

BLOW UP A PUMPKIN BALLOON

YOU'LL NEED

Water
Small bottle
Orange balloon
Black Sharpie
Effervescent vitamin tablet



INSTRUCTIONS

Inflate the balloon, let out the air, and draw a pumpkin face on it.

Half fill your bottle with water.

Drop an effervescent vitamin tablet into the bottle and place the balloon on top.

Watch the balloon inflate and the pumpkin grow.

Why does it work?

Effervescent vitamin tablets contain sodium bicarbonate (baking soda) and citric acid. When the tablet is placed in water, it forms sodium citrate, water and carbon dioxide, which are the bubbles of gas you see.

The carbon dioxide fills up the space in the bottle and then the balloon, forcing it to expand.

Make it an investigation

Experiment with different methods of making the balloon inflate. Try:

Yeast and warm and cold water

Popping candy and water



BLOW UP A PUMPKIN BALLOON

I'M GOING TO TEST



..... with warm, room temperature and cold water.



VARIABLES

I will keep the amount of water and the same and change the temperature of the water.

PREDICTIONS



I predict the balloon will inflate the fastest with

Warm Water

☐

Room Temperature Water

☐

Cold Water

☐

RESULTS

Water Temperature	Time to fully inflate (seconds)	Balloon circumference (cm)	Pumpkin face visible YES/NO
Room Temperature			
Warm			
Cold			

The balloon inflated the fastest with the water.

My prediction was correct

YES

☐

NO

☐