

Sticky Knowledge

Objects filled with air float. That is why hollow objects such as balloons or empty plastic bottles will float. These things float because they have air in them, and air is less dense than water; we say that these things are buoyant.

The shape of an object determines if it sinks or floats. The shape of an object can be changed so that even though the mass has not changed the increase in volume makes it less dense. For example, a plasticine ball placed in water, will sink, but flatten the plasticine and make it into a bowl shape and the volume is increased so it will float.

Consider the properties of the materials you are using.

Are they absorbent or waterproof?

Key Vocabulary:

waterproof	Not letting water through
Absorb	to take in or soak up
Buoyancy	Something that tends to float in water.
Float	rest on or near the surface of a liquid without sinking.
sink	go down below the surface of something, especially of a liquid or become submerged.
Design Brief	Information about who you are designing the product for, what materials you can use and what problem you need to solve.
Prediction	a statement about something that might happen or is expected to happen
variable	something that can change
experiment	a carefully planned test used to discover something

