentric circles is one approach

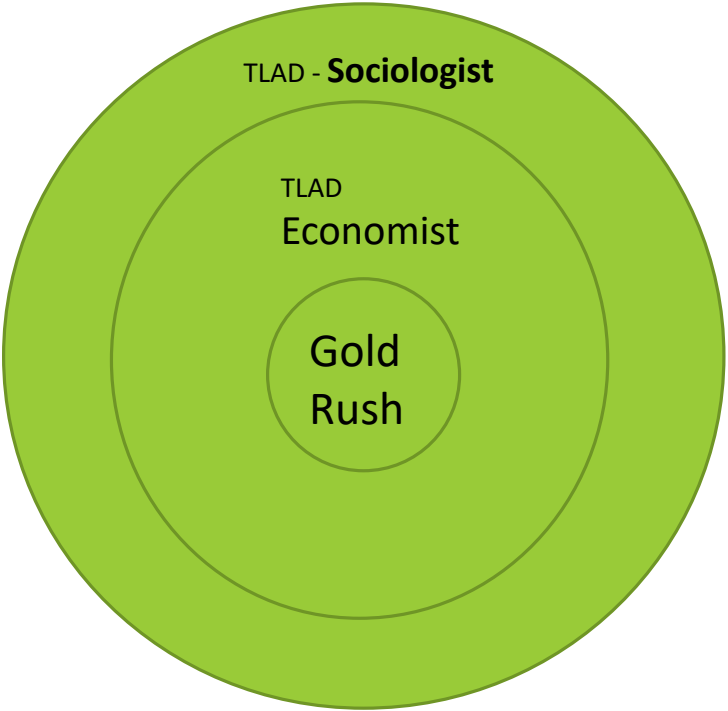
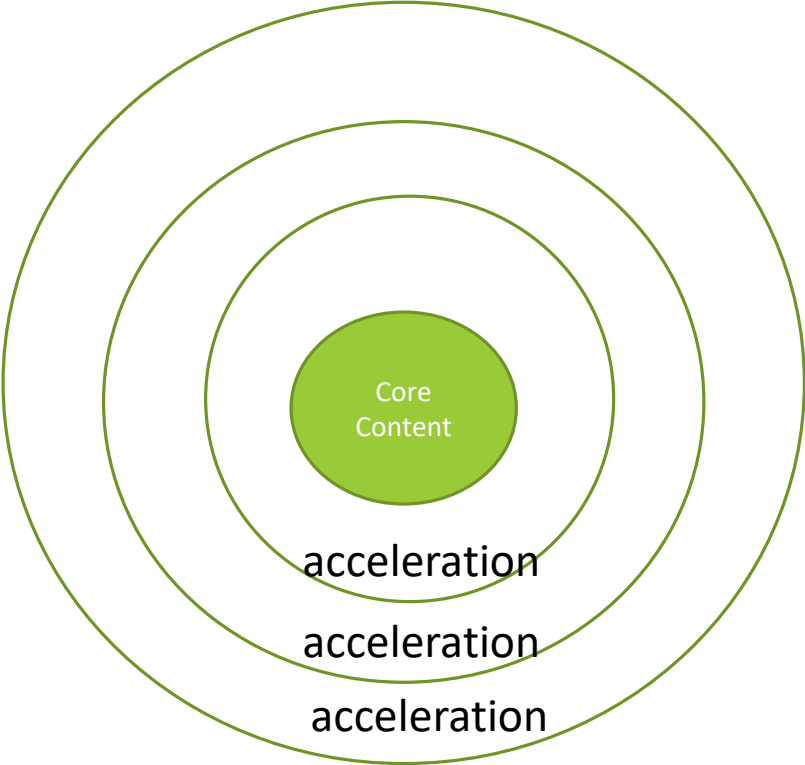
Circling a topic or an area of study using the elements of the GATE standards is analogous to standing at the counter of a Baskin-Robbins ice-cream parlor. A vast array of choices are available to the shopper. There is no right or wrong order, no set order that must be purchased every time you visit Baskin-Robbins.

This same analogy is true of decisions that are needed to plan and execute differentiated curriculum. The elements of acceleration, depth, complexity, and novelty comprise the “menu” of options available.

Concentric circles can be created in one of two ways.

Concentric Circle Options

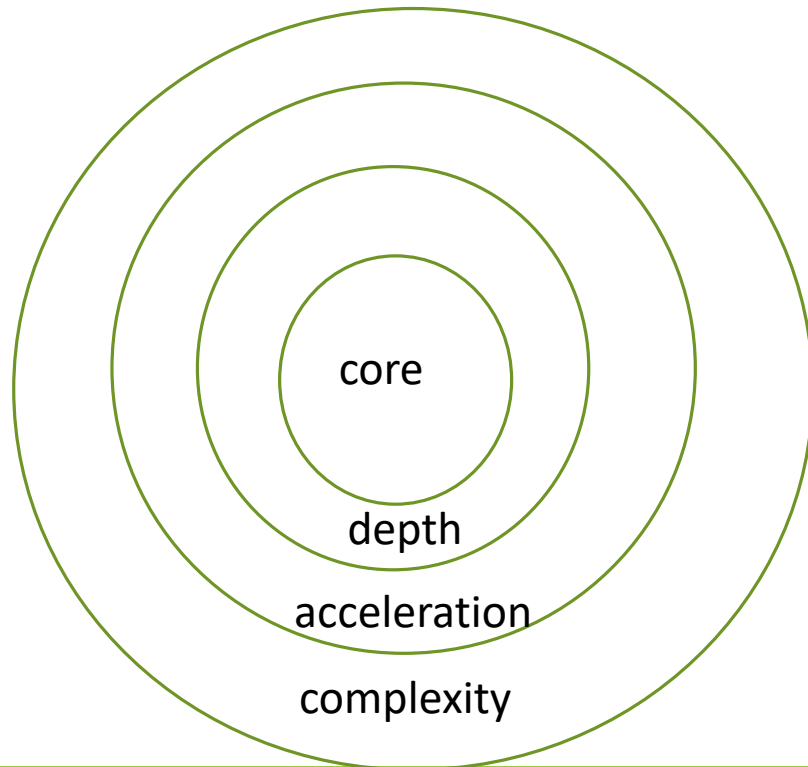
Single Element—Acceleration | Worked example -- TLAD



