Name: _____ Date: _____

Build a Rain Gauge from a Clear Container

Circle group

Weather reporters tell us how much rain fell. You can measure it too. You need a rain gauge. You can make one at home with an adult.

Start with a clear plastic container with straight sides. A tall juice bottle with the top cut off will work. Straight sides help the water rise the same amount for each bit of rain. Tape a ruler to the outside. Or draw lines up the side with a marker.

Next, pick a spot. Choose open ground. Stay away from trees, fences and roofs. They could drip into your container or block the rain. Put it where it will stand still. Set stones around the base.

After a rainy day, look at the line where the water stops. Look straight at it. Write the number in a notebook with the date. Pour out the water. Now it is ready for the next storm.

Check at the same time each day. Your notes will show wet and dry days.

Questions

1. What do you need to make a rain gauge?

_____

_____

2. Why should the container have straight sides?

_____

_____

3. Where should you put the rain gauge?

_____

_____

4. What should you do with the water after you write the number?

_____

_____

5. Why stay away from trees and roofs?

_____

_____

6. What will your notes from many days show?

_____

_____

Words to know

gauge: a tool that measures something
container: something that holds things inside it

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Build a Rain Gauge from a Clear Container

Triangle group

Weather reporters tell us how much rain fell, but you can measure it yourself. All you need is a rain gauge, and you can make one at home with an adult's help.

Start with a clear plastic container that has straight sides, like a tall juice bottle with the top cut off. Straight sides matter, because they make the water rise by the same amount for each bit of rain. Tape a ruler to the outside, or mark lines up the side with a marker.

Next, pick a spot. Choose open ground away from trees, fences and roofs, so nothing drips into your container or blocks the rain. Set it where it will stand steady, and press it a little into the soil or place stones around the base.

After a rainy day, read the line where the water stops. Look straight at it, not from above. Write the number in a notebook with the date. Then pour out the water so the container is ready for the next storm.

If you check at the same time every day, your notes will show a pattern of wet and dry days.

Questions

1. What do you need to make a rain gauge?

_____

_____

2. Why should the container have straight sides?

_____

_____

3. Where should you set the rain gauge?

_____

_____

4. What should you do with the water after you write the number down?

_____

_____

5. Why should the gauge be kept away from trees and roofs?

_____

_____

6. What will notes from many days show?

_____

_____

Words to know

gauge: a tool that measures something
container: something that holds things inside it
steady: not wobbling or tipping over
pattern: something that repeats in a way you can notice

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Build a Rain Gauge from a Clear Container

Square group

Weather reporters regularly announce how much rain has fallen, but you can measure it for yourself. All you need is a rain gauge, and with an adult's assistance you can build one at home.

Begin with a clear plastic container that has perfectly straight sides, such as a tall juice bottle with the top trimmed off. Straight sides are important, because they cause the water level to rise by an equal amount for each bit of rainfall. Tape a ruler to the outside of the container, or draw evenly spaced lines up the side with a marker.

Next, select a location. Choose open ground that is well away from trees, fences and roofs, so that nothing drips into your container or blocks the rain from reaching it. Set it where it will stand steady, and press it slightly into the soil or arrange stones around its base.

After a rainy day, read the line where the water stops, looking straight at it rather than from above. Record the number in a notebook along with the date. Then pour out the water so that the container is ready for the next storm.

If you check at the same time every day, your notes will gradually reveal a pattern of wet and dry days.

Questions

1. What do you need in order to build a rain gauge?

_____

_____

2. Why is it important for the container to have straight sides?

_____

_____

3. Where should the rain gauge be placed?

_____

_____

4. What should you do with the water after recording the number?

_____

_____

5. Why should the gauge be kept away from trees and roofs?

_____

_____

6. What will notes gathered over many days reveal?

_____

_____

Words to know

gauge: a tool that measures something
container: something that holds things inside it
steady: not wobbling or tipping over
pattern: something that repeats in a way you can notice

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Build a Rain Gauge from a Clear Container

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Build a Rain Gauge from a Clear Container

Easier · 164 words · Flesch-Kincaid grade 1.2

1. A clear plastic container with straight sides and a ruler or marker.
2. The water rises the same amount for each bit of rain.
3. On open ground, away from trees, fences and roofs.
4. Pour it out.
5. They could drip into it or block the rain, so the number would be wrong.
6. Wet and dry days.

Triangle: Build a Rain Gauge from a Clear Container

This passage · 190 words · Flesch-Kincaid grade 4.5

1. A clear plastic container with straight sides and a ruler or marker.
2. The water rises the same amount for each bit of rain.
3. On open ground away from trees, fences and roofs.
4. Pour it out.
5. They could drip into it or block the rain, so the measurement would be wrong.
6. A pattern of wet and dry days.

Square: Build a Rain Gauge from a Clear Container

Harder · 212 words · Flesch-Kincaid grade 7.2

1. A clear plastic container with straight sides and a ruler or marker.
2. The water level rises by an equal amount for each bit of rainfall.
3. On open ground well away from trees, fences and roofs.
4. Pour it out so the container is ready again.
5. They might drip into it or block the rain, which would make the measurement inaccurate.
6. A pattern of wet and dry days.