

BUZZ WORD

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Experiment

Activity Book



Bringing the BUZZ to You!

The Buzzword partners designed this kit to inspire your family to keep learning together. We chose activities that build on your child's natural curiosity, encouraging a growing vocabulary and a deeper engagement with books.

So, who's ready to unbox the BUZZ!? First, read through *Charlotte the Scientist Finds a Cure*, written by **Camille Andros** with your child. Then, go through the different activities, EXPERIMENTs, and ideas together, taking time to explain the meaning of the words and connecting them to your child's real-life experiences.

EXPERIMENT Book Recommendations from Carnegie Library of Pittsburgh!

Discovery is such an important part of childhood. Part of discovery is EXPERIMENTing, learning how the world around them works. You can encourage your child's curiosity by sharing books like the ones on this list.



<https://bit.ly/BuzzwordJoy>

Personalized Recommendations

Looking for a good book, album, movie, or TV show? We're happy to recommend them to you! Use this Personalized Recommendations form to send a CLP librarian some information about what you like and we'll curate a list just for you.

www.carnegielibrary.org/match

Salt crystal EXPERIMENT

Materials: mason jar, sea salt, pipe cleaner, water, magnifying glass

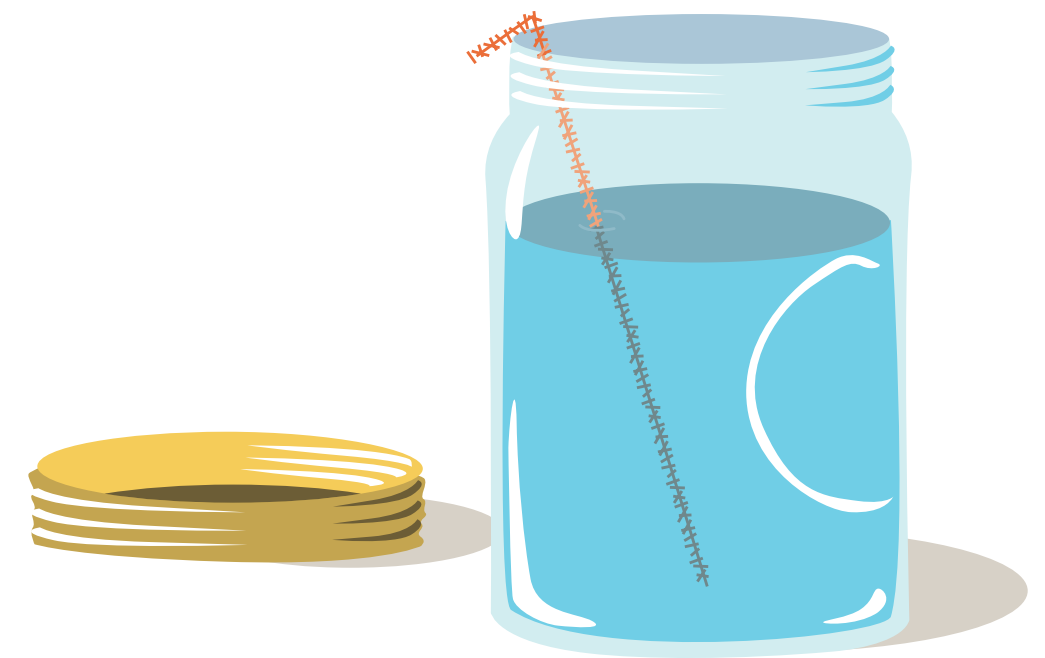
Step 1: With the help of your grownup, measure out 1/3 cup of salt and one cup of boiling water.

Step 2: Pour into a mason jar.

Step 3: Place a pipe cleaner in the solution.

Step 4: Place your uncovered mason jar in a dark, cool space for two to three weeks.

Step 5: Check on your crystals and use a magnifying glass to examine your creation.



I can EXPERIMENT with sunlight!

The sun keeps our planet warm, helps plants grow, and gives us light. The sun also shines a special type of light human eyes can't see called ultraviolet (UV) light. UV light can cause a sunburn and hurt our eyes if we're exposed to too much. One of your beads has a special pigment that absorbs UV light, causing the bead to change color when it's exposed to sunlight.

Materials: 1/3 pipe cleaner, two regular beads,* one UV bead*

Step 1: Find your pipe cleaner and beads.

Step 2: Thread your pipe cleaner through the holes in your beads.

Step 3: With your grownup's help, wrap the ring around your finger and twist so that it's secure.

Step 4: EXPERIMENT with your ring by putting it in direct sunlight. Do you see any of the beads changing color?

Step 5: Continue your EXPERIMENT by covering the beads or taking your ring inside. What is happening to the beads now? Did your EXPERIMENT help you determine which bead is the special UV bead?