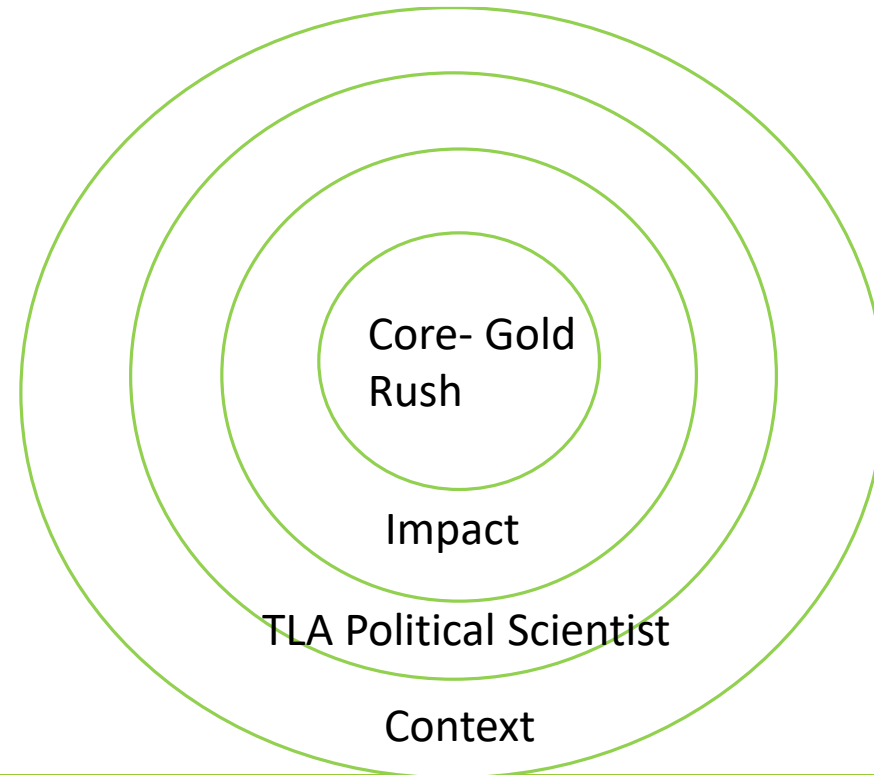
TLAD -**Politician**

Concentric circles – options for creating differentiated learning experiences

Multi-Elements – Across the GATE Standards



Worked Example

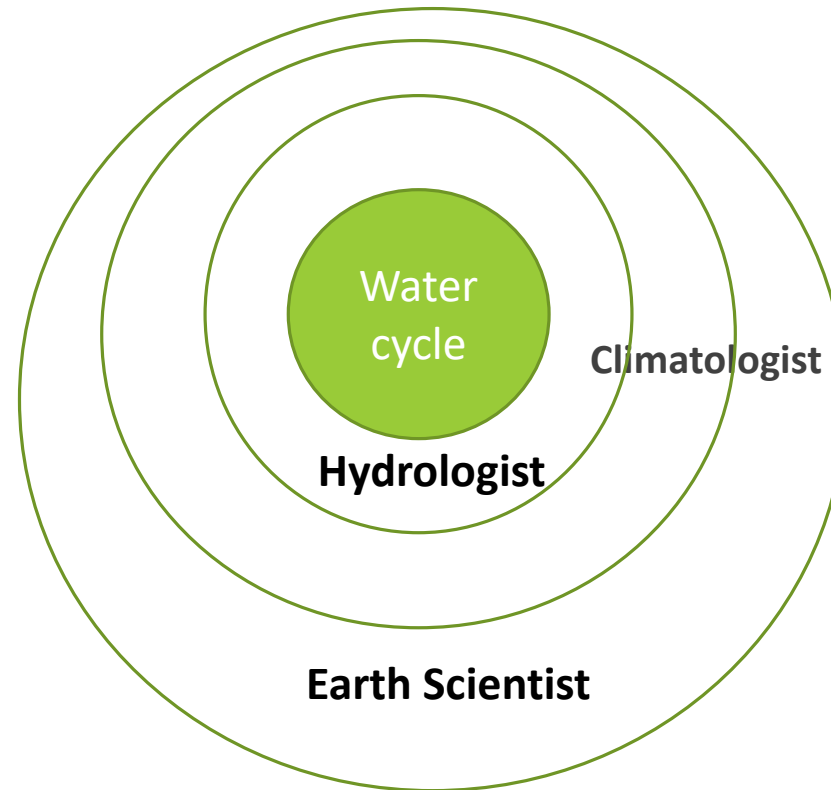


Systems are made up of subsystems



What terms might each disciplinarian use when studying the water cycle?

Earth Science is a System of Academic Study



Disciplinary Focus:

Consider the water cycle from

the perspective of these disciplinarians. How do their areas of study overlap and differ?

What to consider when circling a topic

Why it is significant, relevant, important, or valuable to the learner?

When is it important to use it as a scholar of the discipline?

What are the processes involved in applying it?

How it is connected to other forms of information?

What can be modified or adapted to alter its use?

Who would use the information?

Where would this information be most appropriate and applicable?

Universal Themes and TLAD



Universal Themes give any unit meaning. They make a difference between knowledge and understanding learning.

Many facts vs. being able to apply those facts to something meaningful



All disciplines have the following:

- Purpose
- Language
- Skills
- Tools
- Methodology
- Context
- Signature Contribution

CHANGE

Change can be evolutionary or revolutionary

Change generates additional change

Change is inevitable

Change can be either positive or negative

Change is necessary for growth

Think Like A
Political Scientist

Think Like A
Anthropologist

Think Like A _____

1. Identify the problem	
2. Analyze the problem	
3. Develop a plan	
4. Implement the plan	
5. Evaluate the results	
6. Reflect on the experience	

???

Question: _____
Answer: _____

What They Aren't

- Literary Theme
- Unit Theme
- Decorative Theme



A word cloud containing the following terms: Growing, Honesty, Friendship, Conflict, Heroism, Up, Love, Deception, Family, and Tolerance. The word cloud is crossed out with a large red X.

They Are:



The Biggest Ideas Possible

A Universal Concept is...

- An organizing idea/concept
- A conceptual lens that allows one to look at a topic from a different perspective
- Transcends time and place
- Brings focus to learning across subject areas

A Universal Concept...

Provides scaffold for organizing information

Allows students to delve more deeply into a topic

Demands critical and creative thinking

Advances understanding of core curriculum

Prompts discussion



Universal Concepts/Themes

Themes

1. Change
2. Conflict
3. Exploration
4. Force or Influence
5. Patterns
6. Order vs Chaos
7. Power
8. Structure
9. Relationships
10. Systems
11. Adaptation

Generalizations

Each Universal Concept has a corresponding generalization.

