The Walking Rainbow Experiment

Lesson: The Walking Rainbow Experiment

Florida State Benchmark: SC.8.P.8.4 – Classify and compare substances on the basis of their physical and chemical properties.

Materials Required:

- Clear cups or glasses (6)
- Water
- Food coloring (red, blue, yellow)
- Paper towels
- A tray to hold the cups
- Measuring cup
- Stirring sticks (optional)

Safety Precautions:

- Ensure students handle liquids carefully to avoid spills. In the event of a spill, immediately clean the area to prevent slipping.
- All materials used, including food coloring, should be non-toxic. Remind students to wash their hands after the experiment to maintain hygiene.

Procedure:

- 1. **Setup:** Arrange six clear cups in a row on the tray. Fill the first, third, and fifth cups with water.
- 2. **Coloring:** Add a few drops of food coloring to the filled cups (e.g., red in the first cup, yellow in the third cup, and blue in the fifth cup).
- 3. **Paper Towels:** Cut strips of paper towel. Place one end of each paper towel strip in the colored water, ensuring the other end is in the adjacent empty cups.
- 4. **Observation:** Allow students to observe the movement of colored water along the paper towels over a few minutes.
- 5. **Discussion:** After the observation period, lead a discussion about capillary action and diffusion based on their findings.

Note: Clean Up:

- After completing the experiment, students should dispose of the paper towels and any excess food coloring in the trash.
- Rinse the cups with water and return them to their proper place.
- Wipe down the workspace to ensure all spills are cleaned and the area is left tidy for future use.