

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

## **IDENTIFY THE VARIABLES & DESIGNING INVESTIGATIONS W.S.**

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1. Students of different ages were given the same jigsaw puzzle to put together. They were timed to see how long it took to finish the puzzle.
  - a. Identify the variables in this investigation.
    - i. Independent variable? \_\_\_\_\_
    - ii. Dependent variable? \_\_\_\_\_
    - iii. Controlled Variable(s)? \_\_\_\_\_
  
2. An investigation was done with an electromagnetic system made from a battery and wire wrapped around a nail. Different sizes of nails were used. The number of paper clips the electromagnet could pick up was measured.
  - a. Identify the variables in this investigation.
    - i. Independent variable? \_\_\_\_\_
    - ii. Dependent variable? \_\_\_\_\_
    - iii. Controlled Variable(s)? \_\_\_\_\_
  
3. The higher the temperature of water, the faster an egg will boil.
  - a. Identify the variables in this investigation.
    - i. Independent variable? \_\_\_\_\_
    - ii. Dependent variable? \_\_\_\_\_
    - iii. Controlled Variable(s)? \_\_\_\_\_
  
4. The temperature of water was measured at different depths of a pond.
  - a. Identify the variables in this investigation.
    - i. Independent variable? \_\_\_\_\_
    - ii. Dependent variable? \_\_\_\_\_
    - iii. Controlled Variable(s)? \_\_\_\_\_
  
5. The greater the amount of soap in a soap and water mixture, the bigger a soap bubble can be blown.
  - a. Identify the variables.
  - b. What exactly will be changed?
  - c. How will it be changed?
  - d. What exactly will be measured?
  - e. How will it be measured?
  
6. The farther a ball drops, the higher it will bounce.
  - a. Identify the variables.
  - b. What exactly will be changed?
  - c. How will it be changed?
  - d. What exactly will be measured?
  - e. How will it be measured?