- Overarching statement built on a universal theme
- Can be proven true most of the time
- High cognitive demand
- Like universal themes, they transcend time and place and can be applied across disciplines



CHANGE

Universal theme

Generalization

- change generates additional change
- change can be either “good” or “bad”
- change is inevitable
- change is necessary for growth

POWER

Universal theme

Generalization

- power is the ability to influence
- power may be used or abused
- power is always present in some form
- power may take many forms (chemical, electrical, political, mechanical)
- power may be used to facilitate, dominate, or maintain the status quo

Power

Science

History

Math

Literature

Games

Art

Politics

Music

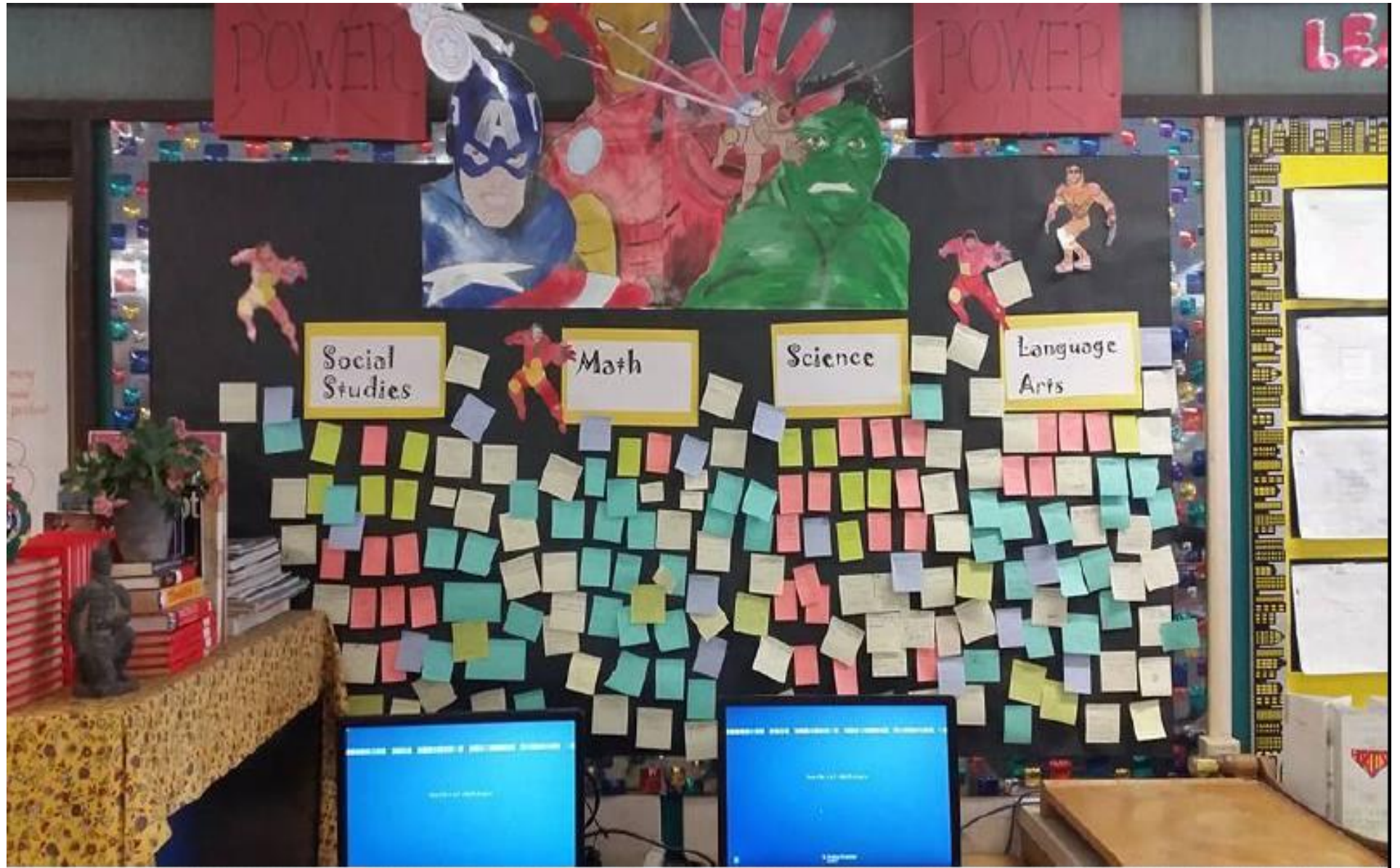
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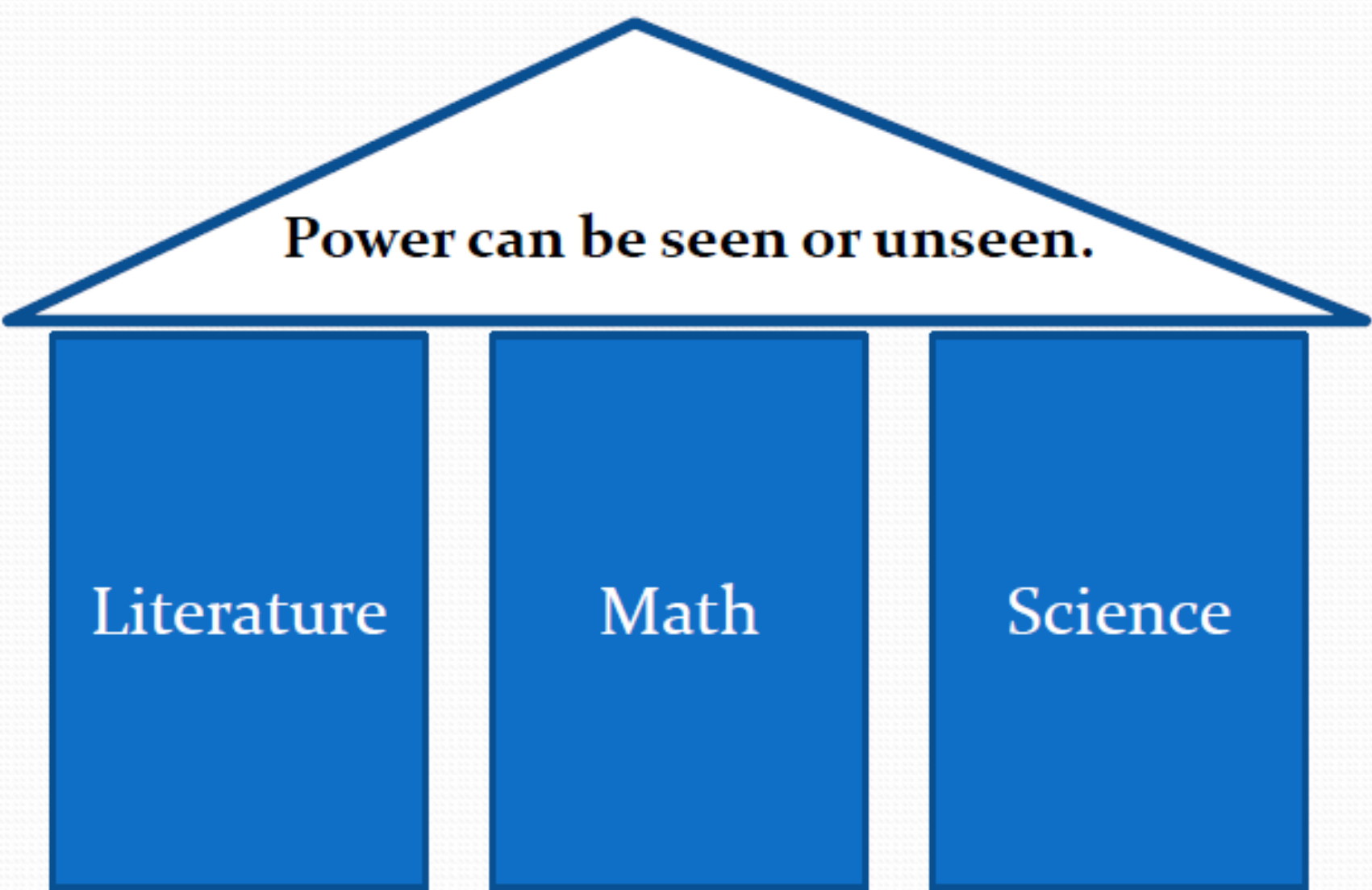
Power!

