



## Thirst Quenchers

### Goals

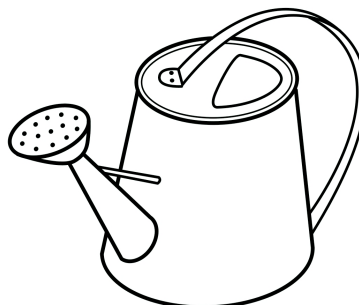
Students will understand the climate of Colorado, how we measure rainfall in the garden, and why it is important to conserve water in the garden.

### Objectives

Students will create a rain gauge and demonstrate proper watering techniques in the garden.

### Materials

- Hoses with watering wands
- Watering cans
- Glass Jars
- Permanent markers
- Rulers/measuring tape
- Paper & pencils



**Time:** 30 minutes

### Background Information

If students take a great interest in monitoring their rain gauge, help them make a weather station. Instruments to include are a minimum/maximum thermometer, wind gauge, rain gauge, barometer, and hydrometer. Make a weather logbook and check instruments and record data at the same time each day/week. Make charts and graphs with the students, tracking temperature changes, rainfall levels, etc. This develops great math skills. See the National Oceanic and Atmospheric Administration at [www.noaa.gov](http://www.noaa.gov) for more information on measuring weather patterns.

You can sign up for a free rain gauge at [www.cocorahs.org](http://www.cocorahs.org) or purchase one at any garden supply center, if you do not have the time or materials to create your own.

### Introduction (9 min)

Arrange students into two circles, one on the inside and one on the outside, where students are facing a student from the opposite circle. Have the students discuss the following questions with their partner from the other circle. After each question, discuss the correct response with the larger group and then have one of the circles move clockwise so that each student is matched with a new partner.

- What is our weather like in Colorado during the growing season?
- What does “climate” mean and what is the climate in Colorado? (Climate is defined as long-term weather patterns, and Colorado has a semi arid climate).
- What does it mean to conserve something?
- Why is it important to conserve water in the garden?

## Activity Steps (20 min)

1. Explain that a rain gauge is how you will keep track of precipitation in the garden. Point out that Colorado does not receive enough rainfall to grow plants in the garden and that is why we need to water the garden beds frequently (Denver receives approximately 15 inches of precipitation per year).
2. Group students according to the number of rain gauges you will be making and pass out a glass jar, ruler or measuring stick and permanent marker to each group.
3. Students should measure from the bottom up and mark the jar at  $\frac{1}{4}$  inch intervals.
4. Set the gauge in the garden away from buildings or trees that might distort the readings. Check the rain gauge consistently, record findings in a rain journal and empty it out after each measurement.
5. As a general rule, growing plants need one inch of water per week to mature properly. Check plants and feel the soil daily to test for dryness. Ask the students to pay attention to the plants and notice if they are thirsty (drooping).
6. Remind students to water the soil, not the whole plant. Especially in hot weather, water on plant surfaces will evaporate quickly and may burn plants. Also try not to water in the heat of the day.
7. Have the students use their watering cans or watering wands and water their garden beds thoroughly.
8. To check if you have watered enough, use the finger test. Poke your index finger all the way into the soil. If the soil feels moist along the entire length of your finger, you have watered enough.

## Conclusion (1 min)

Students show with 1-5 fingers their understanding of properly watering the garden, one finger being little or no understanding and five being full understanding. This will help you understand if the watering techniques should be revisited throughout the season.

## Notes

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