

Ms. Randall A & P

Digestive system project

“THE BIG CHEW”

A Theme Park Ride through the Digestive System

PROJECT OVEVIEW

You have been selected to submit a design brochure for a ride in a theme park that is based on the organs and processes found in the digestive system. The design requirements specify that the ride, called THE BIG CHEW, must meet the following criteria:

- It must be designed for families (the main audience for the park)
- It must educate as well as entertain.
- The ride must allow visitors to experience **ALL aspects of the digestive system**.
- While the ride must be educational, there is plenty of room for creativity. For example, the ride could be based on a water slide, a skate board park, an auto race track (remember...kid friendly), etc.

DESIGN REQUIREMENTS

- **You will submit (1) a drawing of your ride and (2) a small brochure explaining the ride.**
- **The drawing must include:**
 - Your name
 - A neat, creative, colored drawing of the ride with at least 9 points of interests or stops that will make up the ride. These attractions are listed on the leaflet
 - Each attraction should be given a name that leaves no doubt about what part of the digestive process it represents (e.g. “The “Stomach Squeeze” or the “Large Intestines Loop”). A point of interest does not necessarily need to be part of the ride. It could include an educational video or may even be a snack bar. For example, folks might stop at the “Pancreas Picnic Park’ for lunch
 - The ride and the leaflet together must be able to educate visitors about ALL of the terms listed on the bottom of the page.
 - The ride must “flow” in a logical sequence through the digestive system (i.e. from mouth to large intestine).
Remember the pancreas, gall bladder and liver are accessory organs and are not part of the long tube.
- **The brochure must include:**
 - Your name
 - An explanation of how the ride will educate visitors as well as entertain them. All of the following words **must** be incorporated in the descriptions of the attractions in the leaflet

Mechanical digestion
Chemical Digestion
Mouth/teeth
Saliva
Enzymes (from mouth, stomach, &
small intestines)
Esophagus
Epiglottis
Peristalsis
Mucus
Stomach
Pepsin

Hydrochloric Acid
Small intestines
Liver
Bile
Gallbladder
Pancreas
Villi (villus)
Blood Vessels (or bloodstream)
Large intestines
Rectum
Bacteria
Nutrients

GETTING STARTED

1. Look at your notes and text book and the chrome books that are available in the classroom to be sure that you fully understand the digestive system.
3. Give some thought to the layout of the brochure.
4. Come up with a preliminary design for your ride. Do not use colored paper or pencils for the preliminary work. Have the design approved by the teacher before you begin the final design.
5. Work that is not completed in class must be finished at home.

GRADE THIS IS A PROJECT GRADE. The project will be graded as follows:

Total points possible=40

MEETS DESIGN REQUIRMENTS FOR THE LEAFLET	APPEARANCE (NEATNESS AND CREATIVITY)	ORGANIZATION AND CONTENT	SCIENTIFIC ACCURACY
Outstanding. You have met or exceeded all the requirements for the leaflet and drawing	Awesome. Each point of interest is depicted neatly, colorfully and in excellent detail. It shows a great deal of creativity.	Superior. Descriptions of all attractions are detailed and leave no doubt about their purpose. A good deal of thought was given to all aspects of the digestion process.	Wonderful. Scientific aspects of digestion are completely accurate and precisely explained for all attractions. It is obvious that visitors will learn a great deal about the digestive process
Satisfactory. You have met most of the criteria for the leaflet and drawing.	Suitable. Project is neat and shows some creativity	Adequate. Most descriptions of attractions are detailed and clear as to their purposes.	Satisfactory. Scientific aspects of digestion are completely accurate and precisely explained for at most points of interest. There is evidence that the theme park will be a good learning experience.
Acceptable. You have met at least half of the criteria required for the leaflet drawing.	Somewhat suitable. Project shows some effort in the areas of neatness and creativity	Mostly satisfactory. At least half of the descriptions are detailed and clear OR a few key concepts relating to the digestive system were left out.	Mostly adequate. Scientific aspects of digestion explained but in some cases the descriptions lack accuracy or completeness.
Unacceptable. The leaflet and drawing were not designed with the requirements in mind	It does not appear that much thought went into creation of the leaflet or drawing.	Unsatisfactory. Descriptions of the attractions lack detail. It is not clear how visitors will learn about this body system from your descriptions	Insufficient. Scientific aspects of digestion are not completely or accurately explained. The project does not provide evidence that the ride will be a learning experience.