

MESSY SCIENCE IDEAS

Science activities can be dangerous. Always do a risk assessment for your venue and your group. Work out what dangers there could be and how you will minimise risk.

Bible Passage	Activity	Resources	Talk about
<p>2 Corinthians 5:17 Therefore, if anyone is in Christ, the new creation has come: The old has gone, the new is here!</p>	<p>Put a couple of tablespoons of oil in the pan and add a small handful of corn. Put the lid on, leave a small gap for steam to escape, and heat on high. The children can watch from a safe distance, but remember there is very hot fat in the pan. When all the corn has popped, take the pan off the heat. When you are sure that there are no more “pops” take the lid off and share the popcorn with a little sugar or salt.</p>	<p>Bag of popping corn Vegetable oil and tablespoon Tabletop or camping burner Large pan with glass lid Salt and/or sugar Small plastic bowls</p>	<p>They will almost certainly have eaten popcorn, but talk about whether any of them know how it starts off. The popcorn is the same thing as the corn, but it has changed beyond all recognition and can't be changed back! How do our lives change when we know Jesus? We are still the same people but we might seem very different. Can you describe any changes that you've seen in friends/family when they've come to know Jesus?</p>
<p>1 John 3:20 If our hearts condemn us, we know that God is greater than our hearts, and he knows everything.</p>	<p>Explain that one of the six eggs is hardboiled but that you've forgotten which one. Without cracking or breaking any of the eggs can you discover which is the hardboiled one? Just show them all the equipment and leave it to them to decide how they might decide. As everyone decides put a mark on the egg that they think is the hardboiled one. At the end, show them the real test – the hardboiled egg will spin whereas the fresh ones won't because of the liquid moving inside. Prove it by cracking the hard boiled one (over a leader's head, if you like!)</p>	<p>Box of six eggs, one is hardboiled (make no markings on any of the eggs, they must all look the same.) Kitchen scales Magnifying glass If you can get one, a stethoscope Bowl of water Tape measure</p>	<p>When you look at all the people you know, some of them might be happy and friendly and some might be grumpy! But actually we don't know what is going on inside someone's heart. The might be all sorts of reasons why someone feels sad or doesn't want to be very friendly. What sort of things can make this happen? Only God knows what is really inside someone's heart. If we trust in Jesus we can be sure that he's with us every day, even if things sometimes go wrong.</p>
<p>Ephesians 3:19 ...and to know this love that surpasses knowledge—that you may be filled to the measure of all the fullness of God</p>	<p>Light the candle and blow it out a few times. Talk about what the children think the flame is and what makes it burn. Ask them what they think will happen if you put a glass jar over the candle. Now try this – most are quite surprised that it doesn't immediately go out. But that it does go out after a while.</p>	<p>A candle, attached to a plate Matches A clear plastic jam jar</p>	<p>There is something that the candle needs in order to burn – it's in the air and is called oxygen. When you put the jar over the candle it keeps burning because the air in the jar has oxygen in it – but it quickly gets used up and the candle goes out. God's Holy Spirit is in us when we trust in Jesus. What things does the Holy Spirit do in our lives? But we need this Holy Spirit afresh every day or like the candle going out we might stop doing God's work.</p>

<p>2 Peter 1:16 For we did not follow cleverly devised stories when we told you about the coming of our Lord Jesus Christ in power, but we were eyewitnesses of his majesty.</p>	<p>Allow everyone to look at the banana. Explain that you love bananas and custard but that you have forgotten to bring your special banana slicing knife. You wish there was a special banana slicing spell which would just make it slice by magic!</p> <p>Get everyone to think up a magic spell, (Bananas are yellow, bananas are nice, make my banana, fall into a slice! – I’m sure you can do better than that!)</p> <p>Now peel the banana and distribute the slices. As the are being eaten explain that it was just a trick, but that in his letter Peter says that all the amazing things that Jesus did WEREN’T a trick, they REALLY happened.</p>	<p>A pre-sliced banana – choose a brown speckled one. Insert a clean, long needle at intervals up the banana. Being careful not to cut through the skin on the other side, slice the flesh inside with the needle. Repeat up the banana.</p> <p>Some custard in little bowls and spoons</p>	<p>Can you think of some of the miracles that Jesus did? What do you think about them? Is it easy to believe that they happened or do we sometimes wonder if the first disciples might have made them up?</p> <p>Peter was one of the disciples (an eyewitness!) and he was absolutely certain that none of the facts about Jesus were made up stories. He was so certain that he suffered all kinds of punishments from people who wanted him to say that he’d made up everything. Does this make you feel any differently about what Jesus did?</p>
<p>Colossians 1:23 if you continue in your faith, established and firm, and do not move from the hope held out in the gospel.</p>	<p>Show everyone an empty bottle and discuss whether it looks strong enough to stand up on its own. Say that you are going to make it crumple without crushing or squashing it.</p> <p>Put about an inch of hot water into the bottom of the bottle and screw the lid on firmly.</p> <p>Now put the bottle into the washing up bowl with some ice/freezing cold water. As you watch the bottle should gradually crumple. Discuss why this is (As the hot air inside the bottle cools it also contracts – gets smaller- so that there is a vacuum – space- left in the bottle. When this happens the pressure of the outside air makes the bottle collapse.</p>	<p>Empty plastic bubblebath or coke/lemonade bottles with lids Hot water stored in flasks Ice washing up bowl</p>	<p>The bottle collapsed because it didn’t have enough air in it. Our faith can sometimes feel like it’s collapsing, especially if the people around us are laughing at us for being a Christian.</p> <p>Have you ever felt like you don’t know what to say about being a Christian, maybe when people are critical or dismissive? What makes your faith firm again?</p> <p>How can we trust more in the hope held out in the Gospel? What might help us be filled up by this hope?</p>
<p>Colossians 3:16 Let the message of Christ dwell among you richly as you teach and admonish one another with all wisdom through psalms, hymns, and songs from the Spirit, singing to God with gratitude in your hearts.</p>	<p>Use one of the unmagnetized pins and show how you are trying to pick up other pins with it. Of course it won’t work.</p> <p>Now show an identical pin that you have previously magnetized by stroking a magnet in the same direction over it lots of time. This time it will pick other pins up. What has changed?</p> <p>Talk about what magnetism is and how it’s possible to use one magnet to create another one.</p> <p>Everyone can make their own magnetic pin and see how many other pins can be picked up at once.</p>	<p>New, unmagnetized pins Magnets Trays or bowls to put the pins in.</p>	<p>The first people who knew Jesus was quite a small number, and yet now there are Christians all over the world, in every country. How has this happened? A new little magnet can only be made by another magnet working on it. What things can help someone new to become a Christian?</p> <p>Can we be like the magnet, helping someone new to find out what it means to follow Jesus?</p>