Objectives:
- Students will make detailed observations of natural objects
- Students will draw pictures of objects seen through the lens of a magnifying glass

Grade Level: K and up

Time Frame: 20 minutes to 1 hour

Introduction:
This activity forces students to take an in depth look at nature. While using magnifying glasses, students investigate the normally unseen details in plants and animals. It is a great way to practice observation skills. This is also a great lesson to practice using descriptive words, similes and metaphors.

Background:
We make observations using our five senses. One of the most commonly used senses is the sense of sight. We use our eyes to make observations all day long without even thinking about it. Scientists use certain tools to help them get better observations. Scientists use binoculars to see things that are far away in more detail. They use microscopes to see things that are so small they can’t be seen with the naked eye. They also might use magnifying glasses to look at the details of an object. Magnifying glasses are often used in the field to help make positive plant identification. They allow us to see small details that might otherwise be overlooked.

Descriptive words give readers a better idea of what something looks or feels like. When you make observations and describe something it is best to use descriptive words that don’t include any feelings or judgements. If you describe something fully and with a lot of detail, someone should be able to draw a picture from your written description.

Materials:
- Magnifying glasses (one for each student or pair of students)
- Investigations worksheet
- Pencils
- Colored pencils or crayons (optional)

Procedure:
1. Discuss with students what an observation is and what tools we can use to help make more precise observations.
2. Take students on an exploratory nature walk and have them observe objects with and without a magnifying glass.
3. Instruct each student to find an object and draw it first without a magnifying glass, then draw details of it with a magnifying glass. Finally have them write a description of it using as many descriptive words as they can.
4. To challenge students, have them switch written descriptions with a classmate. Each student draws the other person’s object from the written description.
Field Notes: Making Observations and looking at Nature with a New Perspective

DIRECTIONS: Use the space provided to draw a picture of something interesting that you find.
DIRECTIONS: NOW, USE THE SPACE PROVIDED TO DRAW SOMETHING INTERESTING USING A MAGNIFYING GLASS. INCLUDE DETAILS YOU WOULDN’T NORMALLY SEE WITHOUT A MAGNIFYING GLASS.
DIRECTIONS: USE YOUR MAGNIFYING GLASS AND IN THE SPACE PROVIDED WRITE A DESCRIPTION OF THE OBJECT YOU DREW. INCLUDE LOTS OF DETAILS AND DESCRIPTIVE WORDS SO THAT SOMEONE COULD DRAW YOUR OBJECT JUST BY READING YOUR DESCRIPTION

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CHALLENGE: TRADE WRITTEN DESCRIPTIONS WITH A FRIEND AND DRAW A PICTURE OF THE EACH OTHER’S OBJECTS WITH ONLY THE DESCRIPTION. DID YOU GET CLOSE? WHAT DETAILS COULD YOU HAVE PROVIDED TO MAKE IT CLEARER?