

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Practice with Dependent and Independent Variables

Remember -

The independent variable is what is controlled in the experiment.  
The dependent variable is what is measured in the experiment.

Identify the dependent and independent variables in the following cases.

1. Hikers who wear light-weight boots can hike more hours that hikers who wear heavy boots.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
2. Sunflowers that get more water grow over six feet tall.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
3. Children who take asthma medication have fewer asthma attacks.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
4. Knee replacement patients who participate in physical therapy can climb stairs three days after surgery.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
5. People who are exposed to asbestos have a greater incidence of mesothelioma.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_

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### Exercises with Dependent and Independent Variables

Remember -

The independent variable is what is controlled in the experiment.  
The dependent variable is what is measured in the experiment.

Identify the dependent and independent variables in the following cases.

1. Athletes who do not get enough sleep the night before will not run as fast the next day.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
2. Researchers want to know if the gas mileage of cars will increase with a new type of asphalt surface on roads.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
3. The amount of rainfall in an area lowers the incidence of wildfires.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
4. Covering a scrape with a band-aid decreases healing time.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_
5. People with an income greater than \$50,000 spend more money on eating out than people who make less than \$30,000.  
Independent variable: \_\_\_\_\_  
Dependent variable: \_\_\_\_\_