Grades K–2
Journey Through the Universe
Solar System Hat

Inspired by the planetarium of the American Museum of Natural History.

What Will You Learn?

- How to make a paper structured hat
- Learn about the order of the planets from the sun

Materials:

- Solar system worksheet
- Black construction paper
- Glue stick
- Scissors
- Craft decorations
- Markers/colored pencils/crayons

Instructions:

Coloring Sheet of the Solar System
1. Color the sheet of the solar system with crayons, colored pencils and/or markers however you would like.

Making the Hat
2. Fold the black construction paper in half (hamburger fold).
3. On the bottom half of the construction paper, paste the coloring sheet.
4. On the top half of the construction paper, take the scissors and cut vertical strips down to the halfway line. No need for the strips to be cut perfectly straight or all the same size.
5. Use craft decorations, decorated tape, buttons, yarn, markers and/or color pencils to make patterns on the vertical strips. You may decorate the front and back of these strips. Continue decorating the vertical strips by making a few accordion folds and/or curling some of our strips around a pencil.
6. When finished, wrap the length of your design around your head. Measure out how you would like it to fit and secure with tape.

**Reflection Questions:**
- The solar system may be represented in a variety of ways. Can you think of other materials that may be used to create the sun and the planets?
- If you could create your own planet, what would it be called and what would it look like?

**Explanation:**
- The solar system has one star, eight planets, five dwarf planets, at least 290 moons, more than 1.3 million asteroids, and about 3,900 comets. All of the celestial bodies in the solar system are pulled into orbit by the sun’s gravity. The solar system is located in an outer spiral arm of the Milky Way galaxy called the Orion Arm, or Orion Spur.
- The order of the sun and planets in the solar system:
  - The sun (a star of hot burning gas that gives off light, heat, and energy)
  - 8 planets (planet: a celestial nearly round body that is in orbit around the Sun)
    - Mercury
- Venus
- Earth: This is our home and the only planet inhabited by living things.
- Mars
- Jupiter
- Saturn
- Uranus
- Neptune

**Further Reading Recommendations:**

- *[Space Encyclopedia: A Tour of Our Solar System and Beyond](#)*
- *[El universo (Spanish)](#)*
- *[Where Is Our Solar System?](#)*

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Summer Adventure 2024 activities have been adapted from HYPOTHEkids’ STEAM lessons.

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