

 <p>Marble</p>  <p>Spoons</p>	 <p>Toaster</p> <p>Bean Can Phone</p> <p>You will need two plastic drinking cups or tin cans, baked beans ideal, make sure they are empty and clean with no sharp edges, and a long piece of string or nylon twine.</p> <p>Pierce the bottom of the cups with a needle (the tins will need a skewer and hammer – be careful!).</p> <p>Thread the string through. Secure the string with a big knot then taping a loop of it to the inside of the bottom of the cup. To work, the string has to be pulled tightly between the two cups. You and your mate can take turns to listen and speak to each other.</p>	 <p>Ketchup</p>  <p>Custard Pie</p>  <p>Ice Cube Freezer Tray</p>
 <p>Apple Pie</p> <p>Crazy Custard</p> <p>How: Mix 8 eggcups of tinned custard powder (or cornflour) with 4 eggcups of water, making sure to stir in the water slowly so you don't get any lumps. (Don't cook it!)</p> <p>The result is a strange substance that will either act like a solid - if you punch it quickly, or roll it into a ball OR will act like liquid, if you touch it gently.</p>	<p>What's happening? The custard powder and water mixture is a mixture of solid particles suspended in a liquid, called a "colloid". When you stir the mix slowly, the custard powder particles can move around in the water quite freely, and so it acts as a liquid. When you stir 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.</p> <p>You may feel that you can now have a private conversation, but is your transmission secure? By tying a third cup/tin to the middle of the long piece of string, your enemies (or friends) will be able to monitor your communications!</p>	 <p>Comfy Slippers</p> <p>Crazy Craters</p> <p>How Spread newspaper out, and put a baking tray onto it. Make a thick layer of flour in the baking tray. Smooth it out, and then cover this layer with a thinner layer of cocoa powder. Standby for action: drop marbles from different heights and observe the craters they make.</p> <p>What's happening? The circular features you can see on the Moon's surface are impact craters just like what you've just done in the flour and cocoa. They were formed when impactors (ie incoming objects) smashed into the surface, and on the Moon, you can see layers upon layers of these craters have been created over the millennia. (Check out some images of the Moon's surface at http://nssdc.gsfc.nasa.gov/photo_gallery/)</p>
 <p>Blob of Custard</p> <p>Hurting Meteorite</p> 	<p>Why? The cotton becomes attached to the ice cube because the salt lowers the freezing point of water and melts the ice. The top of the ice cube quickly re-freezes, trapping the cotton under a thin layer of ice - allowing you to pick it up.</p> <p>How? Lay the cotton flat across the top of the coldest of ice cubes with the ends hanging off either side. Take a pinch of salt and sprinkle it over the top of the ice cube. Wait for a minute or so. Take hold of the thread, one end with each hand, and gently raise the ice cube. PS: If it doesn't seem to work, try making a loop in the middle of the cotton before placing it on the ice cube so that there is more cotton in contact with the ice.</p>	<p>Iceberg</p>  <p>Magic Ice Cube</p> <p>How? Lay the cotton flat across the top of the coldest of ice cubes with the ends hanging off either side. Take a pinch of salt and sprinkle it over the top of the ice cube. Wait for a minute or so. Take hold of the thread, one end with each hand, and gently raise the ice cube. PS: If it doesn't seem to work, try making a loop in the middle of the cotton before placing it on the ice cube so that there is more cotton in contact with the ice.</p>
 <p>Steaming Mug</p> <p>Bowl</p> 	 <p>Salt Shaker</p> <p>Full Moon</p>  <p>Baked Beans</p> 	<p>How? Spread newspaper out, and put a baking tray onto it. Make a thick layer of flour in the baking tray. Smooth it out, and then cover this layer with a thinner layer of cocoa powder. Standby for action: drop marbles from different heights and observe the craters they make.</p>

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