

Activity Instructions

Today we are thinking about light. Jesus said 'I am the Light of the world.' John 8:12 But Jesus also said 'You are the light of the world ...let it shine for all.' Matthew 5:14-15

Activity 1: Light sources

List as many light sources as you can. You could have a competition to see who can name the most in 1 minute or you can do it all together and see how long you can make your list.

Light was the first thing God created when he made everything so it must be something that God thinks is really important.

Then God said, 'Let there be light.' And there was light. And God saw that it was good. Then he separated the light from the darkness. Genesis 1:3-4

Activity 2: Night sky

Explore the night sky by using this link <https://www.google.com/sky/>

God made the sun, the moon and the stars to shine light over the world.

And God said. 'Let bright lights appear to separate the day from the night. ... let their light shine down upon the earth.' ... God made two great lights, the sun and the moon... He also made the stars. God set these lights in the heavens to light the earth, ... to separate the light from the darkness. Genesis 1: 14-18

Activity 3: Change a battery

You will need: a torch with a battery that can be changed

Practise changing the battery in the torch.

The torch needs the energy from the battery to shine so that we can use it to see things in the dark. It is a bit like how we need to be connected to Jesus so we can shine his light out into the world so other people can see and know Jesus too.

You are the light of the world – like a city on a mountain, glowing in the night for all to see. Matthew 5:14

Activity 4: Light Refraction Experiment

You will need: a sticky note or small piece of paper like that, a marker, and a clear plastic bottle of water.

Draw an arrow, facing either left or right, on the sticky note. Stick this to a wall and then look at the arrow through the bottle of water. What happens to the arrow?

This happens because the light rays bend as they pass through the plastic and water. This shows that light has the power to change things. When we shine our light out for all to see things change as people get to know Jesus.

Don't hide your light under a basket! Instead, put it on a stand and let it shine for all. Matthew 5:15

Activity 5: Spectroscope

You will need: an empty paper towel roll, an old CD/DVD or blank one, a small piece of cardboard (from a cereal box), some tape, a pencil, a scissors and a craft knife (adult use only).

Towards the base of the paper towel tube, cut a slit at a 45 degree angle with the craft knife (adults should do this) Directly across from this slit cut a small rectangular peephole again using the craft knife (adults again) Now trace around the end of your paper towel tube onto the small piece of card and cut out that circle. Cut a small slit in the middle of the circle using a craft knife. Now tape this circle to the top of the

paper towel tube. Insert the CD, shiny side up, into the 45 degree angled slit. Your spectroscope is ready to use.

Take it outside and face it towards the light (not directly at the sun) and look through the peephole. You should see a rainbow! (You may need to change the tilt at which you hold it a little) You can also experiment with other sources of light: fluorescent light bulb, neon light, candle Is the result the same for each light source? (It is really interesting testing the different light sources!)

The CD has lots of minute tracks on it so when the light hits the surface of the CD it separates it into the different colours of light because each colour of light has a different wavelength, and then we can see them as they reflect off the CD.

This reminds us of how Jesus is the source of the light that we reflect out into the world.

Activity 6: Night-light holder

You will need: a glass jar (with the labels removed) and (1) tissue paper in a few different colours, PVA glue and a brush (2) permanent markers or (3) stickers.

- (1) Tear or cut the tissue paper into small squares. Apply PVA all over the sides of the glass jar and randomly stick on the tissue paper squares
- (2) Using permanent pens draw your design onto the glass jar
- (3) Stick stickers onto the sides of the glass jar but remember to leave some room for the light to come through!

Now your night-light holder is ready for the night-light.

Every time you light your night-light be reminded that Jesus is with you always. Jesus is the light of the world and we reflect his light out to everyone around us. Take some time to watch your night-light and to be with Jesus. We need to spend time with Jesus, to refill ourselves with the light of Jesus so we can then reflect his light out to the people around us

Jesus said to the people, 'I am the light of the world. If you follow me, you won't be stumbling through the darkness, because you will have the light that leads to life.' John 8:12

Activity 7: Marshmallows and s'mores

You will need (for each person): a night-light or candle, a fork, a marshmallow and 2 chocolate digestive biscuits

Stick the marshmallow onto the fork. Hold the marshmallow just above the flame on the candle and wait patiently for the marshmallow to cook (turning it every few seconds helps – but make sure it isn't too near the flame or it will burn!) When the marshmallow is cooked (it should be soft and melting a bit) place it between the 2 biscuits (chocolate sides against the cooked marshmallow) ENJOY!

As you cook your marshmallow watch the flame and remember Jesus, the light of the world, is with you. You can chat to him, or just sit and be quiet with him.

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