*Year-round
interactive board.*

As students make connections to the subjects taught, they record the connection to the universal concept of power on the board.

***Powerful
learning!!***





Power can be seen or unseen.

Literature

Math

Science

Power can be seen or unseen.

Stamp Act

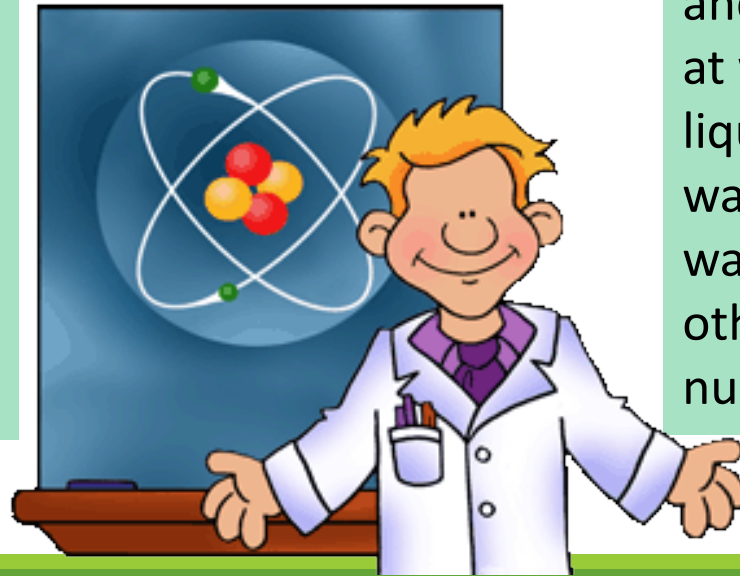
**Intolerable
Acts**

**Boston
Massacre**

CHANGE	<ul style="list-style-type: none"> • change generates additional change • change can be either “good” or “bad” • change is inevitable • change is necessary for growth •
COMMUNITY	<ul style="list-style-type: none"> • a community has members • community members share a common environment • communities follow patterns of growth and change • when one community comes in contact with another community, change may occur
CONFLICT	<ul style="list-style-type: none"> • conflict is composed of opposing forces • conflict may be natural or man-made • conflict may be intentional or unintentional • conflict may allow for synthesis and change
EXPLORATION	<ul style="list-style-type: none"> • exploration requires taking risks • exploration confronts “the unknown” • exploration may result in “new findings” or the confirmation of “old findings” • exploration requires leadership (i.e., explorers)
FORCE	<ul style="list-style-type: none"> • force attracts, holds, or repels • force influences or changes • force and inertia are co-dependent • force may be countered with equal or greater force
ORDER	<ul style="list-style-type: none"> • order may be natural or constructed • order may allow for prediction • order may communicate concepts • order may have repeated patterns • order may have elements of chaos
PATTERNS	<ul style="list-style-type: none"> • patterns have segments that are repeated • patterns allow for prediction • patterns have an internal order • patterns may have symmetry • patterns are everywhere
POWER	<ul style="list-style-type: none"> • power is the ability to influence • power may be used or abused • power is always present in some form • power may take many forms (chemical, electrical, political, mechanical) • power may be used to facilitate, dominate, or maintain the status quo
RELATIONSHIPS	<ul style="list-style-type: none"> • relationships can bring about change • relationships can be simple or complex • relationships may have positive and negative effects • relationships can be natural, forced, or chosen • relationships are connections

Think Like A Disciplinarian

...is an aspect of scholarliness that encourages students to explore the advanced, sophisticated, and complex concepts in the various disciplines by assuming the role of the disciplinarians who work in those fields.



Thinking Mathematically Think Like A Chemist!

Chemists classify matter by its melting and boiling points, or the temperatures at which a solid changes to a liquid and a liquid changes to a gas. Ice changes into water at 32°F (0°C) and changes into water vapor at 212°F (100°C). What other jobs might work with negative numbers?

Think Like A Political Scientist

I study government and political processes, institutions, and behavior. I deal with questions closely associated with political theory. Modern political science stresses the importance of using political concepts and models that are subject to empirical validation and that may be employed in solving practical political problems.

Think Like A Archaeologist

I investigate the lives of early people by studying the cultural remains they left behind, such as buildings, artwork, tools, or pottery. I also examine the context and associations of the remains, which can provide information about how the remains were used. I look for bones and plant parts, which can reveal much about how ancient people lived. I look for information about how, where, and when cultures developed. I search for reasons why major changes have occurred in certain cultures. I will examine any evidence that can help explain how people lived in the past.

Think Like A Sociologist

I study the individuals, groups, and institutions that make up human society. I observe and record how people relate to one another and to their environments. I also study the formation of groups; the causes of various forms of social behavior; and the role of churches, schools, and other institutions within a society. I study relationships among individuals and groups in order to determine their effect on the overall function of the society. I formulate theories based on observations of various aspects of society. I use three chief scientific methods to test these theories: surveys, controlled experiments, and field observations.

