Biology

Grade Level: 5

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The Digestive System: Grade 5 Biology, Cambridge Curriculum Edition

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2. MATERIAL EXPLANATIONS

Chapter 1: What is the Digestive System?

The digestive system is a group of organs working together to convert food into energy and basic nutrients to feed the entire body, turning what we consume into usable substances. Key organs involved include the mouth, stomach, intestines, liver, gall bladder, and pancreas.

Chapter 2: Important Parts of the Digestive System

Here are some important parts of the digestive system:

- 1. **Mouth**: This is where digestion starts. The food is broken down by the action of saliva and teeth.
- 2. **Esophagus**: A tube that connects the throat (pharynx) with the stomach.
- 3. **Stomach**: Here, the real process of digestion starts. Aided by stomach acid, food particles are broken down further.
- 4. **Small intestine**: This is where most of the digestion occurs. It absorbs nutrients and minerals from the food we eat.
- 5. **Large intestine**: This part of the system is responsible for processing waste so it's easy to eliminate.
- 6. **Rectum and anus**: These are responsible for the expulsion of undigested waste materials.

Chapter 3: The Digestive Process

The digestive process consists of four key steps:

1. **Ingestion**: This is the process of taking food into the body.

- 2. **Digestion**: The breaking down of ingested food by mechanical and chemical actions.
- 3. **Absorption**: The process where digested food molecules are absorbed into the blood and transported to the body cells.
- 4. **Egestion (excretion)**: The expulsion of undigested and unabsorbable residues from the body.

- **3. PRACTICE PROBLEMS WITH SOLUTIONS**
- **Problem 1**: What part of the digestive system connects the throat to the stomach?
- **Solution**: The Esophagus.
- **Problem 2**: Where does most digestion occur?
- **Solution**: Most digestion occurs in the Small Intestine.
- **Problem 3**: In what step is digested food absorbed into the blood and transported to the body cells?
- **Solution**: This happens in the Absorption phase.
- **Problem 4**: What part of the digestive system processes waste for easy elimination?
- **Solution**: The Large Intestine.
- **Problem 5**: What are the four steps of digestion?
- **Solution**: The four steps are Ingestion, Digestion, Absorption, and Egestion.

4. REFERENCES

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