

Glitter Bottle

Materials

- Clear gum glue
- Plastic bottle with lid, approximately 600ml size
- Hot tap water
- Small jug
- Food colouring
- Cold tap water
- Glitter
- Duct tape or electrical tape



Instructions

1. Pour clear gum glue into the plastic bottle until it is about one quarter full.
2. Slowly add about the same volume of hot tap water to the bottle.
3. Swirl the bottle to thoroughly mix the glue with the hot water.
4. To the small jug, add a few drops of food colouring and fill with cold tap water.
5. Pour the coloured water from the jug into the bottle until the bottle is almost full.
6. Add glitter and close the bottle with the lid. Turn the bottle upside down to gently mix the glitter with the water and glue.
7. Take off the lid and top up the bottle with more cold water until it is completely full.
8. Close the bottle firmly with the lid and wrap the lid with duct tape or electrical tape to prevent children from removing the lid.

What happens?

When the bottle is shaken, the glitter swirls through the thick mixture of water and glue. If the bottle is left to sit, the glitter slowly sinks down through the liquid. As the glitter moves through the liquid, it reflects light, like hundreds of tiny mirrors, creating a beautiful sparkling effect. It is the 'viscosity' of the liquid in the bottle that makes the glitter fall slowly. Water has a low viscosity as it is very runny. Water mixed with gum glue flows more slowly and has a higher viscosity.

Health and safety considerations

Take care to securely close the bottle with tape to ensure children cannot remove the lid and drink the liquid and glitter.