



2E).

Floating cork

Can you make a cork float to the middle of a glass of water?

YOU WILL NEED:

- A glass or jam jar
- Water (a jug may be useful too)
- A tray to hold any water spills
- A cloth to mop up spills
- A cork

SAFETY:

- If the glass/jar is made of glass, it may break if dropped.
- If the glass does break, do not touch the bits of glass as they will cut you.
- Seek advice on clearing up the broken glass from a leader.

INSTRUCTIONS:

- 1) Mostly fill the glass or jar, but not to the very top.
- 2) Float a cork in the water – it will drift to the edge of the jar/glass.
- 3) Challenge your friend to get the cork to stay in the middle of the jar/glass without holding it there.
- 4) Add enough water to completely fill the jar/glass to just overflowing.
- 5) The cork floats to the middle – now look at it from the side and you can see why.

EXPLANATION.

If the glass is mostly full, the meniscus (water surface) is shaped such that the water in the middle of the glass is lower than the water at the edges.

The cork is less dense than water so it floats to the edge.

If the glass is totally full, the meniscus raises above the top of the container and the cork floats to the middle.