

Starters for Science are 4 activities that parents can use at home to help children develop their science alongside the key learning and vocabulary children are using at school. The activities are easy to resource and provide children with the stimulus to learn and talk about their science topic. Encourage children to use the correct vocabulary as they talk about what they are doing and finding out. Don't forget to share your work on social media

## #ScienceFromHome

### Key Learning:

Humans have circulation systems that ensure essential nutrients and gases are delivered to all parts of the body and waste materials are removed.

The circulation system includes the heart, blood vessels, arteries, veins, blood and the lungs.

The heart is a pump and is composed of four chambers that pump blood constantly around the body.

Blood travels from the left side of the heart to the lungs where it collects oxygen and releases carbon dioxide. The blood then returns to the heart, this time to the right side, where it is pumped to every other part of the body through arteries. Veins then return the blood to the heart.

Blood contains many things essential for the body such as red blood cells, white blood cells, platelets, nutrients and plasma.

Diet and exercise play an important part in healthy living. An unhealthy diet and lack of exercise is not good for the body.

Some drugs are used to maintain a healthy body however, there are drugs which have a detrimental affect on our bodies.

### Vocabulary:

circulatory system

heart

lungs

blood vessels

blood

lifestyle

disease

water transportation

nutrient transportation

oxygen

air

breathing

exercise

diet

drugs

### Brilliant bodies

Can you tickle yourself? How many litres of blood do you have in your body? How many times does your heart beat in a day? Test your family with a body trivia quiz. Create your own cards or download some from here:

<https://bit.ly/2RFJVRN>

### Make fake blood

Do you know what is in blood? Can you make a model of blood in an empty bottle? You will need something for red blood cells (red plasticine?), white blood cells (mini marshmallows?), nutrients, plasma and platelets. You can find out more about blood here:

<https://www.bbc.co.uk/bitesize/topics/zwdr6yc/articles/zqv4cwx>

### How does our body work?

Go outside and use chalk to draw around someone's body. Can you draw what goes on inside your body?

[www.stem.org.uk/rx34f3](http://www.stem.org.uk/rx34f3)

### Heart beaters

Take your pulse rate at rest (counting how many pulses you have in 15 seconds and multiplying by four may be easier than taking your pulse for 60 seconds). Do star jumps for one minute and take your pulse rate afterwards. What has happened? Take your pulse rate every minute for five minutes after the star jumps – is it back to your resting rate yet?

[www.stem.org.uk/rx33h9](http://www.stem.org.uk/rx33h9)