

**A liquid has no fixed shape but a fixed volume and takes on the shape of its container.** The molecules in a liquid move more and have more energy than particles in a solid but still remain in close contact with each other. Children often only think of water when talking about liquids, so it is worth beginning by brainstorming all the liquids that they know. Different liquids behave in different ways, some move more easily than others – they are less viscous.

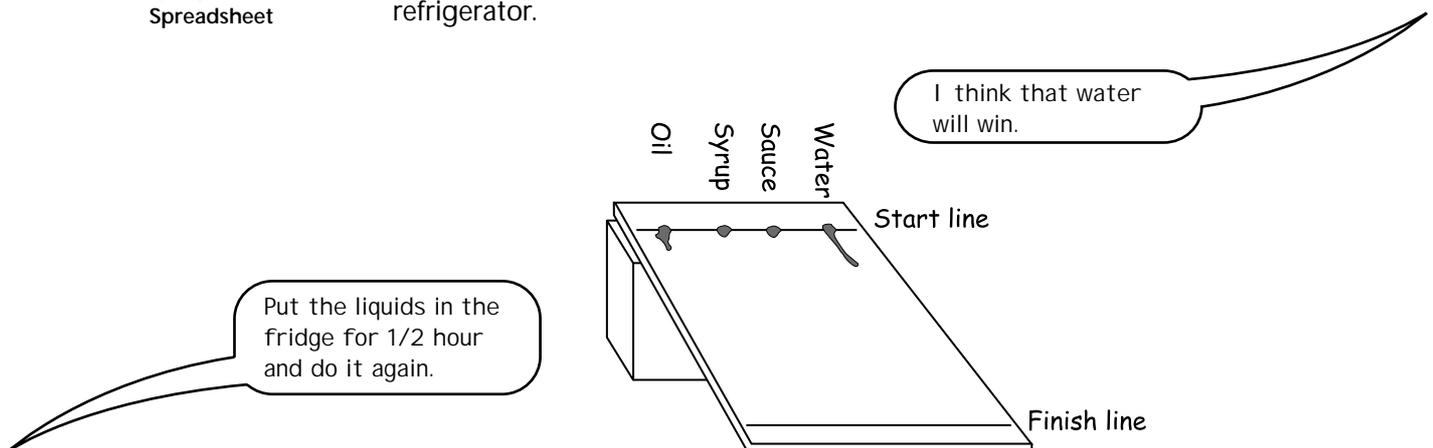
(a) **There are liquids other than water** Draw, discuss and collect a variety of liquids and with older children discuss the viscosity or thickness of the liquid.

(b) **Race the liquids** Investigate which liquid moves the fastest. Choose a variety of different liquids eg water, syrup, tomato sauce, vegetable oil, glycerine, cream and put a measured spoonful of each at the top of a tray. Tip the tray and lean it against a brick allowing the liquids to run down the tray.



Spreadsheet

Which is the fastest? Try timing the liquids. What happens if you cool all the liquids first in a refrigerator? Compare different temperatures of the same liquid eg tomato sauce that has and has not been in the refrigerator.



(c) **Conservation of volume of liquids with change of shape**

Using a given volume of water let the children pour it into a variety of different shaped containers and draw and observe the change of shape. Ask them to predict each time how far up the container they think it will go. Repeat the task with different volumes, as this gives children practice at measuring volume.



Modelling

