**Science Project**

**Compound Machine Project**

Your science project will be to design your own compound machine, with 4 simple machines or more.

**Both partners will work together to:**

1. Choose the **4 or more** simple machines to include.
2. **Design** the compound machine.
3. **Decide** whether the compound machine will be presented as a hand drawing, on the computer, on a poster board, the compound machine itself in 3D format that we can touch, or another way that will be brought up to the teacher’s attention for approval.
4. **Label** all the simple machines included.
5. **Decorate** and elaborate as needed (depends if done on poster board or hand drawing).
6. Write an advertising for your compound machine (USING POWERPOINT.)
   1. The advertising portion will be done in English and Spanish. One partner will write it in English and the other in Spanish.
   2. Think about who would want to purchase your compound machine. Who is your audience? Who will you try to convince to purchase your product?
   3. Make sure you appeal to your audience by including:
      1. Emotions and feelings. (ex: “Puppies need love too!”)
      2. Logic (head): (ex: “A puppy would make me more responsible”)
      3. Admiration (celebrities) (ex: “Prince Royce has a puppy”)
   4. The **advertising** should include:
      * 1. the name of the compound machine.
        2. an ***attention grabber***.
        3. a ***description*** of how it machine ***works***, its function.
        4. ***three reasons*** why someone should purchase the compound machine. (Think: If someone purchases this machine, how will it make their life easier)
        5. Why should the audience believe that your machine is as great as you say? Explain here, do not use the question to write this part.
        6. Illustrations of your compound machine being used, and how it helped make work easier for the owner.
        7. If you finish early, you will be able to create an audio commercial for your machine!

**(optional) Commercial dig**

**Choose a television show to watch. (some cases: an application game you play on your cell phone, online games/programs.) Keep a detailed list of eight different commercials (Ads) you see during the show/game. These all should come from the same show/game: You must resist the urge to change the channel/game/website. Follow the example at the top of the chart.**

**Name of TV program/application/game:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date and time of broadcast/played:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| **Product name** | **Purpose of product** | **To what extent does this product appeal to you? (1-not at all; 5-I want it!)** |
| **Example: Domino’s Pizza** | **To satisfy my hunger.** | **3** |
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**Source:**

**Science Project rubric**

**Rubric for compound machine**

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|  | **4** | **3** | | **2** | | **1** | |
| **Design Drawing/**  **Supply List** | The drawing/list or supplies is detailed and easy to understand. The drawing is done neatly. It is labeled and includes at least 2 simple machines that are being used in the correct way. | | The drawing/list of supplies is detailed, but somewhat difficult to understand. The drawing is somewhat messy. It is labeled and includes at least one simple machine that is being used in the correct way. | | The drawing/list of supplies does not have a lot of detail and is somewhat messy. It is not labeled, but the 2 simple machines are being used in the correct way. | | The drawing/list of supplies is does not have any details and is difficult to understand because of messiness. The design is not labeled and only one simple machine is being used in the correct way. |
| **Function** | Compound machine has a function that can be demonstrated using all parts of the machine. Compound machine has a name. The machine is original and shows creativity. | | Compound machine has a function that can be demonstrated using all parts of the machine. Compound machine has a name. | | Compound machine has a function that can be demonstrated using some parts of the machine. Compound machine has a name. | | Compound machine has a function that cannot be demonstrated. Compound machine has a name. |
| **Modification/**  **Testing** | There is clear evidence of troubleshooting, testing, and refinements based on data or scientific principles. | | There is clear evidence of troubleshooting, testing and refinements. | | There is some evidence of troubleshooting, testing and refinements. | | There is little evidence of troubleshooting, testing or refinement. |

**Rubric for advertising (Persuasion Rubric)**

**Directions:** Your assignment will be graded based on this rubric. Consequently, use this rubric as a guide when

working on your assignment and check it again before you submit it.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Traits** | **4** | **3** | **2** | **1** |
| **Organization** | The introduction is  inviting, states the goal  or thesis, and provides  an overview of the issue.  Information is presented  in a logical order and  maintains the interest  of the audience. The  conclusion strongly states  a personal opinion | The introduction  includes the goal or  thesis and provides  an overview of the  issue. Information is  presented in a logical  order but does not  always maintain  the interest of the  audience. A conclusion  states a personal  opinion. | The introduction  includes the main  goal or thesis. Most  information is  presented in a logical  order. A conclusion is  included, but it does  not clearly state a  personal opinion. | There is no clear  introduction,  structure, or  conclusion. |
| **Goal or**  **Thesis** | There is one goal or  thesis that strongly and  clearly states a personal  opinion and identifies the  issue. | There is one goal or  thesis that states a  personal opinion and  identifies the issue. | A personal opinion  is not clearly stated.  There is little reference  to the issue. | The personal  opinion is not easily  understood. There is  little or no reference  to the issue. |
| **Reasons and**  **Support** | Three or more excellent  reasons are stated with  good support. It is  evident that a lot of  thought and research was  put into this assignment. | Three or more  reasons are stated,  but the arguments are  somewhat weak in  places. | Two reasons are  made but with weak  arguments. | Arguments are weak  or missing. Less than  two reasons are  made. |
| **Attention to**  **Audience** | Argument demonstrates  a clear understanding  of the potential  audience and anticipates  counterarguments. | Argument  demonstrates a clear  understanding of the  potential audience. | Argument  demonstrates some  understanding of the  potential audience. | Argument does not  seem to target any  particular audience. |
| **Word Choice** | Word choice is creative  and enhances the  argument. | Word choice enhances  the argument. | There is evidence of  attention to word  choice. | Word choice is  limited. |
| **Grammar,**  **Mechanics, &**  **Spelling** | There are no errors in  grammar, mechanics,  and/or spelling. | There are few errors in  grammar, mechanics,  and/or spelling, but  they do not interfere  with understanding. | There are several errors  in grammar, mechanics,  and/or spelling. | There are numerous  errors in grammar,  mechanics, and/or  spelling. |

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**Comments**