

HOW TO MAKE A BRILLIANT BAROMETER

This barometer is easy to make—you just stretch a piece of rubber cut from a balloon over the opening of a glass jar. As atmospheric pressure increases, it pushes the balloon down against the air trapped inside, and as the pressure goes down, the rubber relaxes. Tape a straw to the rubber and watch it rise and fall as the pressure changes.



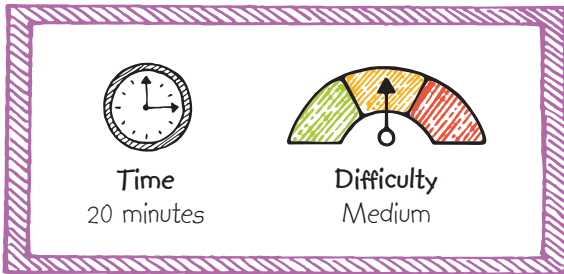
1 Cut the neck off the balloon and throw it away immediately. This will make it possible to stretch the piece of rubber over the jar's opening. There's no need to blow up the balloon.



2 Stretch the rubber over the top of the jar, trapping the air inside. Pull the rubber tight, to get rid of any creases.



3 Secure the rubber in place with a rubber band. No air should be able to escape from the jar.



WHAT YOU NEED



Straw



Pencil



Balloon



Colored tape



Ruler



Rubber band

Colored card stock



Glass jar



Scissors



Place the end of the straw in the center of the rubber.



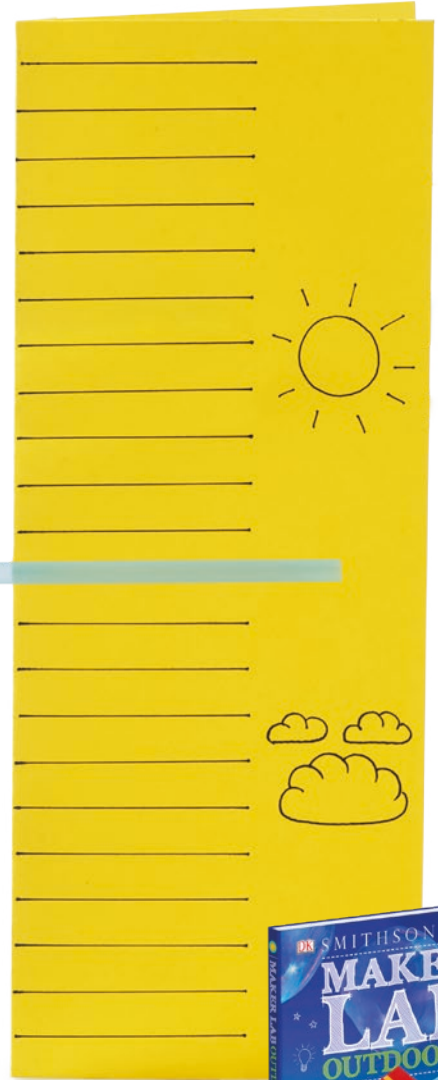
5 To make the scale, neatly fold the piece of colored card stock in half lengthwise.

4 Cut a short piece of tape and stick it to the end of the straw. Now place the end of the straw across the middle of the rubber and attach it firmly.



6 Using a ruler, draw lines $\frac{1}{2}$ in (1 cm) apart across one side of the folded card stock.

7 Leave the barometer somewhere where the temperature doesn't change much, away from windows or heaters. If the air in the jar warms up or cools down, it expands or shrinks, which will affect your results. Record the barometer's readings daily. Soon you'll be making your own weather forecasts.

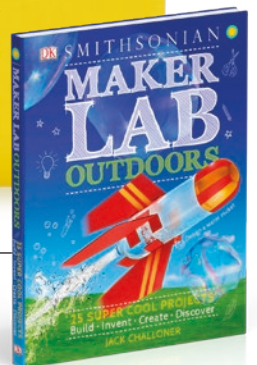


The straw will be level at first, but over time it will move up or down.

When the straw is level, it indicates that the pressure inside the jar is equal to the pressure outside.

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