**“Down the Hatch” Board Game-Rubric**

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| Essentials | Criteria and Notes | | | Score |
| You must include the main organs of the digestive system somewhere on the board. Emphasis is on overall functions of the digestive system, as well as relating to processing of nutrients.  Guiding questions:  Where and how are carbohydrates digested?  Where and how are proteins digested?  Where and how are lipids digested?  Bonus points will be awarded for aesthetics and creativity.  There are good ideas out there, but this should be your own. A grade of 0 will be given if you are found in violation of academic integrity. | Mouth |  | | /5 |
| Teeth/Tongue |  | | /5 |
| Salivary Glands (3)- Parotid, Submaxillary, Sublingual (Enzymes!) |  | | /5 |
| Pharynx |  | | /5 |
| Esophagus |  | | /5 |
| Stomach (cardiac and pyloric sphincters, gastric juices!) |  | | /5 |
| Pancreas (enzymes!- what are they, and what do they digest?) |  | | /5 |
| Liver (Bile!) |  | | /5 |
| Gall Bladder (Bile!) |  | | /5 |
| Small Intestine- (Enzymes!) Duodenum, Jejunum, and Ileum |  | | /5 |
| Large Intestines (Ascending, Transverse, Descending, Appendix) |  | | /5 |
| Rectum |  | | /5 |
| Anus |  | | /5 |
| What would happen if some of the structures were not functioning properly? | You would need to have 5 scenarios where a player could skip ahead or move back or stop-must relate to the different parts of the digestive system. \*think about disorders, diseases, and other problems…\* | | | /15 |
| A copy of the rules for the game. | Please have a detailed copy TYPED (5 pts.) so others will be able to play. The rules need to be explicitly clear so there are no questions by the players. | | | /10 |
| 25+ Questions | /20 |
| Total (Test/Quiz) | /120 |

“Down the Hatch” Board Game

Objectives:

* Learn how the digestive system works
* Create and play a board game based on the structure and functions of the digestive system

Suggested Materials:

* Index cards
* Poster Board
* Art supplies (paint, markers, crayons)
* Dice
* Rules for the game

Activity:

You have just been hired by Burp Toys to design and create a board game. As you design your game, think about different kinds of board games you have played and the various elements that they all have in common. You will design a board game that incorporates the structure and function of the digestive system in the game. Be creative in the design of your board and your playing pieces! The focus should be to trace the path of food from the time it enters your mouth until it exits the anus.

Burp Toys has provided you with some general guidelines:

* The board should include all of the organs that are part of this system.
* The goal of your game should be to move the game pieces from the mouth, through the digestive system.
* The game pieces can be shaped like different foods or drinks that the digestive system needs to stay healthy.
* Your game should have a stack of Digestion Cards that help players move forward and backward. (Create **at least** 25 questions and answers for your game that relates to the digestive system)
* Things to think of: What are the main organs of the digestive system? What are the functions of these structures?
* **Make your game board neat, colorful, interesting, and creative!**
* **Make sure the content and difficulty of your game are appropriate for your classmates’ abilities**.
* **Your game should come with directions that would make it perfectly clear how to play the game. Type the directions.**

At the end of this assessment, your game will be given to another peer group to play, and will be scored separately by your peers. Burp Toys will evaluate your game on how well it teaches players the organs of the digestive system. HAVE FUN! ☺

Plan of attack deadlines:

**\_\_\_\_ 1:** **Hypothesize**-Create the idea for your game. What will you model it after? Develop a rough idea of what it should look like and include.

Proposal is due: \_\_\_\_\_\_\_November 21\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**\_\_\_\_ 2: Strategize**-Devise a plan for how you will divide the workload and construct the game.

Outline is due \_\_\_\_November 21\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\*Monitor and Confirm: Did you plan to address all of the necessary components of the project and assign a logical timespan to make sure it is completed by the due date (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)?

*\_\_\_\_***3: Identify**-Create a list of resources you will use (books, websites, articles, etc). If you use anything outside of the notes, you need to cite your sources in MLA format.

Resources due: \_\_\_\_November 26\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_**4: Collect**-Take research notes from your sources according to your plan.

Research is due: \_\_\_\_\_\_\_\_\_November 22\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\*Monitor and confirm: Have you covered all of the required components as explained in the rubric? Do you understand all of the information? Have you created a list of citations using MLA format?

*\_\_\_\_***5: Analyze**-Categorize your research to make sure you have addressed all components of the project.

\_\_\_\_\*Monitor and confirm: Does all of your selected information make sense as a whole? Did you include all of the components from the project description?

\_\_\_\_6**: Construct**-Create the game and rules.

Games due \_\_\_\_\_\_November 26\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

\_\_\_\_\*Monitor and confirm: Are all components of the game addressed in the rulebook? Is the board neat and well-constructed? Are all of the pieces provided?