

Marking Guide: Cells and Systems Model or Report

Task

Students present a labelled model or report on cells and systems. The work must show the structure and function of cells, tissues, organs and body systems, using accurate labels and explanations of how these parts support healthy function.

Curriculum alignment

- Students apply the concept of system to describe an organism's structure and function, and explain how different organisms meet similar functions in different ways ([Outcome](#)).
- Students describe the role of cells as the basic unit of life, distinguish plant and animal cells, and identify how cells, tissues and organs contribute to structure ([Outcome](#)).
- Students describe human body systems (respiration, circulation, digestion, excretion, sensory awareness) and the role of organs, tissues and cells in supporting healthy function, including responses to changing conditions ([Outcome](#)).
- Students identify research into cell, organ or system function and describe how this research has improved human health ([Outcome](#)).

Rubric

Criterion	Beginning	Developing	Proficient	Exemplary
Cell structure and organization	Labels cells with little accuracy; does not distinguish plant and animal cells (Outcome).	Labels most cell parts correctly; attempts a plant/animal distinction with some errors (Outcome).	Accurately labels plant and animal cells and explains the cell as the basic unit of life (Outcome).	Explains cell structure with clear links to cell, tissue and organ roles across the organism (Outcome).
Systems and organism function	Names a body system with minimal description of its function (Outcome, Outcome).	Describes one or two systems in general terms; function explanations are incomplete (Outcome, Outcome).	Describes multiple body systems and explains, in general terms, how organs and tissues support healthy function (Outcome).	Explains how systems work together and connects this to the broader concept of system, comparing function across organisms where relevant (Outcome, Outcome).
Response to stimuli and health	Does not address how the body responds to changing conditions.	Identifies one example of a body response to stimuli with limited explanation (Outcome).	Describes body responses to changing conditions with a clear example, such as heart rate during exercise (Outcome).	Explains multiple responses to stimuli and connects them to overall system balance and health (Outcome).

Research and real-world connections	Includes no reference to scientific research or health applications.	Mentions a research example or health application without clear explanation (Outcome).	Describes a research example and explains how it improved human health or nutrition (Outcome).	Explains a research example in depth and connects it clearly to improved understanding of a specific body system (Outcome).
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Scoring

Assign each criterion a level: Beginning (1 point), Developing (2 points), Proficient (3 points), or Exemplary (4 points). Add the four scores for a total out of 16.

- 4 to 7: Beginning overall
- 8 to 10: Developing overall
- 11 to 13: Proficient overall
- 14 to 16: Exemplary overall

Use the total as a general guide. A student who scores Exemplary on three criteria but Beginning on one still needs targeted feedback on that weaker area before the overall level is reported as Exemplary.

Notes for the teacher

- Apply the same descriptor wording across all student work in one sitting to avoid drift between the first and last piece marked.
- If a student presents a model without written explanation, ask a short follow-up question to confirm they can describe function in their own words before scoring the "Systems and organism function" row.
- Keep exemplars of Proficient and Exemplary work from a previous cycle on hand to check your judgment stays consistent.
- Separate feedback on labelling accuracy from feedback on explanation quality. These are different skills even when they show up in the same criterion.