Think Like A Anthropologist

I study humanity and human culture. I focus on all societies and all aspects of human physical, social, and cultural life. I examine the characteristics that human beings share as members of a single species and the diverse ways that people live in different environments. I investigate culture, the strategies for living that people learn and share as members of social groups. I also analyze the products of social groups, such as beliefs and values. I look systematically for general patterns in human behavior. I develop theories and use scientific methods to test them. I try to determine how people who share a culture view their world.

Think Like A Historian

I study records of events and prepare written accounts based on my research. I attempt to explain the causes and effects of events and offer interpretations of them. I form questions to direct and focus research, act as a guide to selection of evidence, and help test the evidence for its meaning. I use primary sources and secondary sources to learn basic information and the state of current knowledge. I am skillful in deciphering and interpreting documents and objects. I read documents in their original languages, and routinely master skills from other disciplines, ranging from art history archaeology to statistics and economics. I often extract statistical information from original records and translate it into a form that computers can read and analyze.

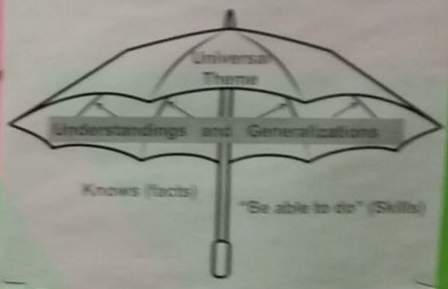
Think Like A Geographer

I study the location and distribution of living things and the earth features among which they live. I study where people, animals, and plants live and their relationships with rivers, deserts, and other earth features. I also examine where earth features are located, how they came to be there, and why their location is important. I search for patterns in the distribution of features over

???

Specify the method that the perspective of an experimenter provides to a scientist.

Comprehension and Application



What is a Disciplinarian?

- Expert in a particular field of study
- Teach, conduct research and publish findings
- Experts in applying a discipline
 - perform specialized tasks rather than conduct basic research
- Collaborate across disciplines
- Sub-disciplines or branches

Key Benefits

Increases awareness of the discipline, thus adding depth and complexity to the subject matter

Requires learning about the specialized vocabulary, tools and skills of each discipline

Connects a student's own interests and abilities to a subject and a discipline

Allows the student to immerse self into the study of a discipline

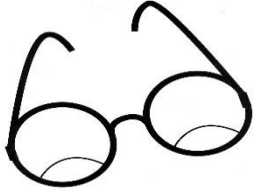
Creates a greater awareness of the contributions of the disciplines to the world

Exploring within a discipline

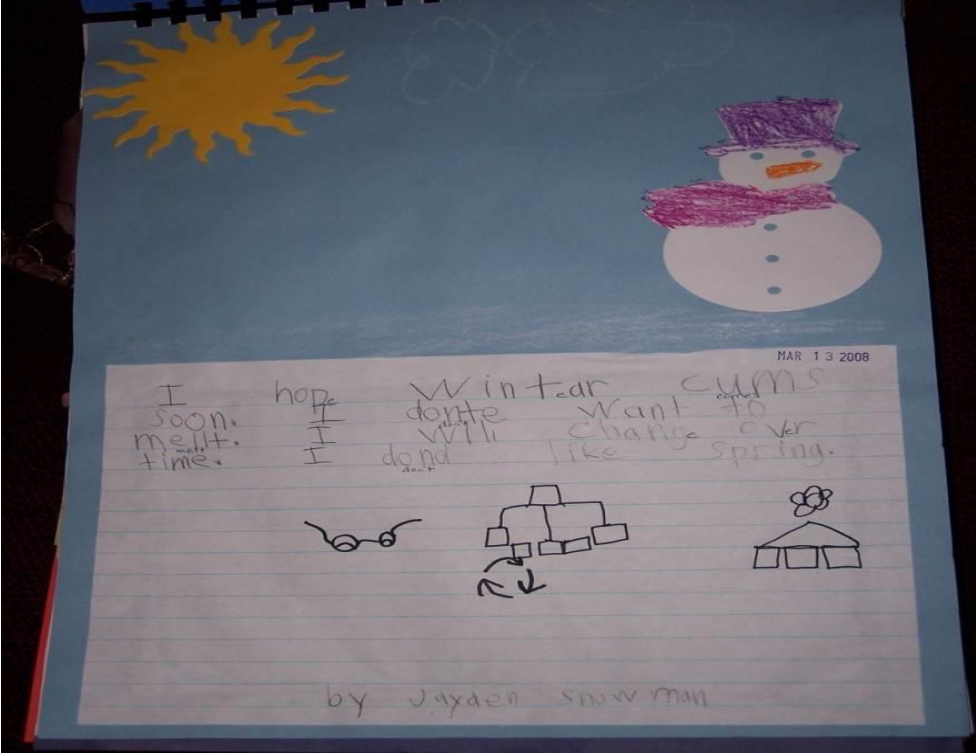
Directed lessons can be given on disciplines as they relate to an area of study.

- Thinking Like an Historian
- Thinking Like a Geographer
- Thinking Like a Scientist
- Thinking Like a Mathematician

Multiple perspectives and TLAD with Kindergarten!!



Biologist's at work!!



Thinking Like a Snowman!

Think Like A Disciplinarian



Discipline ? What is it?

Every discipline is connected to other disciplines in order to provide meaning.

Within Discipline Studies Can Be Even More Specific

- **Thinking Like A Scientist**

- Chemist

- Geologist

- Biologist

- Botanist

- Naturalist

- Paleontologist

Think Like a Disciplinarian



A *geographer* said...

"The location or place is the root of the culture."

What do you think this means?

Be a *Geographer*.....

Prove with evidence what this statement means.

Discipline

Blank space for notes under Discipline.

Language 

Blank space for notes under Language.

Work

Blank space for notes under Work.



Methodology

Blank space for notes under Methodology.



THINK LIKE A...

Thinking Like a Disciplinarian to Support Making Inferences: Think Like a Sociologist

Discuss a fiction story the students have previously read using the following chart as the basis of revisiting the story:

Characters	Role	Problem

Think Like a Disciplinarian with Frames

Align CCSS with Discipline

6th Grade Life Science- The number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors...

What Discipline might work well with this standard?

Layer thinking tools to build questions/ prompts

The number and types
Of organisms an ecosystem
can support depends on the
resources available and on
abiotic factors.



