

# Navigators - Go With The Flow

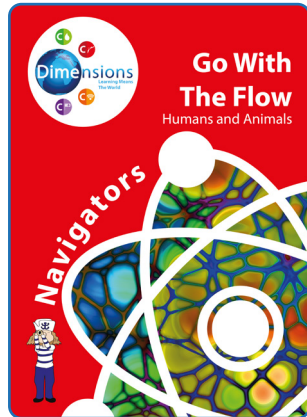
What

I

Should

Know

Dimensions  
CURRICULUM



## Overview

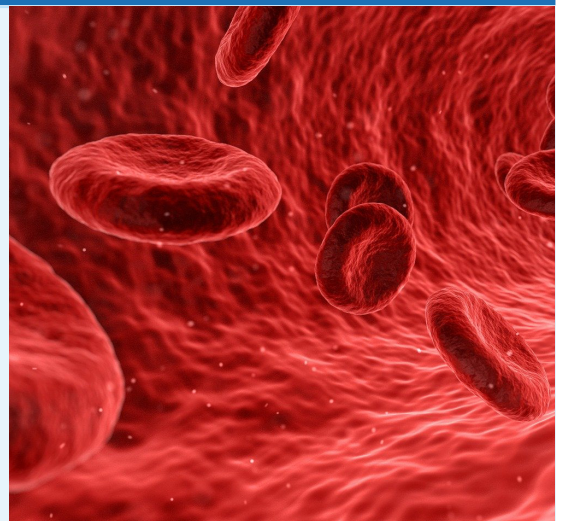
"Go With The Flow" is a thematic unit based around life processes, with a key focus on science. We begin by looking at the changes that take place as humans develop to old age, recognising the impact of diet, exercise, drugs and lifestyle on the way our bodies function. We will also learn about the human circulatory system and the functions of the heart, blood vessels and blood. Finally, we will learn about the ways in which nutrients and water are transported within animals, including humans.

## Not as young as I used to be!

Our bodies go through many stages of change and development as we grow older. As babies, we are not very tall or heavy. Our eyesight is poor when we are very small and we cannot eat solid food, as we don't have any teeth. As we become toddlers and young children, we grow taller and we are able to walk. We start to learn to speak and can make ourselves understood. As we become adolescents, our bodies begin to change and get ready for adulthood. As adults, our bodies still continue to change as we move towards old age. It is important to maintain a healthy lifestyle. This means we should try to eat lots of healthy food, aim to get plenty of exercise and avoid any substances that may affect our health.

## Pump it Up!

The body is made up of many different systems such as the skeletal system and the digestive system, amongst many others. In this unit, we will learn about the circulatory system. This system contains your heart, blood vessels and blood itself. The heart is a pump that works without you having to think about it. It is made of cardiac muscle which works to squeeze blood around your body. It sends deoxygenated blood through veins to the lungs to collect oxygen and then pumps the oxygenated blood around the body so all the organs can function. Blood is made of many things such as white and red blood cells. We can measure how quickly our heart is beating by taking our pulse. We can feel this either on our necks or on our wrists.



## The Water Works

Water is absolutely vital to human and animal survival. Most of our bodies are made of water, which is transported in the circulatory system inside our blood cells. Water is key to keeping all the functions of the body working well. Humans and animals don't just take in water by drinking. Many of the foods we eat contain water, especially fruit and vegetables. An average adult uses up around two litres of water a day so this needs to be replaced. When we get hot, it comes out of our skin through our pores as sweat. Sweat helps to cool the body down. Water has many jobs within the body. It helps to carry away waste products in the form of urine and it helps to keep our joints working, too.

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## Vocabulary

<b>Additive</b>	a substance added to another substance in small amounts to change or improve it
<b>Adolescent</b>	a person who is changing from a child to an adult
<b>Blood Cell</b>	Red = a cell in the blood that carries oxygen to the body's tissues White = a small blood cell with no colour that helps protect the body against infections and bacteria
<b>Blood Pressure</b>	the pressure of the blood against the inner wall of blood vessels
<b>Dehydration</b>	losing water or drying out
<b>Drug</b>	a chemical that is not food and that affects your body
<b>Gestation</b>	the time that an organism spends developing in a womb or egg before being born
<b>Life cycle</b>	the sequence of changes that a living thing goes through as it grows and develops Birth, growth, reproduction, aging, and death are all stages in the life cycle of an animal.
<b>Plasma</b>	the clear, liquid part of blood
<b>Platelets</b>	small disk-shaped bodies found in the blood of vertebrates and associated with clotting
<b>Pregnant</b>	having one or more young growing within the body of a woman or other female mammal
<b>Pulse</b>	the beat resulting from the regular widening of an artery in the body as blood flows through it
<b>Stethoscope</b>	an instrument that doctors and nurses use to listen to the heart with
<b>Urine</b>	a substance made by the kidneys to carry waste out of the body
<b>Womb</b>	the organ where a baby grows when a woman is pregnant

## Concept Flow

- To know and describe the changes as humans develop to old age
- To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- To identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood
- To describe the ways in which nutrients and water are transported within animals, including humans

## My Notes / Questions