WEEK 6 Lesson 2

Science and Engineering: Matter and Its Interactions

Conducting an Experiment to Test Absorbency

Big Ideas	Materials have observable properties. The properties of materials impact how they are used for specific purposes.
Guiding Questions	How do different materials respond when exposed to a liquid (when they get wet)?
Content Objectives	I can conduct an experiment to identify which materials are waterproof and which are absorbent. (2-PS1-2) I can collect data to determine which materials are waterproof and which are absorbent. (Practice 3, 2-PS1-2)
Language Objective	I can communicate my observations and findings about a material's absorbency in writing and speaking. (SL.2.2.a, W.1.2.b)
Vocabulary	**absorb**: to soak up **absorbency**: the property of soaking up a liquid **repel:** to keep something out or away **waterproof**: resists or repels liquid
Materials and Preparation	● all materials from Lesson 1 Bring one tray to the opening meeting. ● A Fair Experiment to Test Absorbency chart, from Lesson 1 Review the chart. Prepare to address children's logistical and content-based questions. ● markers ● Science and Engineering packets ● writing and drawing tools
Opening 5 minutes	Refer to the chart. Facilitate a brief discussion to address children's questions. *Today you will conduct an investigation to test how materials absorb and repel water. You will collect data and discuss your results with your group and then all together.* Distribute packets and materials, and send children to work.

Investigation 15 minutes	Support children in using all of their materials, talking with each other about what they observe, and recording their findings. ● *What do you notice about these materials?* ● *How are you making sure your experiment is fair?* ● *How are you recording the results of this experiment so you can* ● *review your findings later and others can understand them?* ● *What questions do you have?*
Discussion/ Closing 10 minutes	Ask children to share their findings. Encourage them to reference their notes. Identify successes and challenges, along with their discoveries. Facilitate a discussion to apply children's understanding. *Let's think about these materials in our everyday lives. What objects do we use that are made of absorbent materials? What do we use them for?* *What objects do we use that are made of waterproof materials? What do we use them for?* *What can we say about how engineers choose materials to design and make objects for different purposes?*
Standards	**2-PS1-1** Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. **2-PS1-2** Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. **SL.2.2.a** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. **W.1.2.b** Gather information from provided sources and/or recall information from experiences in order to answer questions.
Assessment	Take notes about how children approach their experiments and collaborate to conduct them. Review their packets to assess how children record their findings. Listen for how children interpret and discuss their own and each other's findings.

Notes