**Depth and
Complexity
prompts**

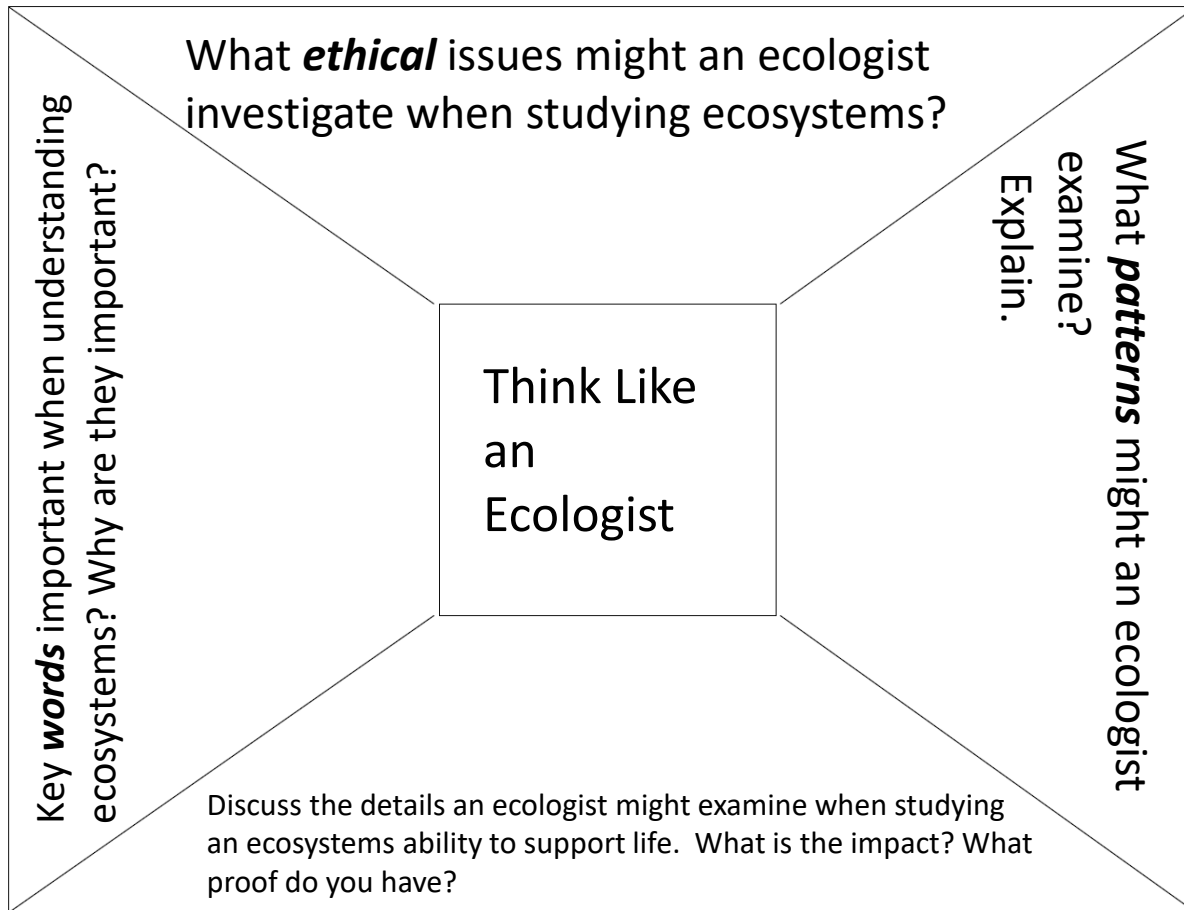


What ***ethical*** issues might an ecologist
Investigate when studying ecosystems?

What ***patterns*** might an ecologist
examine?

Important ***words*** to understand
ecosystems.

Discuss the ***details*** an ecologist might
examine when studying an ecosystem's
ability to support life.



Disciplinarian middle of the frame.

Questions/prompts outer portions

Think Like A

<p>Language of my discipline:</p> 	
<p>Tools and Methods</p> 	
<p>Resources</p> 	
<p>Products</p> 	

Unit of Study Geology/Rocks & Minerals

Geologist

**Looks at
origins**



Archaeologist

**How rocks
were used as
tools**



Anthropologist

**How rocks were
used as religious
purposes**

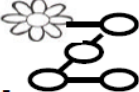


Think Like An Mathematician

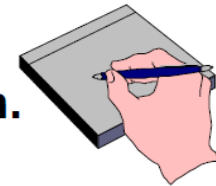
Describe the  situation
in numerical values.

Use the  to develop
a scenario to problem
solve.

Think Like A Sociologist

Describe the  of the
group dynamics or inter-
actions among people.

Write a paragraph.



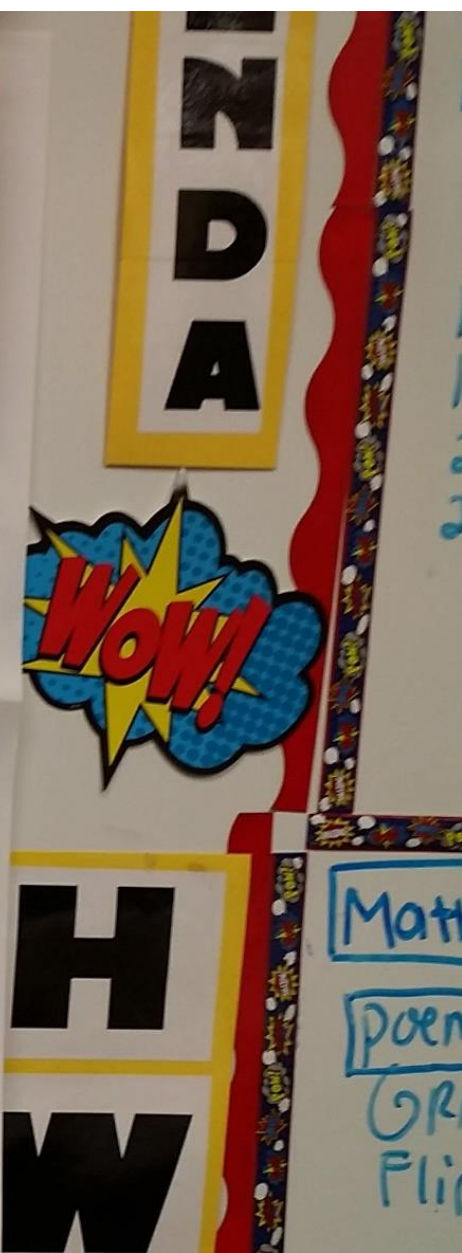
TLAD

Every discipline is connected to another to provide meaning






Think Like A Disciplinarian to add layers of understanding to the Δ , \otimes , \odot , Σ , \oplus , M , ρ , ∞

metacognition



Think Like A Disciplinarian

Discipline:	Language  Vocabulary related to content or discipline being studied. May include phrases, signs/symbols, figures of speech, or abbreviations.	Patterns  Recurring elements or factors in ideas, objects, stories, & events. Items may be predictable, repetitive or ordered.	Ethics  Moral principles or conflicts surrounding different points of view on events, ideas, or issues. May include bias, values, or judgments.
Journalist			
Physician			
Anthropologist			
Biologist			

Science:
Think Like a Disciplinarian on
... Earthquakes ...

