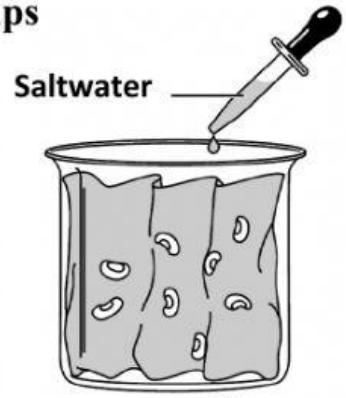
Name: Date: Period:

Homework: Combustion and Control Groups



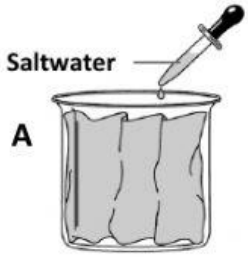
The setup to the right shows one of the trials in an experiment to determine how salt affects the germination of beans.

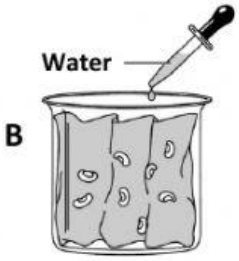
1. What is the independent variable? _____

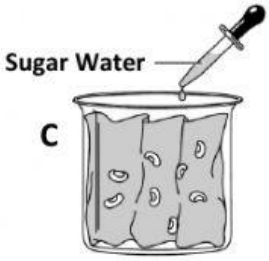
2. What are the constants? _____

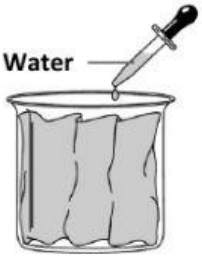
_____

3. Which of the following setups should be used as the control? -









4. **Combustion** can occur when which element is present? **(Circle your answer.)**

1	6	7	8	15
H	C	N	O	P
1.008	12.011	14.007	15.999	30.974
Hydrogen	Carbon	Nitrogen	Oxygen	Phosphorus

Use your notes to fill in the following blanks.

Energy is often released or absorbed in the form of _____.

Remember: The root for heat is _____.

- A reaction where heat is **absorbed** is called an _____ reaction.
  (When heat is being absorbed by substances, they will feel _____.)
- A reaction where heat is **released** is called an _____ reaction.
  (When heat is being released by substances, they will feel _____.)

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5. Does this picture show an endothermic reaction or an exothermic reaction?

_____

_____

_____

THERE ARE 3 WAYS TO STOP A FIRE

1. GET RID OF THE FUEL

How can firefighters use fire to stop a fight a forest fire?

_____

_____

2. REMOVE THE OXIDANT

Explain how a fire extinguisher works.

_____

_____

Why does putting a fire on a blanket put out the fire?

_____

_____

3. REMOVE THE HEAT

Why does putting water on a fire make the fire go out?

_____

_____

Balance the following combustion reactions:

#1) ___C_2H_6 + ___O_2 → ___CO_2 + ___H_2O

#2) ___Zn + ___O_2 → ___ZnO

#3) ___S_8 + ___O_2 → ___SO_2

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