



The Glovely Digestion Model

Achievements and Competencies

Learning Outcomes

Grades 4-6 Meeting basic needs and maintaining a healthy body

Achievements and Competencies are based on the Common Framework of Science Learning Outcomes (K-12) set by the Canadian Council of Ministers of Education (1997).

Specific Expectations

Grade 5

LIFE SCIENCE

Meeting basic needs and maintaining a healthy body

204-2 Rephrase questions in a testable form (e.g., rephrase a question such as "How does the heart work?" to "What factors affect the ability of a pump to circulate water?").

The students will be able to formulate testable questions to determine how the digestion system works. For example, "what will happen to the food once it reaches the stomach?"

204-4 Define objects and events in their investigations (e.g., define terms such as "organ" and "system").

In the digestion model, a cookie-and-baking-soda sandwich passes through the digestion system. As the cookieand-baking-soda sandwich is digested, the students can identify and define the different elements represented in the digestion model.

302-5 Describe the structure and function of the major organs of the digestive, excretory, respiratory, circulatory and nervous systems.

The structure and function of the major organs of the digestive system are represented by the *Glovely Digestion* activity. For example, one of the main organs in the digestive system, the stomach, is represented by a large balloon and shows where gas can be produced.

302-6 Demonstrate how the skeletal, muscular and nervous systems work together to produce movement.





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This activity demonstrates the role of the muscular system in the human digestive system. The students are able to use their own hands to mimic muscle contractions.

302-8 Describe the body's defences, such as tears, saliva, skin, certain blood cells and stomach secretions, against infections

The *Glovely Digestion* activity begins with the digestion of the cookie-and-baking-soda sandwich through the secretion of water, which is representative of salivary amylase. In the large balloon portion of the digestion model, vinegar is mixed with the cookie-and-baking-soda sandwich, representing the stomach secretions used in our bodies to digest food.