

What's the Forecast?

The weather forecast predicts what the temperature and air conditions will be in the near future. There is a wide variety of types of weather. The weather can be sunny or stormy. It can be warm or cool. It also can be rainy, cloudy or windy.

Sometimes, weather is severe. A blizzard, a thunderstorm or a hurricane may happen quickly. When we get information ahead of time, we can prepare for it. Being prepared helps us stay safe.

A meteorologist is a person whose job it is to forecast the weather. There are many tools available to help the meteorologist do his job. A common tool for getting an accurate of the temperature is a thermometer. A high temperature probably means plenty of sunshine for everyone.

In rainy weather, a meteorologist uses a rain gauge. A rain gauge gives numerical data about how much rain is falling outdoors. After it rains, you may be able to see a rainbow. A rainbow appears when the sun comes out and is still rain in the air. Wind brings us weather. It blows clouds from one place to another. It is helpful to know which direction the wind is blowing. A wind vane provides this information. Knowing the wind direction helps a meteorologist know what weather is coming.

Weather forecasts are not always right. As our knowledge about weather gets better, the forecasts become more accurate.

Read the text **What's the Forecast?** above and answer the questions.
Remember to refer back to the text to help answer the questions.

1. What is a weather forecast?
2. Why do you think being prepared for severe weather helps people stay safe?
3. What is the person whose job it is to forecast the weather called?
4. Name one weather tool and explain what it is used for.
5. What is your favourite kind of weather? Why?
6. Do you think the job of a meteorologist is difficult or easy? Explain your thinking.

Make a Tornado in a bottle



Learn how to make a tornado in a bottle with this fun science experiment. Using easy-to-find items such as washing-up liquid, water, glitter and a bottle, you can make your own mini-tornado that's a lot safer than one you might see on the weather channel.

Follow the instructions and enjoy the cool water vortex you create!

What you'll need:

- Water
- A clear plastic bottle with a cap (that won't leak)
- Glitter
- Washing-up liquid

Instructions:




1. Fill the plastic bottle with water until it reaches about $\frac{3}{4}$ full.
2. Add a few drops of washing-up liquid.
3. Sprinkle in a few pinches of glitter – this will make your tornado easier to see.
4. Screw the cap on tightly.
5. Turn the bottle upside down and hold it by the neck. Then quickly spin the bottle in a circular motion for a few seconds.
6. Stop and look inside to see if you can see a mini-tornado forming in the water. NB – You might need to try it a few times before you get it working properly.



What's happening?

Spinning the bottle in a circular motion creates a water vortex that looks like a mini-tornado. The water is rapidly spinning around the centre of the vortex due to centripetal force (an inward force directing an object or fluid such as water towards the centre of its circular path. Vortexes found in nature include tornadoes and hurricanes.




What is each symbol worth? *

 +  +  = 30



 +  = 25

 +  = 

 x  = 

 x  = 

 -  = 80

 +  = 7

What is  worth? = _____




What is  worth? = _____

What is  worth? = _____

What is  worth? = _____

What is  worth? = _____




What is each symbol worth? * Answers

 +  +  = 30



 +  = 25

 +  = 

 x  = 

 x  = 

 -  = 80


 +  = 7

What is  worth? = 10




What is  worth? = 100

What is  worth? = 5

What is  worth? = 20

What is  worth? = 2




What is each symbol worth? **

 +  +  = 60



 +  = 50

 +  = 

 x  =  + 

 x  = 2 x 

 -  = 160


 +  = 14

What is  worth? = _____


What is  worth? = _____

What is  worth? = _____

What is  worth? = _____

What is  worth? = _____

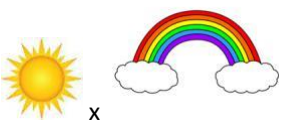

What is each symbol worth? ** answers

 = 60

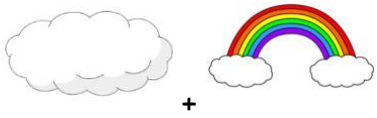
 = 50

 = 

 = 

 = 2 x 

 = 160


 = 14

What is  worth? = 20




What is  worth? = 200

What is  worth? = 10

What is  worth? = 40

What is  worth? = 4

What is each symbol worth? ***

 +  +  = 120



 +  = 100

 +  = 

 x  = 4x 

 x  = 4x 

 -  = 320


 +  = 28

What is  worth? = _____




What is  worth? = _____

What is  worth? = _____

What is  worth? = _____


What is  worth? = _____

What is each symbol worth? *** answers

 +  +  = 120



 +  = 100

 +  = 

 x  = 4x 

 x  = 4x 

 -  = 320


 +  = 28

What is  worth? = 40

What is  worth? = 400

What is  worth? = 20

What is  worth? = 80

What is  worth? = 8