



## CUSTARD GONE CRAZY

Is it a solid? Is a liquid? No, it's scientist's favourite trick!

### WHAT YOU NEED

- ◆ Custard powder (or cornflour – but not instant custard powder)
- ◆ Water

### WHAT TO DO

1. Mix 8 eggcups of custard powder with 4 eggcups of water, making sure to stir in the water a little at a time so you don't get any lumps. The result is a strange yellow substance that can act either like a solid (if you punch it quickly or roll it into a ball) or like a liquid (if you touch it gently). Weird.
2. If you increase the amounts of custard and water, you could in theory fill a paddling pool with the mixture, and run across the top without falling in. (If you do this you can jump up and down, but when you stop jumping you sink into the mixture. To remove your feet pull gently or you may be stuck there for good!)

### WHY

When you move the custard mix around slowly the custard powder particles can move around in the water quite freely, and so it acts as a liquid. When you move the mix faster or hold it in your hand tightly, the solid particles rub against each other causing friction. This makes them stick together and act like a solid.

