Rotating Science Center Lesson Plan with Jamestown Elementary Students

Date: Thursday, November 29, 2018

Homeroom Teacher: Mrs. McClimans, Mrs. King

Students: Diverse 3rd grade learners **Academic Standards: 3.1.3B6**

- Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known.
- Plan and conduct a simple investigation and understand that different questions require different kinds of investigations.
- Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.

Main Topic of Lesson: Scientific Method of Investigation - Pigments

Lesson Title: Chromatography Butterflies

Lesson Goal: Students will create chromatography butterflies and understand how each color holds different pigments.

Question: 1. Do specific marker colors have pigments inside of them?

<u>Research</u>, what you know: Certain markers work better than others (show up brighter). (person leading this – Lexi)

Sharing <u>Hypothesis</u> What will happen to the coffee filter when you add markers to it and place it in water? (person guiding this - Lexi)

Procedure of Experiment (Sequential Steps**)**:

- 1. Lay out coffee filters and draw rings of color at the center using watercolor markers. Fold coffee filter twice into a cone shape.
- 2. Place coffee filters in cups of water until the water touches the ring (and no more).
- 3. Let dry and unfold the coffee filter. Twist your pipe cleaner around the coffee filter so that your butterfly has wings. Use your pipe cleaner for antennas.

^{*(}person welcoming students, introducing topic, lesson and purpose - Crystal)

^{*(}person asking/discussing the lesson question - Lexi)

^{*(}person describing and guiding the procedure of the lesson – Zach)

Analysis and Conclusion: (person leading this section Colton)

Analyze why the coffee filter changed and explain your thoughts. Analyze each specific marker colors and why some were brighter than others.

Accommodations for Diverse Learners

Since we are coteaching, if a student needs direct help we can provide that for them. We also are going to have printed directions, auditory directions, and a definition sheet for students who need to be reminded throughout the lesson.

Materials needed for your experiment

Plastic Cups
Coffee Filters
Non-Permanent Markers
Water
Spray Bottle
Pipe Cleaners
String
Plastic Baggies
Set of Directions