Name: _____ Date: _____

How to Build a Rain Gauge from a Bottle

Circle group

A rain gauge tells you how much rain fell. You can make one with a grown-up.

You need a clear plastic bottle with straight sides. You need a ruler, a marker and some small stones. Ask a grown-up to cut off the top of the bottle. Turn the top upside down. Set it back in the bottle like a funnel. It keeps out leaves. It helps the rain go in.

Put stones in the bottom of the bottle. Then it will not blow over. Pour in water until it just touches the funnel. Mark the water line with the marker. Mark each centimeter above it.

Put the gauge outside in an open spot. Keep it away from trees and roofs. After a storm, look at the water line. Write down the number. Empty the bottle and put it out again.

A record can show which weeks were rainy and which were dry.

Questions

1. What does a rain gauge tell you?

_____

_____

2. What do the small stones do?

_____

_____

3. How is the top of the bottle used?

_____

_____

4. Where should you put the gauge?

_____

_____

5. Why keep the gauge away from trees and roofs?

_____

_____

6. What can a record of the numbers show you?

_____

_____

Words to know

gauge: a tool that measures something
funnel: a wide top that guides water into a narrow opening
centimeter: a small unit used to measure length
record: a written list of what you found out
open spot: a place with nothing overhead to block the rain

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: _____

How to Build a Rain Gauge from a Bottle

Triangle group

A rain gauge tells you how much rain has fallen. You can make one at home with the help of a grown-up.

You need a clear plastic bottle with straight sides, a ruler, a marker, and some small stones. Ask a grown-up to cut off the top of the bottle. Then turn the top upside down and set it back inside like a funnel. It will keep leaves out and help the rain run in.

Put a few stones in the bottom of the bottle so it will not blow over. Pour in water until it just touches the bottom of the funnel. Use the ruler to mark the water line, and then mark every centimeter above it.

Now place your gauge outside in an open spot, away from trees and roofs. After a storm, look at the water line. Write down the number. Then empty the bottle and put it out again.

Keeping a record can show you which weeks were rainy and which were dry.

Questions

1. What does a rain gauge tell you?

_____

_____

2. What do the small stones do?

_____

_____

3. How is the top of the bottle used?

_____

_____

4. Where should you put the gauge?

_____

_____

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

_____

_____

6. What can a record of the numbers show you?

_____

_____

Words to know

gauge: a tool that measures something
funnel: a wide top that guides water into a narrow opening
centimeter: a small unit used to measure length
record: a written list of what you found out
open spot: a place with nothing overhead to block the rain

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: _____

How to Build a Rain Gauge from a Bottle

Square group

A rain gauge tells you precisely how much rain has fallen, and with a grown-up to help you, it is easy to build one at home.

You will need a clear plastic bottle that has straight sides, a ruler, a marker and a handful of small stones. First, ask a grown-up to cut off the top of the bottle. Then turn that top upside down and set it back inside the bottle so that it works as a funnel. The funnel keeps leaves out of the bottle and helps the rain run inside.

Place a few stones in the bottom of the bottle so that the wind cannot blow it over. Next, pour in water until it just touches the bottom of the funnel. Use the ruler to mark the water line with the marker, and then mark every centimeter above that line.

Set your gauge outside in an open spot, far from trees and roofs. After a storm, read the water line and write down the number. Afterward, empty the bottle and put it out again.

If you keep a careful record, you can discover which weeks were rainy and which were dry.

Questions

1. What does a rain gauge measure?

_____

_____

2. Why do you place small stones in the bottom of the bottle?

_____

_____

3. How does the top of the bottle work after it is turned upside down?

_____

_____

4. Where should the gauge be set?

_____

_____

5. Why should the gauge stay far from trees and roofs?

_____

_____

6. What can a careful record of the numbers reveal?

_____

_____

Words to know

gauge: a tool that measures something
funnel: a wide top that guides water into a narrow opening
centimeter: a small unit used to measure length
record: a written list of what you found out
open spot: a place with nothing overhead to block the rain

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: How to Build a Rain Gauge from a Bottle

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

Circle: How to Build a Rain Gauge from a Bottle

Easier · 154 words · Flesch-Kincaid grade 1.7

1. How much rain fell.
2. They keep the bottle from blowing over.
3. It is turned upside down and set in like a funnel.
4. Outside in an open spot, away from trees and roofs.
5. Water dripping from them would add extra and give a wrong number.
6. Which weeks were rainy and which were dry.

Triangle: How to Build a Rain Gauge from a Bottle

This passage · 169 words · Flesch-Kincaid grade 3.5

1. How much rain has fallen.
2. They help the bottle stay put so it will not blow over.
3. It is turned upside down and set inside like a funnel.
4. Outside in an open spot, away from trees and roofs.
5. Water dripping from them would add extra water and give a wrong number.
6. Which weeks were rainy and which were dry.

Square: How to Build a Rain Gauge from a Bottle

Harder · 196 words · Flesch-Kincaid grade 5.7

1. How much rain has fallen.
2. So the wind cannot blow the bottle over.
3. It works as a funnel that keeps leaves out and helps rain run inside.
4. Outside in an open spot, far from trees and roofs.
5. Water dripping from them would add extra water and make the number wrong.
6. Which weeks were rainy and which were dry.