Make Your Own Rain Gauge!

Take-home Activity Snapshot

Related “My American Farm” Game
Wild Water Adventures
Available at www.myamericanfarm.org

Grade Levels
• Third - Fifth

Content Area
• Math, Science

Standards
Mathematics Grade 5, Concept 1: Developing fluency with addition and subtraction of fractions, developing understanding of the multiplication of fractions and division of fractions in limited cases.

Common Core State Standards (Draft)
NS.K-4.1, NS.5-8.1 Science as Inquiry
National Science Education Standards, National Academies of Science

What Will You Do?
In this activity you will create your very own rain gauge to measure rain fall over a period of time.

Supplies You’ll Need
• 1 glass jar (Mason Jar, Spaghetti Sauce Jar, etc)
• 1 plastic ruler
• Tape

Getting Ready

Have you ever wondered how much it rains at your house? Or maybe you want to know just how much water is coming from your sprinkler. Now you can find out by creating your own rain gauge. Rain gauges are used by scientists to study the weather. Water is important to farmers because plants grow best when they get just enough water; not too much and not too little! Ranchers who raise animals also need to know about water, because their animals eat grass or hay that must have water to grow. Farmers and ranchers steward the land by conserving water! Gather up your supplies, and then start with Step 1 below!

Make Your Own Rain Gauge:
Step-by-Step

Step 1: Location
First, find a good location for your rain gauge outside. Make sure it is in a safe place, where it won’t get knocked over or bothered by animals. If you make more than one rain gauge, you can place a gauge in town, at school, and at home to compare rainfall. Remember to get permission.*If you live in an area that doesn’t get much rain, you can set up your rain gauge in the lawn or yard to catch water from a sprinkler!

Step 2: The Gauge
Place your ruler inside your empty jar, with the numbers facing out. Make sure the end of the ruler rests on the bottom of the jar and it stands straight up and down. Use a piece of tape on the top of the ruler to hold it in place.

Step 3: Collect and Record
Place your rain gauge outside where it will collect water and begin recording your measurements. It is a good idea to measure rain for an entire month. Check your gauge each day and record the amount of rain to the nearest tenth of an inch. Add up your measurements at the end of the month. This is a great way to practice adding fractions!
Step 4: Challenge

For more of a challenge, you can calculate average rainfall per week. Take your total rainfall and divide by the number of weeks you collected information.

Step 9: Clean Up

Make sure to clean up your area and put all tools or supplies back where you found them.

Fun Enrichment Activity

Do you want to learn more about water in your area? Keep track of rainfall for an entire school year and have your friends do the same. At the end of the school year, compare how much rain each of you collected for each month. Brainstorm reasons why your numbers may be similar or different!

Use this table to record rainfall, or create your own!

<table>
<thead>
<tr>
<th>Rainfall for _____ (month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun</td>
</tr>
</tbody>
</table>

Recorded to nearest 1/10th of an inch

Foundation Contact Information

American Farm Bureau Foundation for Agriculture
600 Maryland Ave SW Suite 1000w
Washington D.C 20024
Phone: 1.800.443.8456
Fax: 202.406.3756
E-mail: Foundation@fb.org