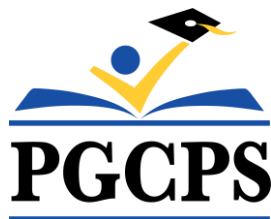


Elementary Science Summer Enrichment Packet for Rising 1st Graders



Prince George's County Public Schools
Division of Academics
Department of Curriculum and Instruction



**BOARD OF EDUCATION
OF
PRINCE GEORGE'S COUNTY, MARYLAND**

Alvin Thornton, Ph.D., Chair

Edward Burroughs III, Vice-Chair, District 8

David Murray, District 1

Joshua M. Thomas, District 2

Pamela Boozer-Strother, District 3

Bryan Swann, District 4

Raaheela Ahmed, District 5

Belinda Queen, District 6

K. Alexander Wallace, District 7

Sonya Williams, District 9

Curtis Valentine, M.P.P., Board Member

Paul Monteiro, Board Member

Sandra D. Shephard, Board Member

Joshua Omolola, Student Board Member

Monica E. Goldson, Ed.D., Secretary/Treasurer and Chief Executive Officer

Kara Libby, Ed.D.
Chief Academic Officer

Judith J. White, Ed.D.
Director, Curriculum and Instruction

Godfrey Rangasammy, Ed.D.
Instructional Supervisor, Science K-12

Note to the Students and Parents/Guardians Expectations for Rising 1st Grade Students

Students will:

- Raise questions about the world around them and be willing to seek answers to some of them by making careful observations and trying things out.
- Observe and describe changes over time in the properties, location, and motion of celestial objects.
- Explain that there must be a cause for changes in the motion of an object.
- Identify and describe ways in which heat can be produced.
- Provide evidence from investigations to identify processes that can be used to change physical properties of materials.
- Compare the observable properties of a variety of objects and the materials they are made of using evidence from investigations.

Students will need a science journal to record their responses. The science journal will be used to record exploration ideas, data, labeled graphs, newspaper clippings, and persuasive/writings and stories.

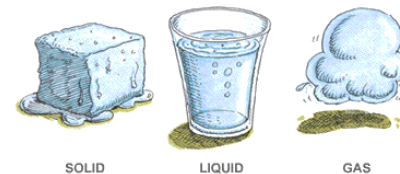
Suggested Science Journal: Wide-Ruled Composition Book

Enjoy your summer break and be safe.



Activities

Week: 1



Physical Science: This month you will focus on the different states of matter.

Week 1 Activities

- Click the title below and watch a video about matter:
 - [What is matter?](#)
- In your journal and with the help of an adult, find 3 pictures for each that show:
 - Solids
 - Liquids
 - GasesAfter you cut out your pictures, glue the pictures in your journal.
- Complete the “matter” activity from the link below.
 - <http://www.turtlediary.com/game/what-is-the-matter.html>
- Changes in Matter Science Rap
 - <http://www.learninggamesforkids.com/featured-games/changes-at-the-beach-3.html>
- For a sweet summer treat, click on the title below and complete the activity titled “Solid to Liquid to Solid.”
 - [Sweet Summer Treat](#)
- Work with a parent/guardian to complete this activity. You will need a large container. Rub your hands together and feel the heat of your palms. Get an ice cube to hold in your hands and hold your hands over the container. Hold until all the ice cubes have melted from the heat of your hands.
 - In your journal, write or draw what you saw happen to the ice.
 - Answer the following question: Why did the ice cubes melt?
 - Make a prediction about what would have happened to the ice if you did not rub your hands together.
- Complete the activity by visiting the link below:
http://www.abcya.com/states_of_matter.htm

Suggested Virtual Field Trips/Tours:

- [Boston Children’s Museum](#) (Location: Boston, Massachusetts)
- [U.S. Census Bureau](#) (Location: Suitland, Maryland)



Activities

Weeks: 2-5

Physical Science and Life Science: This month you will focus on sound, light, and plants.



