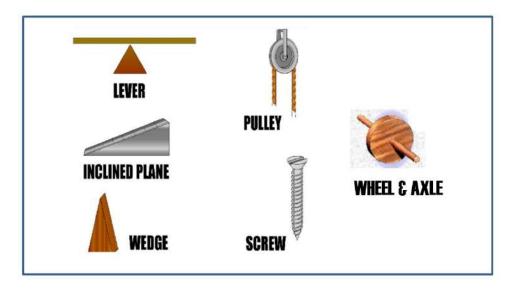
Simple Machines Webquest

Introduction

Our class has been studying the six simple machines. Now, we have been hired by Home Depot to help them with a big project. The company would like us to create inventions that would make daily life easier for people. We are all going to become inventors. We will discover the answers to the following questions.

- What are the six simple machines?
- How do these simple machines make work easier for us?
- How can we combine two or more of these simple machines to create a compound machine?
- What compound machine can we design to make life easier for people in some way?

The 6 Simple Machines



Task

In this WebQuest you will review the six different simple machines and how we use them every day. Then, you will help design and create a sketch of a compound machine for Home Depot. The sketch will be carefully drawn. You and your group will present your sketch to the class and give a brief description of it. So let's get started!

The Process

Your teacher will set you up with 2 partners. You and your partners will work together to:

1. Review the six simple machines by filling in your chart about what they do, and examples of how we use each simple machine today.

In order to fill out your chart, please use the links below to review the six simple machines. These websites will be very helpful for you when you are defining the Simple Machines and giving examples of them in your chart. (Hold control and click)

http://www.mikids.com/Smachines.htm

http://idahoptv.org/sciencetrek/topics/simple machines/facts.cfm

- 2. Now, before we proceed, click on the link below to take the online quiz to make sure that you understand the Simple Machines. You can work together with your group members to complete the quiz. You must show your score to Ms. Reeves before you move on!! ©

 (Hold control and click) http://www.quia.com/quiz/1031530.html
- 3. Yay! You are now an expert at simple machines, and it's time to get creative! You and your partners are going to create a compound machine by using **two or more** simple machines to design an invention that will make people's lives easier in some way.
 - a. First, <u>if</u> you need to learn a little bit more about compound machines. Click the link below to watch a video about compound machines. Be sure to use headphones or lower the volume. (Click on the toolshed for compound machines).

(Hold control and click) Compound Machines Activity

b. Now, you and your partners should decide which role you will take in the project. The roles are listed below.

Role #1 – *Illustrator* – This group member will be responsible for doing the drawing of the invention.

Role #2 – *Writer* – This group member will be responsible for writing a brief description of the invention.

Role #3 – *Editor* – This group member will be responsible for labeling the simple machines on the design drawing AND will check to make sure that the group is using the correct simple machines.

- c. Okay, it is time to think of an invention! The idea must be something that makes a person's life easier in some way. The invention can be a bit silly, but it <u>must make sense</u>. Remember, it MUST include at least 2 simple machines. Sketch out a rough draft of your invention.
- d. Next, take a piece of white construction paper. The **ILLUSTRATOR** should do a detailed sketch of the invention. The editor and writer should help the illustrator and make sure that the design is exactly how they want it to look.

Click here for an example of a sketch of a project: The Automatic Bed Making Machine Sketch (Hold control and click)

- e. Next, the **WRITER** should record a brief description of the compound machine. The paragraph should describe your invention and persuade people to buy it! In the paragraph, be sure to include the following:
 - The name of your invention come up with something creative!
 - The names of the simple machines used remember at least 2!
 - How the invention makes life easier in some way
- Be sure that your paragraph is spelled correctly and has proper punctuation and capitalization.

Click here for an example of a description of a project: <u>The Automatic Bed Making Machine Description</u> (**Hold control and click**)

- f. Next, the **EDITOR** should label the simple machines directly on the design drawing. Also, the EDITOR should double check that the correct simple machines are being used by referring back to the Simple Machines Chart that was completed at the beginning of the WebQuest.
 - g. Finally, you and your group should prepare a short presentation for the class. Please follow these guidelines when creating your presentation:
 - The presentation should be about five minutes long.
 - All group members must speak during the presentation, so be sure to break up your ideas into 3 parts.
 - You should explain your drawing in detail and describe how it can make life easier.

Evaluation

You will be graded based on the completion of your chart, your invention design drawing, your description of your project, the accuracy of your invention, and your

presentation. You will be given a copy of the scoring rubric. Use the rubric as your checklist to ensure exemplary work!

Conclusion

In this WebQuest you have reviewed what simple machines are, found examples of how they are used to help us every day, and designed and created a sketch of your own personal compound machine for Home Depot.

Groups

Savanna Jaylynn Canon	Lena Armone' Andersen	Sony Karrington Christopher
Denzell Brayden S.	Isabella Brinya Austin	Braeden W. Johnathan Brianne
Ilana Deshawn Ajailai		