## Experiment

- 1. Mix Primary coloured (red, yellow and blue) paint together. What colour do you get?
- 2. Print the disc shape onto card
- 3. Colour each segment of the disc with Primary or Secondary colours.
- 4. Push a pencil through the centre.
- 5. Spin the pencil to mix all the colours together? What colour do you see now?

## What's Happening?

When you mix colours of paint together you get a muddy colour. When you mix colours of light together something different happens, you get white. White light is made up of different colours of light. The chemicals that make up the paint reflect different colours of light. When you shine white light, red paint will reflect red light, but will absorb other colours. Green paint will reflect green light and so on. When the disc is spun, it rotates so fast that your eye and brain cannot recognise the individual colours and they merge together to make it look white. A rainbow forms because drops of water act like a prism and split up the white light from the sun into different colours.

Psalms & Science Rainbow

> Psalm 51: 2; 7-9 Wash away all my evil and make me clean from my sin! Remove my sin, and I will be clean; wash me, and I will be whiter than snow. Let me hear the sounds of joy and gladness; and though you have crushed me and broken me, I will be happy once again. Close your eyes to my sins and wipe out all my evil.

**Reflection** What do you think about when you see a rainbow? It can bring a sense of awe and wonder. The rainbow appeared to Noah as the sign of God's promise to all people that he would be with them. The prophet Ezekiel also saw God's rainbow which reminded him of God's glory. And in the book of Revelation, the rainbow appears to remind us that when God comes to us he will bring holiness and justice and he will be merciful and forgiving.