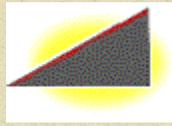


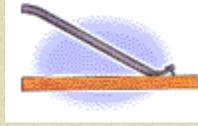
Simple Machines Webquest



wheel & axle



inclined plane



lever



pulley



screw



wedge

Introduction

Simple machines are a part of our everyday lives. We use them without knowing that we are using a simple machine. They are in our lives to make our lives easier.

The Task

In this webquest, you will learn what simple machines are and identify them so you will be able to create your own simple machine that will be used in one of the following places: garden, kitchen, restaurant, garage, boat, or school.

Resources

You need to visit the following websites in order to research and get your information needed for you webquest.

<http://www.fi.edu/qa97/spotlight3/spotlight3.html>

<http://edtech.kennesaw.edu/web/simmach.html>

<http://www.smartown.com/sp2000/machines2000/main.htm>

<http://www.mos.org/sln/Leonardo/InventorsToolbox.html>

<http://www.mos.org/sln/Leonardo/GadgetAnatomy.html>

Procedure/Process

1. Explore the websites listed above.
2. You will locate the definitions to screw, inclined plane, lever, wedge, pulley, and wheel and axle. These definitions will be completed on a separate sheet of paper.
3. You will open a Google doc and cut and paste an example of each type of simple machine into the document. After you have cut and pasted an example, you will identify each type by typing its name beside the picture

that identifies the simple machine. You will print this out with your name on it.

4. Use your definitions to prepare a report that will include the following information:
 - a. What is a simple machine?
 - b. What are the six simple machine categories?
 - c. Give examples of the six simple machines?
 - d. How would each of the six types of simple machines be used in today's world?
5. Pick a place: garden, kitchen, restaurant, garage, boat, or school. After you have chosen your place, think of all the different types of items used in your chosen place that are not electrical. Draw as many as you can think of on the back of your definitions. Pick three of the items you have drawn and list the simple machines that make up that item (there may be more than 1 simple machine per item).
6. Now, for the place that you chose, invent a machine that would be useful. Build the machine that you have invented. Be able to explain during an oral presentation: what it is, how it would be used, and what simple machines make up your invented machine.

Evaluation

Simple Machine Webquest Rubric

CATEGORY	Excellent	Good	Satisfactory	Needs Improvement
Stays on Topic	Stays on topic all (100%) of the time.	Stays on topic most (99-90%) of the time.	Stays on topic some (89%-75%) of the time.	It was hard to tell what the topic was.
Content	Shows a full understanding of the topic.	Shows a good understanding of the topic.	Shows a good understanding of parts of the topic.	Does not seem to understand the topic very well.
Organization	Information is very organized with well-constructed paragraphs and subheadings.	Information is organized with well-constructed paragraphs.	Information is organized, but paragraphs are not well-constructed.	The information appears to be disorganized. 8)
Diagrams & Illustrations	Diagrams and illustrations are neat, accurate and	Diagrams and illustrations are accurate and add	Diagrams and illustrations are neat and accurate	Diagrams and illustrations are not accurate OR do not

	add to the reader's understanding of the topic.	to the reader's understanding of the topic.	and sometimes add to the reader's understanding of the topic.	add to the reader's understanding of the topic.
Amount of Information	All topics are addressed and all questions answered with at least 2 sentences about each.	All topics are addressed and most questions answered with at least 2 sentences about each.	All topics are addressed, and most questions answered with 1 sentence about each.	One or more topics were not addressed.
Mechanics	No grammatical, spelling or punctuation errors.	Almost no grammatical, spelling or punctuation errors	A few grammatical, spelling, or punctuation errors.	Many grammatical, spelling, or punctuation errors.
Paragraph Construction	All paragraphs include introductory sentence, explanations or details, and concluding sentence.	Most paragraphs include introductory sentence, explanations or details, and concluding sentence.	Paragraphs included related information but were typically not constructed well.	Paragraphing structure was not clear and sentences were not typically related within the paragraphs.

Conclusion

Now that you have completed this webquest, you know more than ever about simple machines. You understand how they are used in your daily life. As the expert on simple machines, watch for them in your life and remember how they make your life easier.