

S U M M A R I E S

INVESTIGATION 1: Exploring the Nervous System

In Investigation One, you explored the nervous system. During this Investigation, you:

1. looked at the human torso and skeleton to find parts of the nervous system.
2. used a ruler drop test to measure reaction time.
3. counted how many times your partner blinked in 1 minute.
4. identified an object by listening to the sound it made when it was dropped on the floor.
5. drew a pattern of shapes from memory.

Through these experiments, you found that:

1. the nervous system controls the body's actions.
2. the nervous system sends signals between different parts of the body.
3. the nervous system helps you to think about and remember information.

INVESTIGATION 2: Exploring the Skeletal and Muscular Systems

In Investigation Two, you explored the skeletal system and the muscular system. During this Investigation, you:

1. looked at the human skeleton to find different bones and joints.
2. used your hand to feel your shoulder and back muscles moving and working.
3. used a pulley to model the bones and muscles of the back and shoulder.

Through these experiments, you found that:

1. the skeletal system protects and supports the body.
2. the muscles contract and relax to create movement.
3. the bones and muscles work together to give the body structure and movement.

S U M M A R I E S

INVESTIGATION 3: Exploring the Respiratory System

In Investigation Three, you explored the respiratory system. During this Investigation, you:

1. looked at the human torso to find the parts and follow the pathway of the respiratory system.
2. calculated your respiratory rate before and after exercise.
3. created a working model of a lung.
4. measured how much air you could exhale in one breath.

Through these experiments, you found that:

1. respiratory rate increases with exercise.
2. the lungs get bigger when you inhale.
3. the lungs get smaller when you exhale.
4. all lungs do not hold the same amount of air.

INVESTIGATION 4: Exploring the Circulatory System

In Investigation Four, you explored the circulatory system. During this Investigation, you:

1. looked at the human torso to find the parts of the circulatory system and follow the pathway of blood.
2. used a stethoscope to calculate your heart rate before and after exercise.
3. listened to the sound of a heart beat using a model of the heart.
4. used a model to see what happens to the heart and blood during a heart beat.

Through these experiments, you found that:

1. heart rate increases with exercise.
2. the heart makes a “lub-dub” sound when it beats.
3. during the “lub,” the heart contracts and pushes blood out of the heart.
4. during the “dub,” the heart relaxes and blood is drawn into the heart.

S U M M A R I E S

INVESTIGATION 5: Exploring the Digestive System

In Investigation Five, you explored digestive system. During this Investigation, you:

1. looked at the human torso to find the parts and follow the pathway of the digestive system.
2. used a hand lens to look at the teeth, tongue, and mouth.
3. looked at the throat while swallowing.
4. measured the total length of the digestive system using string.
5. tried to fit a model of the small intestine into a rectangle.
6. measured the length and width of the small and large intestines.

Through these experiments, you found that:

1. the teeth are used to chew food and the tongue helps to swallow food.
2. the digestive system is about 9.5 m in length.
3. some organs of the digestive system are folded so that they fit into the human body.
4. the small intestine is longer than the large intestine.
5. the large intestine is thicker than the small intestine.