

# EDUCATOR GUIDE

## STEP 1: OBSERVATION

1

**Ask students “How do you think scientists discover new things and solve problems?”**  
**Accept all answers.**

Accept all answers. We want students to start thinking about what a scientist does. Some answers may include: doing experiments, working in a lab, looking at things, etc. Say “You are all right! Scientists do all these things to help them discover new things and solve problems. There is even a special process they use called the scientific method. We will learn about the scientific method and become scientists along the way!”



2

**Introduce the Scientific Method Anchor Chart.**

Say “The first step of the scientific method is to make an observation. Today we are going to learn about what observation is and how to make one.”

3

**Provide each student with an Observation: Student Activity Sheet.** Read together “Observation is paying close attention to something to get information. For example, by observing a bird, we can learn about its wings and learn how it flies. To make observations we use our five senses: seeing, hearing, touching, smelling, and sometimes taste. It is the first step of the scientific method.” You can provide students with more examples, such as observing a plant to learn how it grows or when it flowers.



4

**Ask students to answer the question on their activity sheet: “Why do you think making observations is important?”** Have students write out their answers or share their answers verbally.




5

**Explain the importance of observing something.** Without making observations, we would never ask questions or wonder about the world around us. We have to first observe. For example, we observe that many plants are green then we wonder why they are green and what makes them green.

# SEE IT!

**6** Explain to students that they are going to watch an episode of “The Paper Girls”, but before they dive into the episode they must first figure out what happened to create the paper world by making observations of the introduction.

**7** Play the intro to **Episode 3: Mice to Meet You**. It will end at **43 seconds**. Ask students what they observed. It is ok to play the intro more than once. The students should notice that a green potion spilled on a book to create a different world, the paper world. The two girls go back and forth between their world and the paper world to help solve problems.



**8** Explain to students in this episode, “Mice to Meet You”, Reese and Caily make many observations in both their world and in the paper world Confetti. These observations help Reese and Caily to ask questions and solve problems. Students will follow along and answer the questions about Reese and Caily’s observations. Read questions as a class prior to watching the episode.

**9** Watch **Episode 3: Mice to Meet You** as a class. You will want to pause the video. Give students **the time to write and discuss their answers as a class**.

Pause at 1:30 for the first three questions.

Pause at 2:46 to discuss perspective and have students change theirs.

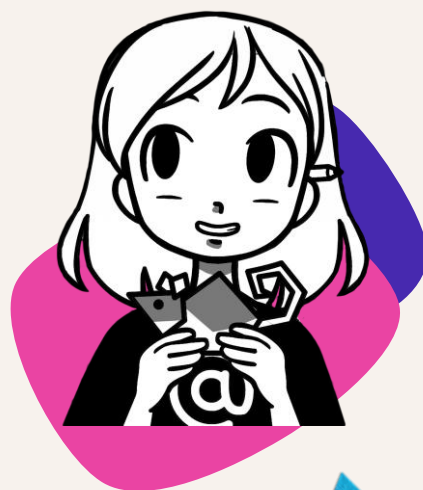
Pause at 5:59 for question 5.

# BE IT!

10

## Review the definition of observation with students.

Ask students “What do we use to make observations?” Review the five senses if they are not mentioned. Explain to students that many times in science we do not taste things because it is not safe. This means they will not taste anything when making observations



11

**Give each student a STEM bag.**

12

**Have the students take every item out of the bag and make observations with the four senses:** seeing, hearing, smelling, and touching. Remind them that they will not be tasting anything because it is not safe. Students may need a review of descriptive words.

13

After they have completed their initial observations, **discuss them as a class.**

14

**Inform students that next time you will be focusing on the second step of the scientific method:** asking questions and solving problems. Have them answer the question “What is a question you have about your items?”

15

**Have students place all of the items back into their bags and write their names on the outside of the bag.** Collect all the bags to use for future lessons. It is important for students to know that they will need all of their items for future challenges.

# HERE IS AN EXAMPLE OF A CLASS OUTLINE

**Introduction:** 20 minutes

**See it:** 20-30 minutes

**Be It:** 20-30 minutes

