



### NATURAL SCIENCE 3



	Contents		
Welcome Page 4			
How do we interact with the world? Page 6	<ul><li>Nervous system</li><li>Locomotor system</li><li>Sense of hearing</li></ul>	<ul><li>Sense of sight</li><li>Senses of smell and taste</li><li>Sense of touch</li></ul>	
How can we classify animals?  Page 18	<ul><li> Mammals</li><li> Birds</li><li> Reptiles</li></ul>	<ul><li>Fish</li><li>Amphibians</li><li>Invertebrates</li></ul>	
What types of living things are plants? Page 32	<ul> <li>Plant reproduction:         flowering and         non-flowering plants</li> <li>Sexual and asexual         reproduction</li> </ul>	<ul> <li>Photosynthesis and respiration</li> <li>Photosynthesis and life on Earth</li> </ul>	
How are living things connected to each other? Page 44	<ul><li>The kingdoms of nature</li><li>Fungi</li><li>Protists</li><li>Monera</li></ul>	<ul><li>Ecosystems</li><li>Human effects on ecosystems</li><li>Searching the internet</li></ul>	
What forms can energy and matter have? Page 58	<ul><li>Matter: changes of state</li><li>Thermal energy</li><li>The sun as a sustainable energy source</li></ul>	<ul><li>Materials: conductors and insulators</li><li>Mixtures</li></ul>	
What different types of machines are there? Page 70	<ul> <li>Simple machines: inclined plane, screw, pulley, wheel and axle, lever and wedge</li> </ul>	<ul> <li>Inventions: steam engine and telegraph</li> </ul>	

Our Project 1:

Changing for the better pp 30-31

Our Project 2:

Our Project 3: Famous women from history pp 82–83

# Hands on

#### **Documentaries**

• Build a pinhole camera.	• Helping the senses
• Find out why animals use camouflage.	• Marine invertebrates
• Germinate a seed.	• Plant reproduction
• Make a birdfeeder and observe its effect on an ecosystem.	• Kingdoms and ecosystems
• Observe the effect of thermal energy on liquids.	• Energy and matter
• Communicate using Morse code.	• Incredible inventions

Questions and Study aids

Page 84

# WELCOME TO CAMBRIDGE NATURAL SCIENCE

Welcome to the amazing world of natural science.







I'm Carla and I want to be a paramedic!



Hello! I'm Omar and I want to be a veterinarian.



Hello! I'm Aileen and I want to be a plant scientist.



Hey! I'm David and I want to be a biologist.







### WHAT ARE VITAL FUNCTIONS?

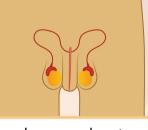
All living things reproduce. They also interact and get energy and **nutrients** from the environment. These are called vital functions because they are necessary for life. Human beings have groups of organs 1 called body systems that carry out these functions.

Let's find out how all living things are similar!



The three vital functions

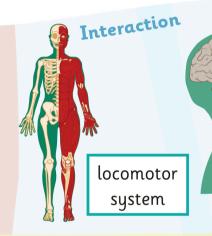




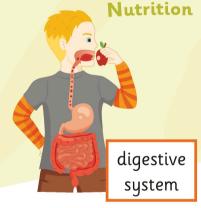
male reproductive system



female reproductive system



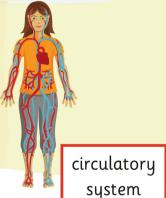
nervous system







excretoru system





respiratory system

Can you name any of the organs in these pictures?

### What have I rearnt?

### Read and complete.

- 1 Vital functions are ..... for life.
- 2 The nervous system allows humans to ..... with their environment.
- 3 Body ..... are made up of groups of ..... .

<sup>1</sup>organ: a part of the body that does an important job in a body system

