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| **Activity: Identifying Variables and Terms** | |
| **Directions:** For each of the following experiments, identify the Independent Variable (IV) and the Dependent Variable (DV). Remember, the IV is the cause (what ***I*** change on purpose) and the DV is the effect (it ***depends*** on the IV). | |
| 1. **Experiment:** A student is testing how listening to an iPod affects your hearing. | |
| **IV:** | **DV:** |
| 1. **Experiment:** A student is testing how brushing your teeth affects the number of cavities you have. | |
| **IV:** | **DV:** |
| 1. **Experiment:** A scientist wants to find out if spending more time in the sun increases your risk of developing skin cancer. | |
| **IV:** | **DV:** |
| 1. **Experiment:** A student investigates if listening to classical music can improve your memory. | |
| **IV:** | **DV:** |
| 1. **Experiment:** A student investigates how well different perfumes attract bees. | |
| **IV:** | **DV:** |



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| **Activity: Practice Identifying Variables** |
| **Purpose:** To practice identifying the important parts of an experiment.  **Task:** As you read, draw a picture to help you visualize the experiment.  **Outcome:** Identify the 5 important parts of the experiment. |
| **Smithers’ Special Juice:** Smithers thinks that a special juice will increase the productivity of workers. He creates two groups of 50 workers each and assigns each group the same task (in this case, they're supposed to staple a set of papers). Group A is given the special juice to drink while they work. Group B is not given the special juice. After an hour, Smithers counts how many stacks of papers each group has made. Group A made 1,587 stacks, Group B made 2,113 stacks. |
| |  |  | | --- | --- | | **The Important Part Is…** | **In The Experiment This Is…** | | **Independent Variable** |  | | **Dependent Variable** |  | | **Control** |  | | **Constants** |  | | **Experimental Groups** |  | |
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| **Superior Muscle Cream:** Superman and Batman are arguing about which muscle cream makes them look stronger in their spandex outfits. They decide to conduct an experiment to find out. For one month, they give 50 men, ages 18-25 Superman Cream; 50 other men of the same age get Batman Cream; and 50 other men of the same age get no cream at all. After one month, they measure each man’s increase in muscle mass to see who was correct. |
| |  |  | | --- | --- | | **The Important Part Is…** | **In The Experiment This Is…** | | **Independent Variable** |  | | **Dependent Variable** |  | | **Control** |  | | **Constants** |  | | **Experimental Groups** |  | |

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| **Activity: Vocabulary Practice** | |
| **Directions:** Write a definition for each of the following terms ***in your own words*** (you may use your notes from class to help you) | |
| 1. **Independent Variable** |  |
| 1. **Dependent Variable** |  |
| 1. **Constants** |  |
| 1. **Control** |  |
| 1. **Experimental Group** |  |



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| **Self-Assessment:** Using the smiley face scale, circle the face which best represents how you feel about your understanding of the scientific method. Feel free to leave me some comments! |