



# FIRM FOUNDATION COUNTRY SCHOOL

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CANDIDATE  
NAME

CANDIDATE  
CLASS

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**Combined Science**

**0653**

STUDY PACK

TERM 1 2026

**Form 1**

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## INSTRUCTIONS

- Write notes in your notebook / print out if you did not carry your books and then write them on your first day at school.
- Do the exercise in your exercise book.
- Submit the work during the first combined science lesson next term.
- This work must be done at home during the holiday not at school.
- Print out diagrams and stick neatly in your notes.

## INFORMATION

- The total mark for the exercise [15].
- The number of marks for each question or part question is shown in brackets [ ].
- This document has 4 pages. Any blank pages are indicated.

# Characteristics of Living Organisms

- **Movement:** an action by an organism or part of an organism causing a change of position or place
- **Respiration:** the chemical reactions that break down nutrient molecules in living cells to release energy for metabolism
- **Sensitivity:** the ability to detect or sense stimuli in the internal or external environment and to make appropriate responses
- **Growth:** a permanent increase in size and dry mass by an increase in cell number or cell size or both
- **Reproduction:** the processes that make more of the same kind of organism
- **Excretion:** the removal from organisms of toxic materials, the waste products of metabolism (chemical reactions in cells including respiration) and substances in excess of requirements
- **Nutrition:** the taking in of materials for energy, growth and development; plants require light, carbon dioxide, water and ions; animals need organic compounds, ions and usually need water

Use this mnemonic to help you remember these processes:

## **MRS. GREN**

- Movement
- Respiration
- Sensitivity
- Growth and development
- Reproduction
- Excretion
- Nutrition

EXERCISE

1. The words in the below show different characteristics of living organisms.

**Growth                      Movement                      Nutrition**

Match each characteristic to its description.

- a) Action that cause a change in position.
- b) Detect and respond to changes in the environment.
- c) Permanent increase in size.
- d) Taking in materials for energy [3]

2. TRUE OR FALSE (1 mark each)

- a) All living things can move.....
- b) Plants do not respire .....
- c) Excretion involves taking in Oxygen..... [3]

3. Explain how 2 characteristics of living things are important for survival.

- 1. ....  
explanation:.....[2]  
.....
- 2. ....  
explanation:.....[2]  
.....

4. Describe how plants obtain their food.

- a. Plants  
.....  
.....  
.....  
.....  
.....[5]

### Common misconceptions

- Don't confuse **respiration** with **breathing**.
- Don't use **faeces** or **defecation** as an example of **excretion** (faeces is indigested food- it has not been formed through metabolic processes).
- Some non-living things, such as a car, may appear to show some of the characteristics – but not all of them.

THE END