FUNCTIONS OF SYSTEMS

Performance Standard 23A.H

Explain how different systems work together under positive and/or negative affects accordingly:

- *Knowledge*: Know and understand the functions of the systems of the body and how they work together.
- *Application*: Apply knowledge of the functions of the body systems to explain their functions and how they interrelate.
- *Communication*: Communicate knowledge of the functions of body systems appropriately.

Procedures

1. ***In order to describe and explain the structure and function of the human body systems and how they interrelate(23A),*** students should experience sufficient learning opportunities to develop the following:
   - Discuss the way the systems work together.
   - Explain the positive or negative impact one system has upon the other.
2. Instruct each student to choose and complete one of the attached worksheets using as many resources as necessary.
3. Evaluate each student's performance using the "Functions of Systems" Rubric as follows:
   - *Knowledge*:
   - *Application*:
   - *Evaluation*:

Note: This worksheet could be done in small groups.

Examples of Student Work

- **Meets**
- **Exceeds**

Time Requirements

- One to two class periods, depending on available resources

Resources

- Textbooks and other reference books
- Medical Internet Sites
- Copies of Functions of Systems task sheets
- Functions of Systems Rubric

FUNCTIONS OF SYSTEMS

(form #1)

Directions: In the space provided, describe how these systems work together to deal with the situation in parentheses.

1. Digestive system and excretory system (stomach ache).

2. Respiratory system and circulatory system (fainting).

FUNCTIONS OF SYSTEMS

(form #2)

Directions: In the space provided, describe how these systems work together to deal with the situation in parentheses.

1. Muscular system and digestive system (swallowing).

2. Nervous system and respiratory system (choking).

FUNCTIONS OF SYSTEMS

(form #3)

Directions: In the space provided, describe how these systems work together to deal with the situation in parentheses.

1. Endocrine system and reproductive system (puberty).

2. Circulatory system and immune system (common cold).

FUNCTIONS OF SYSTEMS

NAME _____ DATE _____

- Exceeds standard (average of 4)
- Meets standard (average of 3)
- Approaches standard (average of 2)
- Begins standard or absent (average of 1)

4	• Successfully able to write the complete answer to the question. • Uses all necessary parts of the system to complete the question. • The information given has no inaccuracies or misinformation. • Used appropriate terminology.
3	• Adequately explained the question. • The information contained few inaccuracies. • Used more than 2 parts of the system to explain the answer. • Usually uses appropriate terminology.
2	• Attempted to explain the answer to the question. • Some of the information was inaccurate. • Answer had some meaning to the question. • Occasionally used appropriate terminology.
1	• The answer was incorrectly stated. • Lacked appropriate terminology. • Basic knowledge is not present. • Looking to others for all the answers.
Score	

"Meets"

FUNCTIONS OF SYSTEMS

HEALTH EDUCATION PERFORMANCE STANDARD 23A – H
(form #2)

Directions: In the space provided, describe how these systems work together to deal with the situation in parentheses.

1. Muscular system and digestive system (swallowing).

To deal with swallowing, ~~the muscular system~~ the first thing you have to do is put the food in your mouth and chew it. Then the muscular system helps you swallow it / push it down your ~~stomach~~ esophagus. Then the digestive system takes over.

2. Nervous system and respiratory system (choking).

When you're eating, the food gets stuck in your windpipe instead of going into your digestive pipe. Then, your nervous system sends a chemical message that you are choking to your brain. Then, your brain tries to stop the ~~choking~~ choking.

"Exceeds"

FUNCTIONS OF SYSTEMS

HEALTH EDUCATION PERFORMANCE STANDARD 23A – H
(form #1)

Directions: In the space provided, describe how these systems work together to deal with the situation in parentheses.

1. Digestive system and excretory system (stomach ache).

For a stomach ache, the digestive system breaks down the food with enzymes that often cause pain. The food that is being turned into waste is exited through the body by the excretory system.

2. Respiratory system and circulatory system (fainting).

In order to faint, your circulatory system must be greatly reduced so that little oxygen in the blood can reach your brain. (The respiratory system gets the necessary oxygen from the air) When too little oxygen is sent to the brain, a person might faint. When a person faints, they will lay on the ground and blood will be more easily flowing with the circulatory system. Since the person is laying down while passed out the oxygen from the respiratory system will more easily pass through the circulatory system and therefore restoring oxygen to the brain and the person will regain consciousness.