

Cells and Systems: Formative Check

Time: 20 min. 6 questions.

Instructions

Answer each question in the space provided or on a separate sheet. You may use diagrams from class notes to help you explain your reasoning, but sketches are not required for full marks on this quiz.

Questions

1. Which pair correctly matches an organism with a structure it uses to gather food?

- A) Eagle - talons
- B) Human - gills
- C) Spider - fins
- D) Shark - roots

[\(Outcome\)](#)

2. Cells are called the basic unit of life. Give one reason why this description fits, using an example from a plant or animal. [\(Outcome\)](#)

3. True or false: A plant cell has a cell membrane but no cell wall, while an animal cell has both a cell wall and a cell membrane. [\(Outcome\)](#)

4. The outcome on healthy human body function names a set number of body systems in general terms. How many systems are named in total? [\(Outcome\)](#)

5. What is the general role of the lungs in the human respiratory system?

- A) Pumping blood throughout the body
- B) Exchanging oxygen and carbon dioxide
- C) Breaking down food during digestion
- D) Filtering waste out of the blood

[\(Outcome\)](#)

6. True or false: Research into human cells, organs and body systems has never led to improvements in human health, such as new medicines or immunization procedures. [\(Outcome\)](#)

Curriculum coverage

Question	Outcome alias
1	Outcome
2	Outcome
3	Outcome
4	Outcome
5	Outcome
6	Outcome

Answer key

1. A) Eagle - talons. Talons are a structure an eagle uses to catch and hold food, which illustrates how different animals meet the same function (food gathering) with different structures ([Outcome](#)).
2. Sample answer: A cell is the smallest unit that can carry out the basic processes of life, such as taking in nutrients and producing energy, and every living thing is made of one or more cells ([Outcome](#)).
3. False. A plant cell has both a cell wall and a cell membrane, while an animal cell has a cell membrane but no cell wall ([Outcome](#)).
4. 5. The outcome names respiration, circulation, digestion, excretion and sensory awareness as the body systems described in general terms ([Outcome](#)).
5. B) Exchanging oxygen and carbon dioxide. The lungs take in oxygen from the air and release carbon dioxide, supporting the body's respiratory function ([Outcome](#)).
6. False. Research into cells, organs and body systems has led to real improvements in human health, including the development of medicines and immunization procedures ([Outcome](#)).