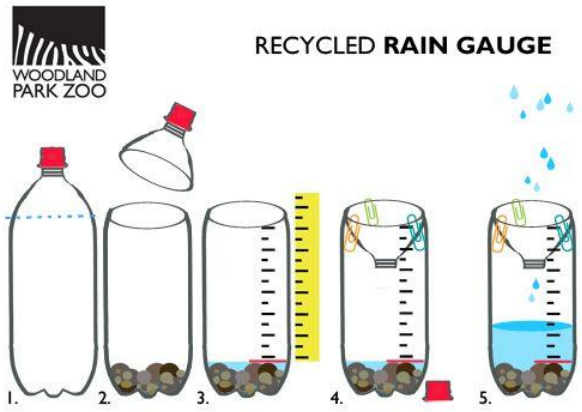
Backyard Precipitation Station (for all ages!)

Most ecosystems, like the *bosque*, rely on **precipitation** (rain, snow, and hail) to grow and support plants and animals. Some of the rain flows into the Rio Grande and some falls onto and into the ground for plants and humans to use. Knowing how much precipitation an area gets is important when looking at the overall health of an ecosystem. Learn how to create your own precipitation gauge and how to analyze data in this activity!

Create your own Precipitation Gauge!

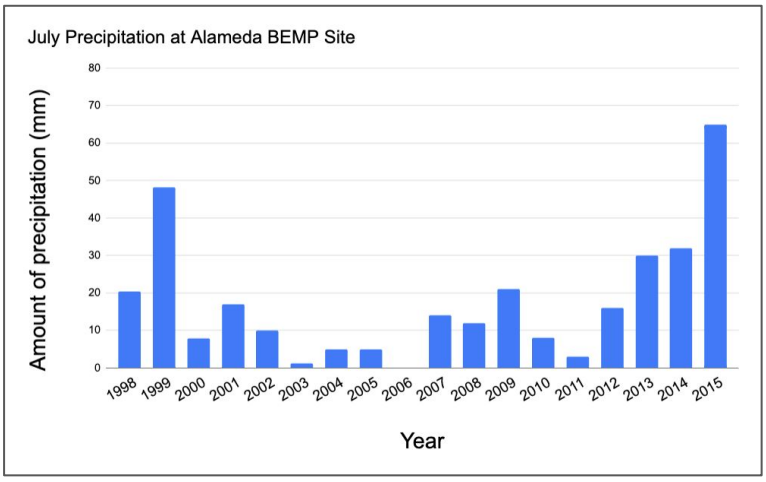


Materials:

- Large soda/juice bottle
- Ruler
- Tape/paper clips
- Rocks/gravel/sand
- Marker

Method:

1. Cut the top off of your bottle below the rounded top.
2. Fill the bottom with rocks, gravel, or sand so it is flat.
3. Using a permanent marker, mark every half inch on your bottle after the rocks.
4. Flip the lid you cut off over and place it inside the bottom piece to make a funnel. Secure with tape or paper clips.
5. Put your gauge in an open area. You can check it every day, week, or month (BEMP checks the rain gauges in the *bosque* every month).
6. Reset your gauge after you record the amount. Pour the collected water in a plant if you can! Create a graph of your data!

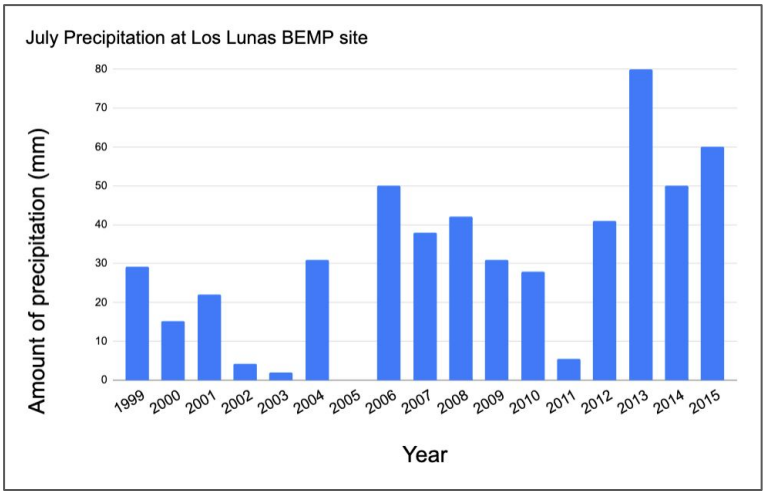


Take it to the next level! *Look at the graphs and answer the following questions related to the BEMP data.*

1. What is being shown in these graphs?
   a. What is the x-axis (independent variable)?

   b. What is the y-axis (dependent variable)?

1. The Alameda BEMP site is north of the Los Lunas BEMP site by almost 30 miles. Is there any difference in the amount of precipitation the Alameda site gets compared to the Los Lunas site?



1. For each site, which year had the most precipitation?

1. Would these graphs look the same for a winter month, like January? Why or why not?

1. Plants, like the native Cottonwood tree, depend on lots of water to grow and live. Do you expect the cottonwood trees to be healthier at the Alameda or Los Lunas site? Why?