

Scientific Method

1. Read each scenario below. Identify the independent variable, the dependent variable(s) and at least 2 other variables that must be controlled for the experiment to be valid.

a) Determine if the amount of light affects the growth of plants.

Independent variable: _____
Dependent variable(s): _____
Controls: _____

b) Determine if the amount of salt on the road affects the amount of rust on cars.

Independent variable: _____
Dependent variable(s): _____
Controls: _____

c) Determine if the amount of homework completed affects the final mark in science.

Independent variable: _____
Dependent variable(s): _____
Controls: _____

d) Determine if the type of tire affects the distance it takes a car to stop.

Independent variable: _____
Dependent variable(s): _____
Controls: _____

Choose one of the scenarios (except c) and create a valid experiment.

Purpose <i>- why are you doing the experiment?</i>	The purpose of this experiment is to determine
Variables	independant: dependant: controls:
Hypothesis <i>- predict a possible outcome and explain why</i>	
Materials <i>-a list of necessary materials to conduct experiment</i>	
Procedure <i>-a numbered list of steps required to complete the experiment</i> <i>- be as specific and detailed as possible</i>	
Observations <i>-what type of observations will you be making?</i>	
Conclusion	Not possible without completing the experiment!