

DIY HOT AIR BALLOON

Continuing our lesson on *Warm Air, Cold Air* we will create our very own balloon to fly!

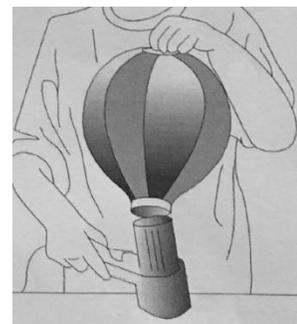
Materials needed:

- Tissue paper
- Pencil/marker
- Pattern template
- Glue stick
- Strip of construction paper about 1 in wide
- Hair dryer



Directions:

1. Use the pattern template to trace the teardrop shaped onto your tissue paper.
2. Cut out 8 pieces of tissue paper.
3. Carefully glue the panels together with a glue stick.
4. Make a collar for the neck of the balloon with the strip of paper. Don't forget it should be wide enough to allow the hair dryer to put air through.
5. Glue the collar onto the balloon.
6. Point a hair dryer towards the neck of the balloon and blow hot air into your tissue paper balloon. Be careful not to push the hair dryer into the neck or you will burst the balloon.



Explanation:

The hot air balloon you built out of tissue paper works under the same scientific principle that enables real hot air balloon to fly: warmer air rises in cooler air. It might seem like air is just empty space, but the air around us is a type of matter called a gas. Matter comes in three states: solids, liquids, and gases. Each state is made up of tiny particles called atoms. In a gas, the atoms are spread out and bouncing around constantly. A gas will fill also a container of any size or shape.

Hot air balloons are called so because they are filled with hot air. Real hot air balloons use a flame to heat the air inside, and you used a hair dryer to heat up the air inside the one you built. Higher temperatures mean more energy, so imagine the air molecules moving faster and spreading out more to take up a larger space. So, when we heat up the air inside, we are increasing the volume.



**Hot air balloon template for cutting out
tissue paper panels**

