



# KU NATURAL HISTORY MUSEUM & BIODIVERSITY INSTITUTE

# Microbes on the Move Magnification Activity

# What you need

- Cup of water
- Clear, transparent item, such as cling wrap or a plastic bag
- Object to be magnified, such as a flat surface with words on it

# **Preparation**



**Step 1.** Gather materials.



**Step 2.** Place the clear item over the object you would like to magnify. Make sure the object can get wet. A flat object with words works best.



**Step 3.** Using your finger or other tool, place about three drops of water on the transparent item. The drops of water should pool together!

Activity modified from "The Magnifying Effect of a Water Drop" by Science Buddies from Scientific American.

#### What to do

Look at the object you are trying to magnify through the pool of water droplets on the transparent item. What do you notice about the parts of the object covered by the pool of water droplets? Do they look bigger or smaller than the surrounding parts of the object not covered by water? Carefully lift the transparent item with the pool of water droplets. Does lifting the transparent item change the appearance of the object?

Magnify other objects using this tool! What do you notice?

## What is happening?

Magnification is a word used to describe the process of making small things appear much larger than their actual size! There are many different tools that scientists use to make small things appear big. Scientists that study microbes, or tiny organisms like bacteria and fungi that cannot be seen with the naked eye, use microscopes!

In this activity, droplets of water were used to magnify an object. The pool of water droplets on the transparent item are curved, and so they are shaped like a dome. This convex shape bends light inwards, which makes the object appear bigger than it actually is!

Information from "The Magnifying Effect of a Water Drop" by Science Buddies from Scientific American.