

STRETCHY SLIME EXPERIMENT

How big can you make slime grow? In this activity, you will use your engineering skills to investigate what factors affect how stretchy slime is and record your findings. You can then use your mathematical findings to compare how stretchy your slime is compared to other stretchy items such as an elastic band.

🕒 30 minutes

Skill set: Committed, curious, resilient



🧰 Kit list

150ml PVA glue

2-4 tsp of contact lens solution

1 tbsp of bicarbonate of soda

Plastic bowl

Ruler

Elastic bands

Timer (optional)

Paper and pencil

📖 Instructions

- 1 Pour the glue into a bowl. Add the bicarbonate of soda, and mix well.
- 2 Now add the contact lens solution and mix until it becomes stiff and harder to stir.
- 3 Take the slime out and knead until the desired consistency is achieved. If needed, add more contact lens solution a few drops at a time, to make the slime less sticky.
- 4 Measure the size of your slime.
- 5 Start stretching! Use a ruler to measure how big you can make your slime grow.
 - At what point does the slime start to break?
 - At what point does your slime stop returning to its original size?
- 6 Record your findings. A great example of using mathematical skills is to measure what percentage the slime stretched, compared with your different batches of slime and to other stretchy items.
 - What variable factors may affect its stretchiness?
 - Could the colour, texture, temperature, or amount of time make a difference?

⚠️ Watch out

- The slime is for experimenting with only, do not eat.
- Take care not to rub your eyes or face after handling the slime. Wash your hands after the experiment.
- Do not take the slime home.
- For disposal, place in a bin bag then in non-recycling waste.
- For more safety guidance, see CLEAPPS guide P042. Find it here: [science.cleapss.org.uk/Resources/Student-Safety-Sheets](https://www.science.cleapss.org.uk/Resources/Student-Safety-Sheets) ✨

➤ Next steps

For more ideas and inspiration visit: [ypo.co.uk/primary](https://www.ypo.co.uk/primary) ✨

🏠 At home

Think about what other properties you could test in materials. Share with the grown-ups at home your ideas on the fun ways you can think of to test these.

➤ Career options

Engineers apply science and maths in their job to help them to solve problems. They also look at the properties of materials when they are designing and building structures, machines and more.

