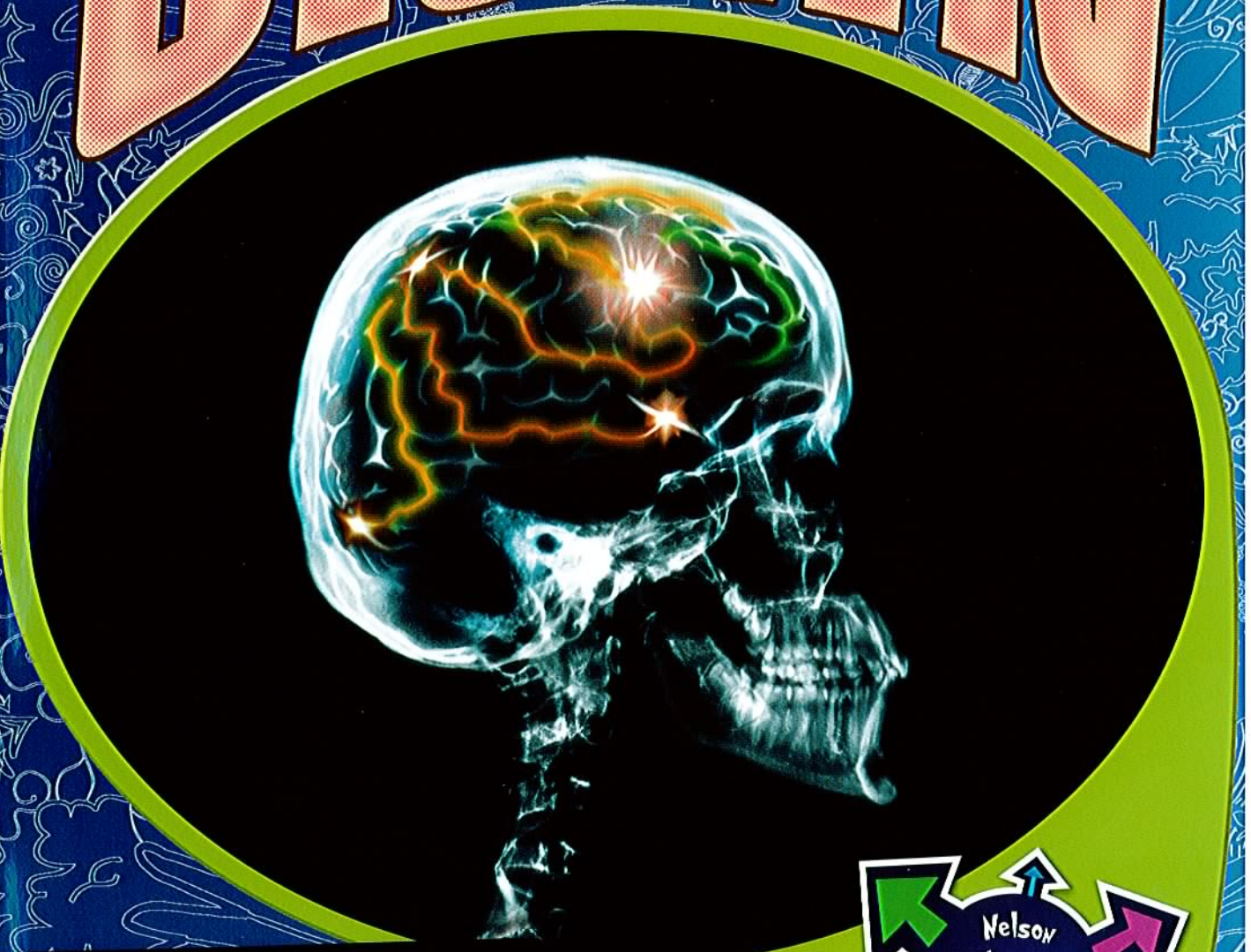
THE BRAIN



The body's most amazing MIGHTY MINI-WORLD

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Nelson Literacy Directions

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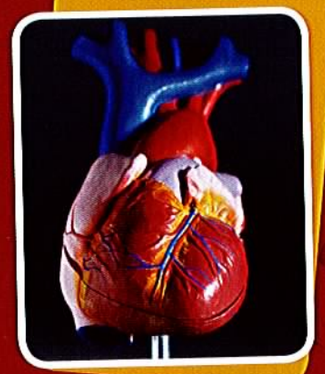
1 The Body's Mighty Mini-Worlds

Systems in the Body

The body is made up of millions of cells. Cells are the smallest living things in nature. They are often called the building blocks of life. Cells form a number of mini-worlds in organisms.

The Nervous System

The nervous system includes the brain, our spinal cord and our nerves. It sends messages throughout the body.



The Sensory System

The sensory system gives people information about the outside world. The eyes, nose, ears, tongue, skin and even the tiny hairs on the body all provide details of our surroundings.

The Circulatory System

The heart, arteries and veins are called the circulatory system, because they work together to circulate blood throughout the body.

The Immune System

The immune system is like a defence system. It helps to fight off viruses and bacteria that attack the body.





The Musculoskeletal System

The muscles and skeleton move the body. They also protect other organs.

The Digestive System

The digestive system is made up of the organs that get food in and out of the body: mouth, oesophagus, stomach, liver and other organs, some glands and the intestines.



The Respiratory System

The respiratory system is made up of the organs that help us breathe, from the nose and mouth down to the lungs. This system works closely with the circulatory system to get oxygen to the cells.

Systems Need the Brain

The body's many systems need the brain to keep them all working together correctly. The brain is a very complicated organ – it is the mightiest mini-world in the body.



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2 The Brain – the Mightiest Mini-World

The **Brain** Is in Control

Imagine that the body is like a plane. It contains many different systems to make it work. The body needs a "pilot" to keep those systems working properly. In the body, the brain is the pilot because it controls the systems.



The brain sends signals to the lungs and heart, so they keep working without us thinking about it.

The brain controls the senses, letting people see, hear, taste, touch and smell.

The brain releases chemicals into the body that make people feel different emotions, such as fear or joy.

The brain stores memories, which help people to recognise familiar people, places and things.

The brain controls movement, such as walking, running and playing.

The brain allows people to think, reason, solve problems, and to talk about them, too.