

## Focus Questions Grade Five

### Microworlds (STC)

Lesson 1: *Observing a Penny*

What is something new you can discover about a penny?

Lesson 2: *Communicating your Observations*

What is the difference between an observation, an inference, and an opinion?

Lesson 3: *Learning about Lenses*

What properties must objects have if they are to be used as magnifiers?

Lesson 4: *Looking through Lenses*

What have you learned about magnifiers?

Lesson 5: *Learning to Use the Microscope*

How are a hand lens and a microscope the same and different?

Lesson 6: *Practicing with the Microscope*

Using a microscope, what can you learn about how pictures are printed in newspapers and magazines?

Lesson 7: *The Field of View*

How does the field of view change as you get closer to an object? How does it change as the microscope magnifies an object?

Lesson 8: *Preparing Slides*

Which is the best slide mounting technique for viewing different objects?

Lesson 9: *What Is It?*

What properties of the four different substances enable you to identify what they are?

Lesson 10: *Exploring Common Objects*

How do you think the hay infusion will change over 3-4 weeks? Explain your thinking.

## Microworlds Focus Questions (Continued)

Lesson 11, Part I: *Looking Inside an Onion*

How do we know if something is alive? How can a microscope help us determine if something is alive?

Lesson 11, Part 2: *Looking Inside an Onion*

How are cells organized in an organism, such as the human body, which is made up of many cells?

Lesson 12: *Looking at Living Things: Volvox*

What can you observe and learn about *Volvox*? Is it alive? Is it plant, animal, or what?

Lesson 13: *Looking at Living Things: Blepharisma*

What can you observe and learn about *Blepharisma*? Is it alive? Is it plant, animal or what?

Lesson 14: *Looking at Living Things: Vinegar Eels*

What can you observe and learn about vinegar eels? Are they plant, animal, or what?

Lesson 15-16: *Looking at Living Things: Hay and Grass Infusions I and II*

What are all the things an environment needs to provide in order for living things to survive?