Week 2 Activities

- Light and sound are forms of energy. Energy is the ability to do work. Use the following link to learn about the forms of energy:
 - <https://www.science4us.com/elementary-physical-science/energy/>
- In your journal, draw 3 pictures that show different forms of energy.
- Help Clifford find the words that begin with the same sound as the picture name:
 - <http://teacher.scholastic.com/clifford1/flash/phonics/>
- With the help of an adult (parent or guardian), hit pots and pans gently with a spoon. As you hit each one, listen to the sound. In your journal, draw and label which objects have a high-pitch sound and then draw and label the objects that have a low-pitch sound.

Weeks 3 Activities

- Watch the video about sound.
 - <http://studyjams.scholastic.com/studyjams/jams/science/energy-light-sound/sound.htm>
- Watch the video about light:
 - <http://studyjams.scholastic.com/studyjams/jams/science/energy-light-sound/light.htm>
- If the weather permits and with the help of an adult (parent or guardian), go outside (do not go outside without an adult), stand in a sunny area and look at your shadow at the times below. Stand in the same spot each time that you go outside to make your observation. Also, be sure to include a picture of yourself and where you are standing and the location of the sun.
 - 9:00 am (Draw where you saw your shadow in your journal.)
 - 2:00 pm (Draw where you saw your shadow in your journal.)
 - 6:00 pm (Draw where you saw your shadow in your journal.)
- Plants are important to our lives.
 - Watch the videos about plants: <http://studyjams.scholastic.com/studyjams/jams/science/plants/plant-with-seeds.htm>
 - In your journal, draw a plant. Label and explain how each part of the plant works.

Weeks 4 and 5 Activities

- **Planting Seeds**

- You will need an adult (parent/guardian)
- With the help of an adult (parent/guardian), you can get seeds from an apple, orange, sunflower, lemon, tangerines, dry kidney or lima beans (the kidney or lima beans must first be soaked overnight) or store-bought seed packets (only if you are able, buying store-bought seeds is not mandatory)
- 12-ounce clear plastic cups (with a hole poked in the bottom for water drainage)
- plastic plate to rest the cups on
- potting soil or dirt from outside your home
- water with a spray bottle or cup

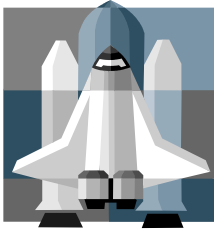
- **Directions**

- Fill a plastic cup most of the way with potting soil and plant 4-7 beans.
- Cover the seeds gently with soil.
- Lightly water the soil, using the water spray bottle.
- In your journal, draw how your cup looks after you added the soil and seeds.
- Fill a plastic cup most of the way with potting soil and plant 4-7 beans.
- Cover the seeds gently with soil.
- Lightly water the soil, using the water spray bottle.
- In your journal, draw how your cup looks after you added the soil and seeds.
- Observe the seeds you planted in the plastic cup. Draw in your journal what you see. This a good time to lightly water your seeds in the soil. Watch your seeds until the end of July. Water your seeds/plants based on how your soil looks. If your soil is dry, add water.

- Watch the video learn about photosynthesis: [Photosynthesis](#)

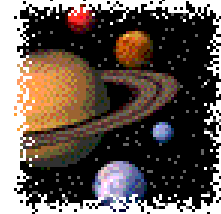
Suggested Virtual Field Trips/Tours:

- [United States Botanic Garden](#) (Located: Washington, DC)
- [National Museum of Natural History](#) (Located: Washington, DC)
- [Koshland Science Museum](#) (Located: Washington, DC)



Activities

Weeks: 6-7



Earth and Space Science: This month you will focus on stars, planets and solar system.

Week 6 Activities

- Watch the video about Earth.
 - [A Day On Earth](#)
 - [Phases of the Moon](#)
- In your journal, write the names of some tools that you can use to see the stars better at night.
- In your journal, draw four different phases of the moon.
- In your journal, draw planet Earth and draw a planet in our solar system that you would like to explore.

Week 7 Activities

- Draw a picture of the night sky. Use chalk and black construction paper.
- Learn more about our solar system by clicking the link: [The Solar System](#).

Suggested Virtual Field Trip/Tour:

- [Smithsonian National Air and Space Museum](#)