Ask Me About Microscopes & Magnification!

Sparking Discovery in the Classroom

TRAVELING SCIENCE WORKSHOPS

DISCOVERY MUSEUM

Today, an instructor from the Discovery Museum in Acton visited my classroom and led a hands-on program about microscopes and magnification.

Ask me to tell you what amazing things I observed looking through lenses! I can tell you how I used water as a magnifier and we can explore together by trying the water lens activity below.

I also really enjoyed using the 30x handheld microscopes. Ask me to tell you about all of the objects we checked out in our classroom such as the carpet, my desk surface, my hair and my skin.

Water Scope

The first magnifiers were made with water lenses. Try making you own water lens.

What you need:

- Small or large plastic yogurt containers
- plastic wrap
- scissors
- water
- large rubber bands

What you do:

1. Ask an adult to cut the bottom of the yogurt container off, leaving at least a 3 inch wide ring.
2. Cut a piece of plastic wrap and stretch it over the mouth of the yogurt container. Secure it with a rubber band.
3. Push down gently on the top of the plastic wrap to make a shallow well.
4. Pour a little water into this well.
5. Place objects under the container and look through the water at the object. What do you notice?
6. What happens if you change the amount of water you are looking through?

Experiment with making additional water scopes. You might try using different sized containers. Does having longer or shorter sides affect the magnification of your water scope? How do objects look through a deep well of water? Try holding one scope over the other and vary the distance between the two while looking through the two scopes at one time. What do you notice?