

**This interactive show demonstrates how we can explore and test some simple science ideas with the equipment to be found in most kitchens. And we might make a mess at the same time!**

Our shows are designed to work flexibly as introductions to a topic or to revise a topic depending on what approach teachers would like us to adopt with particular audiences.

Teachers may wish to use this overview to help to prepare their classes before the show. Introducing or revising key vocabulary and concepts in advance of the show tends to increase the learning outcomes from the presentation.



### Key concepts and vocabulary

- if an object has more weight than the same volume of water, it will sink in water (we say it is **more dense – heavier for its size**);
- if the object has less weight than the same volume of water it will float in water (it is **less dense – lighter for its size**);
- vocabulary associated with **pushes and pulls** – squeeze, squash, etc.
- materials that we call **liquids** usually change shape when we give them a push or pull; they also take the shape of their container and will pour eg water, milk;
- materials that we call **solids** do not change shape when we push or pull them eg frozen ice cream;
- some substances fizz when they react with water and start to **dissolve** – they give off bubbles of a gas;
- **gases** take up more space than liquids or solids – they try to fill all of the available space;
- if you try to trap a gas as it is produced, the pressure inside the container will increase until it explodes with great **force** – like shaking a coke bottle before opening it;
- to have a **'fair test'** in an investigation you have to keep all the factors that might affect the investigation the same except for the factor you are testing.

Further information explaining the demonstrations and concepts used in the show, with some suggested follow-up activities, can be found in the support notes for this show at [www.think-differently.co.uk](http://www.think-differently.co.uk)