

1 Characteristics of living things – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	Write it 3 times (English)		
living organism	_____	_____	_____
life processes	_____	_____	_____
characteristics	_____	_____	_____
Movement	_____	_____	_____
Respiration	_____	_____	_____
energy	_____	_____	_____
Sensitivity	_____	_____	_____
Growth	_____	_____	_____
Reproduction	_____	_____	_____
Excretion	_____	_____	_____
waste	_____	_____	_____
Nutrition	_____	_____	_____
classify	_____	_____	_____
species	_____	_____	_____
fertile offspring	_____	_____	_____

English	Write it 3 times (English)		
scientific name	_____	_____	_____
binomial system	_____	_____	_____
genus	_____	_____	_____

Recall

A **living organism** carries out **life processes** – the activities that keep it alive. Every living thing, from a bacterium to a whale, does all seven of them.

Nothing here is hard; the trick is to learn the names and what each one means.

New ideas

Read these first, then do the Practice.

■ 1 The seven characteristics – MRS GREN

The seven **characteristics** of life spell **MRS GREN**:

M	Movement
R	Respiration
S	Sensitivity
G	Growth
R	Reproduction
E	Excretion
N	Nutrition

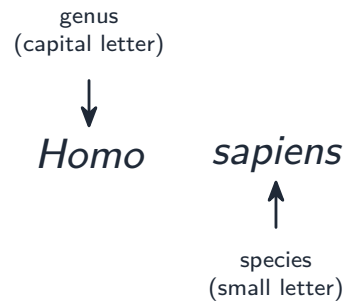
- **Movement** – changing position or place.
- **Respiration** – releasing **energy** from food inside cells.
- **Sensitivity** – detecting and responding to changes.
- **Growth** – a permanent increase in size.

- **Reproduction** – making more of the same kind of organism.
- **Excretion** – removing the **waste** made by the body's reactions.
- **Nutrition** – taking in materials for energy and growth.

■ 2 Naming living things

Scientists **classify** living things – they sort them into groups by shared features. The smallest group is the **species** (organisms that can breed to make **fertile offspring**).

Every species has a two-part **scientific name** (the **binomial system**), written in italics:



- the **genus** comes first, with a capital letter;
- the species comes second, with a small letter.

Watch out: *excretion* (removing the body's *own* waste, like carbon dioxide or urea) is not the same as *egestion* (removing undigested food) – keep them apart. In a binomial name the genus has a capital and the species a small letter, both in italics.

Practice

Try these in order.

1.1 What seven words do the letters MRS GREN stand for? [4]

1.2 Define *excretion*. [2]

1.3 What is a *species*? [2]

1.4 Write the name *Homo sapiens* correctly, and say which part is the genus. [2]

1.5 Respiration is one of the seven characteristics. What does it release inside cells? [1]

1.6 Challenge. A car can move, “feed” on fuel and give off waste gases. Using two of the seven characteristics, explain why a car is still **not** a living organism. [2]