

CCSD CURRICULUM WRITING OBJECTIVE FORMAT 2008

DISCIPLINE: Life Science **COURSE:** Science **DATE:** June 2008
GRADE: 4 **ID#:** 4s lsc2b2o2f 2008 **LESSON LENGTH:** 1 day

1. CONTENT STANDARD:

Students know and understand the characteristic, structure, and function of organisms and their systems, the processes of life, and how organisms interact with each other and their environment.

BENCHMARK:

Knows that the human body is composed of specialized cells which are grouped together to form tissues which are in turn grouped together to form organs and interacting organ systems for digestion, respiration, reproduction, circulation, excretion, movement, control, and protection from disease.

PRIOR LEARNINGS:

Understand our digestive system breaks down food for nutrients for our body.

VOCABULARY:

- Esophagus, small/ large intestine, digestion

UNIT OBJECTIVES:

Identify the major parts of the digestive system (i.e., mouth, esophagus, stomach, small intestine, and large intestine) and their functions.
(4s lsc2b2o2f 2008)

TECHNOLOGY/MEDIA RESEARCH OBJECTIVES:

- 1 Demonstrate the ability to locate a menu bar and successfully put in an URL address to access a website. (4tech c1b1o3)
2. Demonstrate positive and ethical behaviors when using technology in accordance with district technology and internet policy. (4tech s2b1o1)

2. OBJECTIVES/ASSESSMENTS

CONTENT/CONTEXT:

Content:

- Students will learn about the human digestive system and how it works.

Context:

- Materials: enough baby food jars for pairs of students; 4 mints or uncoated hard candies for each pair; water; vinegar

- **Activity**

1. Make the following predictions before doing this activity.
 - a. Do you think a mint will dissolve faster in water or vinegar?
 - b. Do you think a mint will dissolve faster if it is whole or in pieces?
2. Fill the jar halfway with water.
3. Add a mint to the jar and put the lid on securely. Keep track of the time as you shake the jar until the mint dissolved. Record on the chart the amount of time it takes to dissolve the mint. Empty the jar.
4. Break a mint into several small pieces. Repeat Steps 2 and 3 with the pieces of mint.
5. Fill the jar halfway with vinegar. Repeat Step 3.
6. Break a mint into several small pieces. Fill Jar halfway with vinegar. Repeat Step 3 with the pieces of mint.
7. Make a chart to keep track of the minutes to dissolve for water for a whole mint and pieces of mint, then to dissolve for vinegar for a whole mint and pieces.
8. After the activity is complete, discuss the following questions:
 - a. In which test did the mint dissolve the fastest? Was your prediction correct? Why do you think this is true? Which part of the digestive system is represented by the water? By the vinegar? By shaking the jar?

PRE - ASSESSMENT :

Life Science Unit 4 pretest

POST - ASSESSMENT :

Life Science Unit 4 posttest

RESOURCES:

Science in a Box- Mailbox- 2002

Harcourt Science Manual- Life Science- Unit A Chapter 4 Pages A108-A113

3. STRATEGIES

INITIAL STRATEGY:

Teachers will explain the background information: Food is full of the nutrients that our bodies need to live. How does an apple become nourishment for our bodies? It has to be broken down into small particles of nutrients for the body to absorb. Teeth first break the food I into smaller pieces. The food then moves down the esophagus to the stomach. In the stomach the food is churned and mixed with digestive juices that continue to break it down. The food passes from the stomach into the small

intestine. After chemicals from the pancreas and kidney break down the food even further, the small intestine absorbs the needed nutrients and passes the rest to the large intestine, which gets rid of the waste.

MODIFYING STRATEGY:

The teacher can pull small groups as needed for further instruction.

EXTENDING STRATEGY:

Storyboard what happens to food as it travels through the digestive system.