Extension Activity: Humans use different types of technology to keep themselves from being hurt by the sun's UV rays, including sunscreen, hats, umbrellas, clothes, and sunglasses. How could you take your UV ring outside and protect the UV bead from changing color? EXPERIMENT with a few possible solutions!



* Note: this activity contains small parts that could pose a choking hazard. Adult supervision required.

Buzzy Bee's Body Bingo

Our bodies are amazing and they help us to do so many incredible things! We run, jump, dance, talk, sing, and so much more. As we grow, our bodies let us know we can do more amazing things. With help from Buzzy Bee, we're going to EXPERIMENT and play a fun-filled game of Body Bingo to see what our bodies can do!

Materials: bingo card, bingo daubers

Step 1: Find your Buzzy Bee Body Bingo sheet and dauber. Set aside.

Step 2: Pick an activity on your bingo board and do it.

Step 3: If you can accomplish the activity, use your dauber to mark that space. If you can't accomplish it, EXPERIMENT with new ways to accomplish it.

Step 4: Once you have completed four activities in a row, either left to right, diagonally, or the four corners, call out BINGO!

Extension Activity: Measure how long you can do some of these activities for. Make a guess (or a hypothesis) and EXPERIMENT to find your results. For example - time just how long you can stand on your left foot or count how many arm circles you can do in a row!



Heart Rate EXPERIMENT

It is important to exercise and get your heart rate up every day. Dance is a great way to move your body and bring exercise and art together. In this activity, you will EXPERIMENT by doing dance moves and seeing how they affect your heart rate.

Materials: stethoscope, dance cards

Step 1: With the help of your grownup, find your heartbeat using the stethoscope. To do this, sit or stand up tall and place the stethoscope on your chest over your heart.

Step 2: Pick one of the dance cards.

Step 3: Make a guess (or a hypothesis). Will your heartbeat get faster or stay the same while doing the dance move?

Step 4: Do the dance move for 30 seconds.

Step 5: Check your heartbeat with the stethoscope and compare the numbers. Is your heartbeat faster after dancing or the same?

Step 6: Repeat the steps with each dance card.

Extension activity: What would happen to your heart rate if you did a dance move for longer than 30 seconds? Make a prediction about what will happen to your heart rate when doing the dance moves for longer and then complete the above activity.

You can also extend this activity to the whole family and see how you compare with each other. Have fun dancing and exercising together in this EXPERIMENT!

PITTSBURGH BALLET THEATRE

Watercolor EXPERIMENT

In *Charlotte the Scientist Finds a Cure*, Charlotte often starts a sentence with “if” and “then” in the middle. That is the beginning of a hypothesis. To test a hypothesis, an artist/scientist must conduct an EXPERIMENT.

A hypothesis is very valuable for a scientist or an artist! In this EXPERIMENT, we will test different materials with watercolor paint and things from around the house.

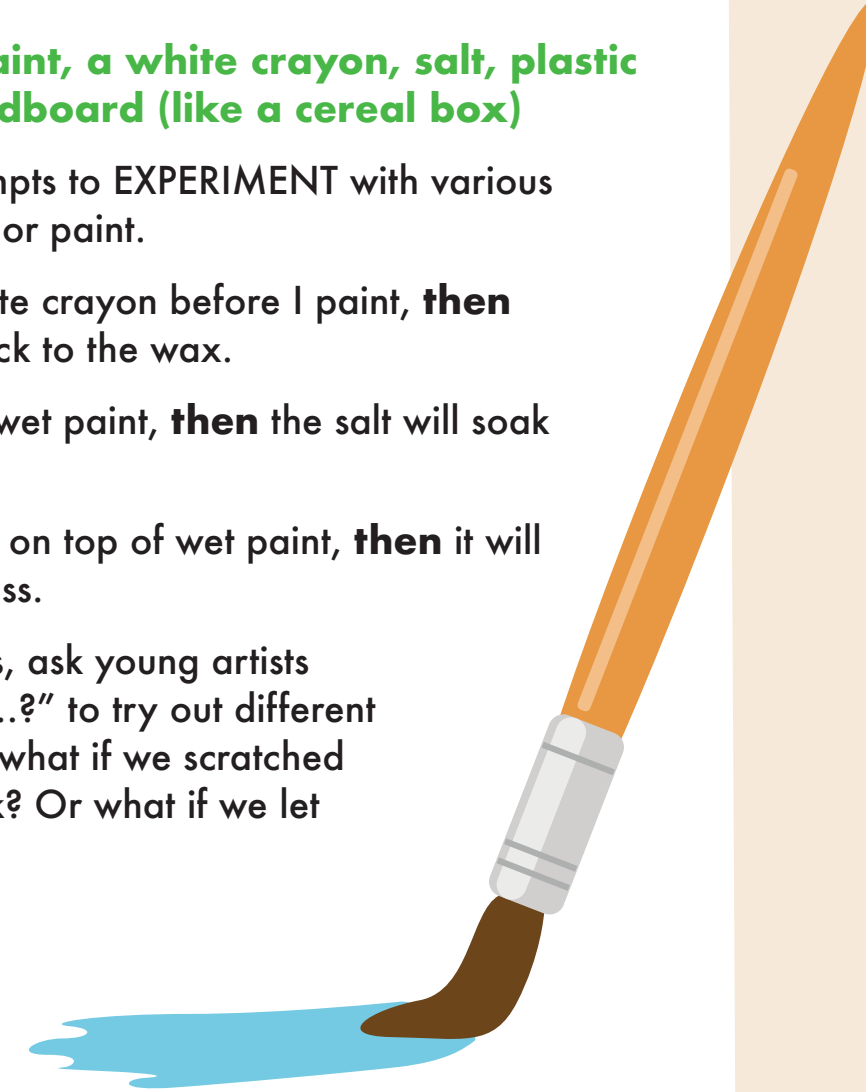
Materials: watercolor paint, a white crayon, salt, plastic wrap, cardstock or thin cardboard (like a cereal box)

