

# Internal Systems Review

## Digestive System

- Overall function – how does this system support the life of a cell?
- Structure and function of organs
- Oral Cavity
- Peristalsis
- Stages of digestion (ingestion/digestion/absorption/egestion)
- Villi – passive and active transport
- Specific enzymes

## Respiratory System

- Overall function – how does this system support the life of a cell?
- Structure and function of organs
- Mechanics of breathing – volume and pressure changes
- Alveoli – diffusion of gases

## Circulatory System

- Overall function – how does this system support the life of a cell?
- structure and function of organs
- blood vessels (arteries/veins/capillaries)
- systemic and pulmonary circulation
- heart structure
- capillaries – exchange of nutrients and gases
- blood, blood pressure, heart rate

1. Support the following statement. *“Individual systems interact to sustain the life of individual cells in your body.”* Your answer should address why we need to eat, and why we need to breathe, and how individual system work together to accomplish that.
2. **Using the rubric below as a guide choose one of the following questions to answer.** Your answer should start by clearly stating the overall function for each of the systems you are describing. (10 marks)
  - a) Describe the process that **cells** in your body use to receive nutrients from your food starting from the mouth. Make sure to include **and describe** any key structures and their functions. Your answer should include key enzymes, organs and pathways that help this system function.
  - b) Describe the process that **cells** in your body use to exchange gases with the outside environment. Make sure to include **and describe** any key structures and their functions. Your answer should also reference the mechanics of breathing (inhaling and exhaling) in your response.

0-4	5-6	6-7	7-8	8-10
<ul style="list-style-type: none"> <li>▪ Response is incomplete or fails to meet the standards required for a pass</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates a limited understanding of the question</li> <li>▪ Response does not incorporate specific facts and content from the course material</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates a moderate understanding of the question</li> <li>▪ Response poorly incorporates specific facts and content from the course material</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates a good understanding of the question</li> <li>▪ Response does a good job of incorporating specific facts and content from outside sources.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates an excellent understanding of the question</li> <li>▪ Response does an excellent job of incorporating specific facts and content from outside sources</li> </ul>
<ul style="list-style-type: none"> <li>▪ Response is incomplete or fails to meet the standards required for a pass</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates limited organization and flow</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates moderate organization and flow</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates good organization and flow</li> </ul>	<ul style="list-style-type: none"> <li>▪ Response demonstrates excellent organization and flow</li> </ul>

