

## **Definition Question**

### **LIFE SCIENCE**

#### **Why Joel breathe faster when he exercise?**

- He needs **more oxygen** and **more energy**
- Heart pump **blood rich in oxygen faster to his other body parts**  
(eg leg)
- increase rate of respiration**
- Heart pump blood rich in **carbon dioxide from his other body parts to lungs so it can be removed faster**

#### **Describe how the respiratory system works together with the circulatory system in our body.**

- Oxygen enters our body from the nose and windpipe and into our lungs.
- Oxygen is absorbed into the bloodstream
- Heart pumps oxygen rich blood to other body parts for respiration.
- Carbon dioxide produced during respiration is carried by blood to the lungs and exit through the nose.

#### **Function of the respiratory system is**

To allow gaseous exchange of carbon dioxide and oxygen between the body and surrounding air.

#### **Describe what pollination is.**

The transfer of pollen grains from the anthers of a male flower of a plant to the stigma of a female flower of a plant.

#### **Describe what fertilisation is.**

It is the fusion of male and female sex cells.

**Describe the process of photosynthesis in plants.**

Photosynthesis is the process by which plants trap light with chloroplasts, and use water and carbon dioxide to produce oxygen and food.

**State the function of the circulatory system.**

To transport food and oxygen to all parts of the body and remove carbon dioxide and waste from all parts of the body via blood.

**State the function of the respiratory system**

To take in oxygen from the inhaled air and expel/remove carbon dioxide to the surroundings.

**State what deforestation is.**

Deforestation is the mass clearing of forest by humans to convert the land for other uses.

**State what digestion is.**

Digestion is the process where food is broken down into simpler substances that can be absorbed by the body.

**What is the function of water carrying tubes?**

To transport water from the roots to all parts of the plant

**What is the function of food carrying tubes?**

To transport food made in the leaves to all parts of the plant.

## **Population vs Community**

A **population** refers to a group of organisms of the same species living in the same area.

*For example, a herd of deer grazing together in a forest would be considered a population. These deer interact with each other, mate, and pass on their traits to the next generation.*

A **community** is a group of populations of different organisms living in the same area at a given time.

*Think of a stream community, where you can find fish, frogs, insects, and plants all coexisting and relying on each other for survival.*

## **Why do living things reproduce?**

To ensure the continuity of the species.

## **PHYSICAL SCIENCE**

### **State what boiling is.**

Boiling is the process when liquid gains heat to become gas at a fixed temperature/ at its boiling point.

### **State what freezing is.**

Freezing is the process when liquid loses heat to become a solid at a fixed temperature/ at its freezing point.

### **State what melting is.**

Melting is the process when a solid gains heat to be a liquid at a fixed temperature/ at its melting point.

**State what evaporation is.**

Evaporation is the process when liquid gains heat to become gas at any temperature.

**State a difference between boiling and evaporation.**

Boiling takes place at a fixed temperature while evaporation takes place at any temperature.

**State what temperature is.**

Temperature is a measurement of how hot or cold something is.

**State what is a force.**

A force is a push or pull

**State the effects of a force.**

A force can cause a stationary object to move.

A force can change the speed or direction of a moving object.

A force can cause a moving object to stop moving.

A force can change the shape of an object.

**What is frictional force.**

Force that opposes the motion when the surface of a moving object comes into contact with another surface.

**What is gravitational force?**

It is a force that acts on objects with mass, pulling them towards each other.

**When does repulsion take place?**

It takes place when the like poles of two magnets face each other and push each other away.

