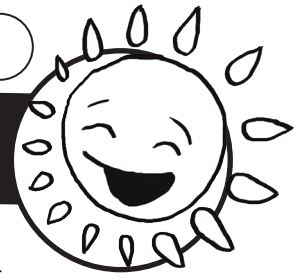


# SUN



The water cycle is very important to life on earth and provides us all with water for our houses and homes. The water cycle happens every day and the sun is an important part of this process as the heat from the sun evaporates tiny, invisible drops of water vapour up into the sky to make clouds. It's our job at Wessex Water to remove and clean water from the ground and supply it to us all.

## 1 WHAT DO YOU KNOW ABOUT THE SUN?

The sun is a giant star at the centre of our solar system. It is composed of approximately 70% hydrogen and 30% helium with other elements making up less than 1%. It generates energy by nuclear fusion reactions that turn hydrogen into helium at its centre. Its diameter is approximately 865,000 miles across, that is about 109 times bigger than the earth, and is about 4,700 million years old.

Draw some pictures about what you know. The earth orbits around the sun and takes 365 days to complete its revolution. The earth also rotates itself and takes 24 hours, giving us day and night. Why is the sun important to life on earth?

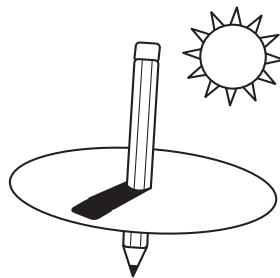
## 2 MAKE A SHADOW CLOCK

You will need: a sharp pencil and circle of stiff cardboard to make the dial.

Push the pencil into the ground. Leave it outside in the sunshine. Mark on the dial where the pencil's shadow is each hour. The shadow will move steadily across the dial.

You can also go outside on a sunny day and ask someone to draw around your shadow on the ground using chalk. Then go back outside later and stand in the same position and ask your friend to draw around your shadow again. What do you notice?

The shadows will be long in the early morning and late afternoon because the sun is low in the sky. At midday, when the sun is overhead, they will be very short.



## 4 SUN SAFETY

The sun is essential to life on earth but you do need to protect yourself from the sun's rays. Slip on a tee shirt, slop on some sunscreen and slap on a hat. Could you make a poster to remind everyone to do this? Or design a sun hat, sunglasses or some shorts and a tee shirt. **Remember it is never safe to stare directly at the sun.**

## 3 FLOWERS AND PLANTS

All plants rely on the sun to flourish. A sunflower is an easy one to grow. You just need a seed, a pot and some compost. Put it out in the rain and sunshine and measure its growth.

Have a look around the garden. What flowers are in bloom now? Is there a common colour or a variety? Find out what flower your family likes best by making a bar chart.

Draw and/or paint pictures of flowers and plants that you find in your garden. You will have to look closely at the shape of their leaves and petals. Can you label a diagram of a plant using the words stem, petal, leaf etc?

What happens to some flowers at night? See if you can observe a daisy or a lily and see what happens. Can you also make a daisy chain?



Please do visit [www.wessexwater.co.uk/community/education](http://www.wessexwater.co.uk/community/education) for more information about what Wessex Water does to supply clean water to our homes, schools and businesses.

