

5	4 3 2 1	0/inc	Late
Extremely thorough, complete, and detailed. Mastery Work done if asked	<input type="checkbox"/> Detail Needed	<input type="checkbox"/> Overall Neatness	Complete But Late or Redone
	<input type="checkbox"/> Instructions not followed	<input type="checkbox"/> Parts left undone	



Three Kinds of VARIABLES

I CAN IDENTIFY VARIABLE IN AN EXPERIMENT and CAN WRITE a GOOD QUESTION and HYPOTHESIS

Directions: Read the handout on variables, then complete the following Cornell Notes.

Question	Answer						
1. What is a variable ?	_____						
2. What is an Independent Variable ?	_____						
3. What is a Dependent Variable ?	_____						
4. What is a Controlled Variable ?	_____						
5. In the reading, there is an example of how the mass of a paper airplane affects the distance it flies. Identify the variables to the right from the reading.	<table border="1" style="width: 100%;"> <tr> <td style="width: 30%;">Independent</td> <td></td> </tr> <tr> <td>Dependent</td> <td></td> </tr> <tr> <td>Controlled (list 5)</td> <td></td> </tr> </table>	Independent		Dependent		Controlled (list 5)	
Independent							
Dependent							
Controlled (list 5)							
6. Explain why you should only have one independent variable .	_____						

Summarize the above information in 2 – 3 sentences. Underline the following words in your summary: Independent, Dependent, and Controlled.

DIRECTIONS: For each experiment below, determine the INDEPENDENT, AND DEPENDENT, and CONTROL VARIABLE(S.) For MASTERY WORK, DO 1 of THESE and 3 of the MASTERY(other side of reading)

1. An experiment was performed to determine how the amount of coffee grounds could affect the taste of the coffee. The same kind of coffee, the same coffee maker ,the same amount and type of water, the same perking time and the same electrical source were used.

INDEPENDENT VARIABLE	
DEPENDENT VARIABLE	
CONTROL VARIABLE	a) b) c)

2. Students of different ages were given the same puzzle to assemble. The puzzle assembly time was measured.

INDEPENDENT VARIABLE	
DEPENDENT VARIABLE	
CONTROL VARIABLE	a) b) c)

3. A study was done with an electromagnet system made form a battery and wire wrapped around a nail. Different sizes of nails were used and the number of paper clips that the electromagnet could pickup was measured.

INDEPENDENT VARIABLE	
DEPENDENT VARIABLE	
CONTROL VARIABLE	a) b) c)

4. A study was attempted to find if the length of a cable wire affects the clarity of television programming. You determine the variables.

INDEPENDENT VARIABLE	
DEPENDENT VARIABLE	
CONTROL VARIABLE	a) b) c)

5. Two groups of students were tested to compare their speed working math problems. Each group was given the same problems. One grouped used calculators and the other group worked the problems without calculators.

INDEPENDENT VARIABLE	
DEPENDENT VARIABLE	
CONTROL VARIABLE	a) b) c)

6. A study was done to find if different tire treads affect the braking distance of a car.

INDEPENDENT VARIABLE	
DEPENDENT VARIABLE	
CONTROL VARIABLE	a) b) c)