2/22/2017

... Our Stuff news segment!!!
... daily-
... rphones)
... G NEWS!!!
... the Charlotte Islands.
... on helping the affected areas.
... 19 people dead, 187 injured and, 74 missing.
... nment on the situation.
... e the earthquake.
... to prepare to evacuate to the Canadian Mainland.
... sor Daniel Sitanggang of the National Institute of
... ion, what is an earthquake?
... (ake, tremor or temblor) is the perceptible
... from the sudden release of energy in the
... thquakes can be violent enough to toss
... ?
... nderground suddenly breaks along a fault. This
... hat make the ground shake. When two blocks of
... stick a little. They don't just slide smoothly, the
... fects the (Press) POWER
... es?
... lace on the Charlotte islands. So, can you explain
... other?
... 1 earthquake cause the seafloor to rise or fall
... nto each other at a plate boundary. The thicker
... to a rise or fall of the seafloor.

A Day in the Life of a Meteorologist (skit script)
SCENE 1: At Work

... en enter work room)
... morning Riyal
... morning Eden!
... eek's Precipitation Segment was really fun!
... u feel the earthquake this morning in Chino Hills?
... I felt a little, but not that much because I live a little far from the epicenter of
... ake.
... hope many people didn't get hurt.

... wait to find out what our next assignment is going to be!
... w!! I hope its about like fish and stuff!
... Eden, we are meteorologists not marine biologists..
... w that! I just wanted to see fish...
... nyway.. Lets-
... ne rings) *Riya answers phone
... iello?? *looks at powerpoint*
... yelling
... , okay, we'll get started right now sir! *hangs up
... needs us down at Chino Hills to get facts about the major earthquake that just

... ll, hurry up then!
... ht we better get started already.
... thquakes must have a starting point right?
... h.. So that would be the focus, and the point on the surface ABOVE the focus is the
... !
... ctly! And what COMES from an earthquake is seismic waves! These carry energy
... earthquake away form the focus, through Earth's interior, and across the surface.
... x, lets keep searching!
... u got it!
... ound and write in notebooks
... ack together)

SCENE 2: CHINO HILLS


2/24/2017

BY YOUNGSUK R. (ROOSTER)
NIKOLASA A. (RICK RIORDAN)

SOCIOLOGISTS ON EARTHQUAKES

WHAT IS SOCIOLOGY?

- Sociology is the study of social behavior (society), including its origins, development, organization, networks, and institution. It is a social science that uses various methods of empirical (based on observation) and critical analysis to develop a body of knowledge about social order, disorder, and change.



EARTHQUAKES THROUGHOUT HIST

BY: MATTHEW HANSEN AND BRAYDEN LAZEWSKI

... IN
... lect, the two of us decided to become
... s live and perceive earthquakes toda
... times, cities, and our daily lives tak
... s earthquakes can be, as well as th
... er the last hundred years. (Ear

Think Like A Disciplinarian

Think Like a Linguist

I study the sounds, words, phrases, and sentences that make up languages. I also study how history and culture affect languages. I trace how languages and language families develop, where words come from, and how words get invented. I study languages that are spoken today as well as "dead" languages, such as Latin, which are no longer spoken. I focus on the way modern languages change and are influenced by cultural trends the places where these people live.



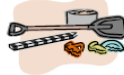
Think Like An Anthropologist

I study humanity and human culture. I focus on all societies and all aspects of human physical, social, and cultural life. I examine the characteristics that human beings share and the diverse ways that people live in different environments. I investigate *culture*, the strategies for living that people learn and share as members of social groups. I also analyze beliefs and values. I look for general patterns in human behavior. I try to determine how people who share a culture view their world.



Think Like An Archaeologist

I investigate the lives of early people by studying the cultural remains they left behind, such as buildings, artwork, tools, or pottery. I also examine the remains which can provide information about how the remains were used. I look for bones and plant parts, which can reveal much about how ancient people lived. I look for information about how, where, and when cultures developed. I search for reasons why major changes have occurred in certain cultures. I will examine any evidence that can help explain how people lived in the past.



Think Like A Geographer

I study the location and distribution of living things and the earth features among which they live. I study where people, animals, and plants live and their relationships with rivers, deserts, and other earth features. I also examine where earth features are located, how they came to be there, and why their location is important. I also search for patterns in human economic, political, and social activities and try to find out why these patterns exist. I want to know about the forces that create and change the landscape. I am also interested in how human beings change the earth and the ways in which the surface of the earth has changed over time.



Think Like A Geologist

I try to understand the world around us and predict how our planets will behave. I study rocks, soils, mountains, volcanoes, rivers, oceans, and other parts of the planet to understand how geological events and earth's geological history affect people. As the human population grows, more and more people live in areas that experience natural geological hazards such as floods, earthquakes, tsunamis, volcanoes, and landslides. I use knowledge to try to understand these natural hazards and forecast potential disasters.



Think Like A Historian

I study records of events and prepare written accounts based on my research. I attempt to explain the causes and effects of events and offer interpretations of them. I use *primary sources* and *secondary sources* to learn basic information and the state of current knowledge. I am skillful in deciphering and interpreting documents and objects. I read documents in their original languages, and routinely master skills from other disciplines, ranging from art history archaeology to statistics and economics. I often get statistical information from original records and translate it into a form that computers can read and analyze.



Think Like A Marine Biologist



I describe and classify marine life. I try to determine how these organisms develop, how they obtain food, how they reproduce, how they interact with other life, and why particular groups live in different regions of the ocean. I seek to learn how marine plants and animals can be harvested as food without destroying their natural populations. I also investigate whether or not certain human activities, such as dumping waste products in the ocean, harm marine life. I try to discover what substances marine organisms produce that can be used to treat human diseases. I use marine animals in experiments to increase our knowledge of human life processes.

