

EDUCATOR GUIDE

STEP 1: OBSERVATION

INTRODUCTION: 8-10 MIN

1

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

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



TEACHER NOTE: You can complete over 2 days.

Day 1: Intro (8-10 minutes) and See it: Show and discuss episode (10-15 minutes).

Day 2: Be it! Complete hands on activity (15-20 minutes).





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!

WATCH & DISCUSS EPISODE: 10-15 MIN

6

Explain to students that in this episode, “Mice to Meet You”, Reese and Caily make many observations in both their world and in 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.

7

Have students watch Episode 3: Mice to Meet You. Watch the video as a class or individually. It is ok to pause or rewatch the video if students need help answering the questions.

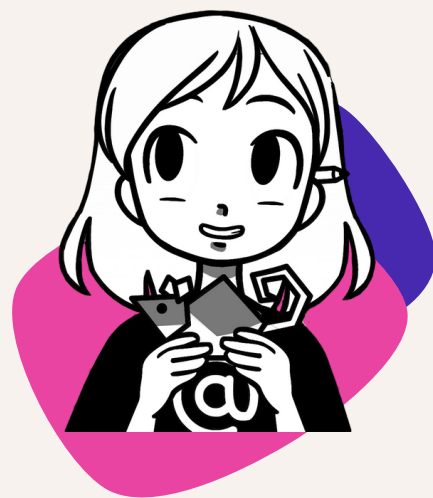
8

After students have answered the questions, talk about the answers together. Some options to differentiate include reading and answering each question as a class after watching the video or placing students in small groups to work together.



BE IT!

HANDS-ON ACTIVITY: 15-20 MIN



9

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 they visit their safe place.

10

Take students to a safe place to practice making observations. If you are not physically with the student, have them go with an adult to a safe place. This could be their home, backyard, front steps, park, etc.

TIP: You can also set up an observation station where students can observe an ice cube, a piece of bread, etc. You can circle back the following days to discuss how your observations have changed.

11

Have the students work through making observations with the four senses: seeing, hearing, smelling, and touching (if it is safe).

Remind them that they will not be tasting anything because it is not safe. Students may need a review of descriptive words.

12

After they have completed their initial observations, say “We are now going to change our perspective. Perspective is the angle or direction a person looks at something. Remember Caily changes her perspective when she stands on her chair in her room. She needs to change the way she views the candy bar to see if her sister has eaten it.”



13

Have the students sit down on the ground and draw what they see again. Have the students write down how the first picture and their new picture are different. Students may share their answers. “You noticed some different things when you changed your perspective. It is very important for scientists to look at things from many perspectives. This way the scientists can have lots of information.”

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 space or a problem you see?” Have students write out their answers or share their answers verbally.



Optional Exit Tickets: Lessons 1-4 include optional exit tickets, which are available under "**Standards & Assessment**" to further assess the learning. After you review the exit tickets you may decide to show the episode again, review the concepts, or reteach with a small group.

Lesson 5 includes a more comprehensive Performance-Based Assessment to help assess your students’ abilities to apply the scientific method to solving a real world problem.



HERE IS AN EXAMPLE OF A CLASS OUTLINE:

Introduction: 20 minutes

See it: 20 minutes

Be It: 40 minutes

Seeing, - 10-minutes

Hearing, - 5 minutes

Smelling, - 5 minutes

Touching, - 5 minutes