Step 1: Use the following prompts to EXPERIMENT with various materials and watercolor paint.

- **If** I color with a white crayon before I paint, **then** the paint will not stick to the wax.
- **If** I sprinkle salt on wet paint, **then** the salt will soak up the colors.
- **If** I put plastic wrap on top of wet paint, **then** it will look like broken glass.

Extension Activity: Grownups, ask young artists “what if you...?” or “what if we...?” to try out different painting methods. For example, what if we scratched through the wet paint with a fork? Or what if we let it dry in the sun?

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Let's EXPERIMENT with making music!

All music comes from one little idea and we EXPERIMENT with different versions before we come up with something amazing! Songs start out with one note, and before you know it, we've written a whole opera with parts for the singers and the orchestra!

In this activity, you are going to EXPERIMENT with different words to make our very own song!

Materials: flashcards with pictures, dry erase board, dry erase markers

Step 1: Pick out three to five cards randomly from the deck of flashcards. Set aside.

Step 2: Write out your words on the dry erase board.

Step 3: EXPERIMENT with writing the words in a different order until you find one you love!

Step 4: Once you are happy with the order of your words try to use them in a song. You can use a melody you already know ("Mary Had a Little Lamb," "Wheels on the Bus," etc.) or make your own!

Extension Activity: When you are at home, look around the house and write down the different things you see and try making a song using the words around you. Do this wherever you go and see how many different songs you can make!

Sink or float EXPERIMENT

Doing EXPERIMENTS is one way we learn about the world around us. Scientists do experiments to answer questions about plants, animals, rocks, and even the stars. They ask questions, make predictions, and collect data. You can do science experiments at home as well. This EXPERIMENT asks you to guess if objects will sink or float in water, then test each object to see what happens.

Materials: bowl, water, objects to test (rock, petal, pine cone, tree slice, stick, shells, feather)

Step 1: Fill the bowl with water.

Step 2: Take out the objects. Take a minute to explore the objects – do they feel heavy or light? Hard or soft? Big or little? What do you think matters for whether each will sink or float?

Step 3: Make your predictions! On the experiment sheet, write down whether you think each object will sink or float.

Step 4: Test each object one at a time by placing it in the bowl of water.

Step 5: Write your results! Do you have any new ideas about what makes an object sink or float?

Extension Activity: You can continue this EXPERIMENT with other objects around the house (crayon, spoon, bouncy ball, paper clip, grape, etc.). This is also a fun activity to do during bath time.

Research Says

From birth to age five years, young children's brains are rapidly developing. During this time, little ones are more open to learning and becoming inspired. Talking with a child helps increase vocabulary development and communication skills needed throughout life.

A child's early vocabulary skills grow in real-life settings through positive interactions and conversations about the world.



Who Are We?

Buzzword Pittsburgh excites children and families as they experience the words that are all around them. Through talk and play that incorporates math, science, and art, young children will expand their vocabularies and conversation skills. The program engages families and community organizations throughout Allegheny County.

The Buzzword Pittsburgh collaborative consists of partner organizations with expertise in the arts and sciences and local family centers. These partners provide interactive learning opportunities that encourage imagination, investigation, creation, and reflection. Buzzword Pittsburgh is supported by PNC Grow Up Great® and the Allegheny County Department of Human Services.

Partner Organizations:



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