Think Like A Paleontologist



I study animals, plants, and other organisms that lived in prehistoric times (more than 5,500 years ago). I study fossil remains of organisms in layers of sedimentary rocks. I learn what kind of life existed in various periods of the earth's history. I also aid in the location of oil. Oil found in rocks often contains certain fossils. Oil companies use such fossils as clue to where to find oil.

Think Like A Physicist



I try to understand what matter is and why it behaves the way it does. I seek to learn how energy is produced, how it travels from place to place, and how it can be controlled. I try to answer basic questions about the world, how it is put together, and how it changes.

Think Like A Political Scientist



I study government and political processes, institutions, and behavior. Modern political science stresses the importance of using political concepts and models that are subject to empirical validation and that may be employed in solving practical political problems.

Think Like A Sociologist



I study the individuals, groups, and institutions that make up human society. I observe and record how people relate to one another and to their environments. I also study the formation of groups; the causes of various forms of social behavior; and the role of churches, schools, and other institutions within a society. I study relationships among individuals and groups in order to determine their effect on the overall function of the society. I use three chief scientific methods to test these theories: surveys, controlled experiments, and field observations.

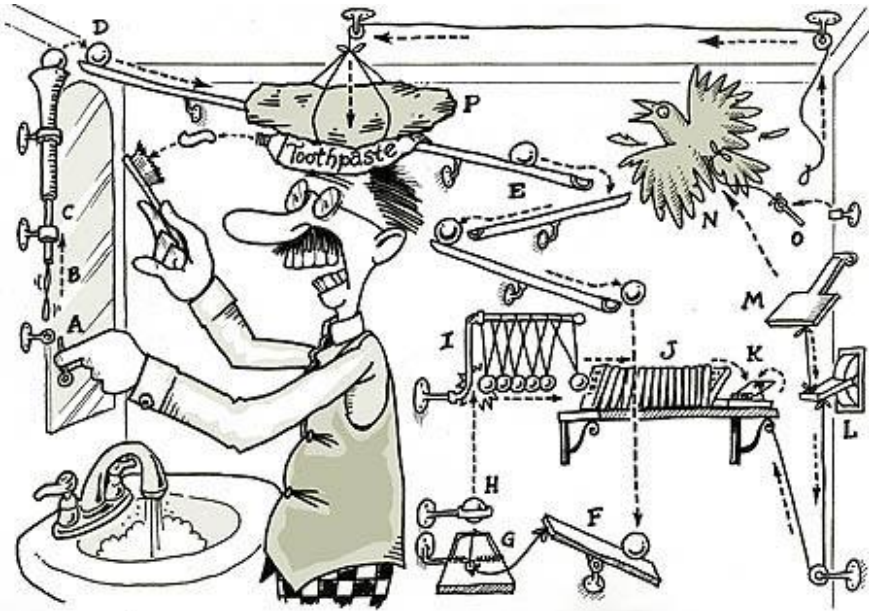
Critical Thinking vs. Creative Thinking – Key Differences

1. Creative thinking tries to create something new, while critical thinking seeks to assess worth or validity of something that already exists.
2. Creative thinking is generative, while critical thinking is analytical.
3. Creative thinking is divergent, while critical thinking is convergent.
4. Creative thinking is focused on possibilities, while critical thinking is focused on probability.
5. Creative thinking is accomplished by disregarding accepted principles, while critical thinking is accomplished by applying accepted principles.

Critical and Creative Thinking

Learning to Learn

Provide opportunities for learning which include:

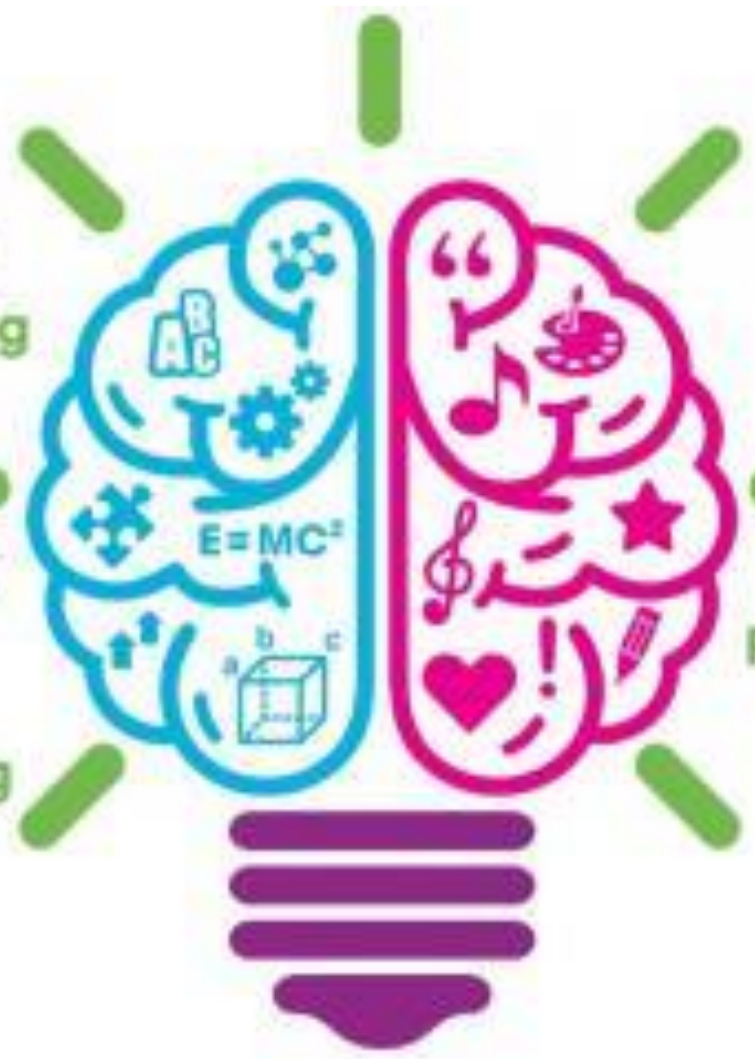


Abstract < > Concrete
Whole < > Part
Simple < > Complex

Disciplined
Intelligence
Memory Training
Analytical Reasoning

CRITICAL THINKING

Mathematical
Intelligence
Logical Reasoning



CREATIVE THINKING

Problem Solving
Enhancing Creativity



**CONVERGENT
THINKING**

VERSUS

**DIVERGENT
THINKING**

<https://youtu.be/cmBf1fBRXms>



Take time to reflect on the information covered within this PowerPoint.

What are ways you can imagine incorporating these strategies within your own classroom?

What AH-HA's did you have?

Share your thoughts with a new BFF.



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