

A. Try these experiments and guess how it works.

Experiment 1: MOVING A CAN WITHOUT TOUCHING IT

blow / rub / tie

- * (a) _____ air into the balloon and (b) _____ the end.
- * (c) _____ the filled balloon on your hair or on a tissue.
- * Put the can on the floor and hold the balloon near it.
- * **Pull the balloon away from the can slowly, and the can will move towards the balloon!**

Why? Scan the QR code

Experiment 2: KEEPING LIQUIDS APART

cover / fill / stir

- * (d) _____ the glasses with water.
- * Put two large spoons of salt into the first glass and (e) _____ it.
- * Add a few drops of food colouring into the other glass.
- * (f) _____ the glass of coloured water with the cardboard/plastic.

Turn it upside down and put it on top of the glass of salt water.

Pull the cardboard/ plastic out from between the glasses.

- * **The coloured water and the salty water won't mix!**

Why? Scan the QR code

Experiment 3: GETTING AN EGG INTO A BOTTLE

boil / pour / shake / wrap

- * (g) _____ the egg for 4 minutes, until the white of the egg is hard but the yolk is soft. Let it cool. Then peel it.
- * (h) _____ the hot water into a bottle. Put on the lid, (i) _____ it in a towel and (j) _____ it well.

* Take off the lid and pour out the water.

* Put the egg in the opening of the warm bottle.

- * **After a few minutes the egg is pulled into the bottle.**

Why? Scan the QR code



B. Use one or more verbs from (A) in your answers.

Ex. How do you make a candle go out? *You blow it.*

- 1 What do you do when you add sugar to coffee? _____
- 2 How can you keep flies off your food? _____
- 3 How can you say no without speaking? _____
- 4 How can you keep your hands warm in cold weather? _____
- 5 What do people with long hair often need to do? _____
- 6 What can you do if you need some water in your glass? _____
- 7 What do you do with a present before giving it to someone? _____

C. Read the passage.

The Ig Nobel Prize

Science tries to answer the biggest questions of our time: 'If we explore nearby galaxies, will we find other forms of life?' or 'What will happen to the planet if we don't stop climate change?' The greatest scientific achievements are awarded a Nobel Prize: Alexander Fleming (penicillin), Marie Curie (radioactivity), and Albert Einstein ($E=mc^2$) are all Nobel Prize-winners. Science is serious, but scientists are only human and sometimes they want answers to questions like: 'Why do shower curtains blow towards you when you have a shower?' And so the Ig Nobel Prize was born, with the aim of making people smile first, and then think about science.

Here's a selection of scientific ideas that have won an Ig Nobel Prize

If a cow has a name, it produces more milk! Farmers have always known this, but now there's proof. Cows without names produce about 13,000 litres a year, but cows with names produce 13,500 litres. This is probably because the cows with names feel more loved by farmers.

When you drop a slice of toast, it falls to the ground with the buttered side down 80% of the time, according to experiments. This is because it usually falls from table height and only has time to turn over once before it reaches the floor.

Mosquitoes love the smell of feet. They'll bite your feet if you take off your shoes! But Limberger cheese smells like feet and is even more attractive to mosquitoes, so they bite you less when there's Limberger nearby. This is a good example of how a silly discovery can be important. 'Cheesy' mosquito traps now help in the fight against malaria, a disease that is carried by mosquitoes. Malaria kills 500,000 people per year.

Only one person has won both an Ig Nobel and a Nobel Prize: Andre Geim made the headlines in 1997 for his 'flying frog' experiment, in which he made a frog float in the air! Then in 2010 he discovered graphene, a form of carbon that is one atom thick. Graphene is the thinnest and strongest substance known to man. There are no prizes for guessing which experiment won an Ig Nobel!

D. Match the underlined words to the meanings.

- | | |
|---|---------|
| 1 stay in the air without support | = _____ |
| 2 the reason for doing something | = _____ |
| 3 something for catching animals | = _____ |
| 4 information to show that something is true | = _____ |
| 5 allow something to fall | = _____ |
| 6 something difficult that you succeed in doing | = _____ |

E. In the same way as the bolded sentences, complete these expressions.

- 1 Water _____ (boil) when you _____ (heat) it to 100°C.
- 2 If you _____ (not add) sugar to this coffee, it _____ (taste) very bitter.
- 3 If you _____ (press) 'play', the music _____ (start).
- 4 When a player _____ (score) a goal, the fans _____ (go) crazy.
- 5 My journey to school _____ (be) quicker if I _____ (take) the bus.