

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

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

## Instructions:

**ANSWERS**

Use the CORMMSS method to plan the following experiments. Fill in the table for each experiment to ensure all variables are properly considered.

### Experiment 1:

### Investigating the Effect of Light Intensity on the Growth of Tomato Plants

#### CORMMSS Method

Change (What will you change?)

**The light intensity (e.g. 100%, 75%, 50%, 25%)**

Organism (What organism will you use?)

**Tomato plants of the same species, age, and size.**

Repeat (How will you ensure reliability?)

**Repeat with three plants per light intensity level.**

Measure (What will you measure?)

**Height of plants in centimeters (cm)**

Measure (How will you measure it?)

**Use a ruler to measure plant height from base to top of the tallest leaf.**

Same (What will you keep the same?)

**Soil type, amount of water.**

Same (What else will you keep the same?)

**Size of pots, temperature, and duration of exposure to light.**

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

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

**ANSWERS**

## Experiment 2:

### Investigating the Effect of Salt Concentration on the Rate of Osmosis in Potato Strips

#### CORMMSS Method

Change (What will you change?)

**Salt concentration in solutions (e.g., 0%, 5%, 10%, 15%).**

Organism (What organism will you use?)

**Potato strips of the same size and from the same potato.**

Repeat (How will you ensure reliability?)

**Repeat with three strips per concentration.**

Measure (What will you measure?)

**Change in mass of potato strips (grams).**

Measure (How will you measure it?)

**Weigh strips before and after soaking using a digital scale.**

Same (What will you keep the same?)

**Volume of solution and time potato strips are left in the solution**

Same (What else will you keep the same?)

**Temperature and strip size.**

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

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

**ANSWERS**

### Experiment 3:

## Investigating the Effect of Different Types of Water on the Rate of Rusting

### CORMMSS Method

Change (What will you change?)

**Type of water (e.g., distilled water, tap water, saltwater, rainwater).**

Organism (What organism will you use?)

**Iron nails of the same size and material.**

Repeat (How will you ensure reliability?)

**Use three nails per water type to ensure reliability.**

Measure (What will you measure?)

**Amount of rust formed (e.g., as a percentage of surface area covered).**

Measure (How will you measure it?)

**Visually estimate or use a grid overlay to calculate the rusted area.**

Same (What will you keep the same?)

**Volume of water**

Same (What else will you keep the same?)

**Exposure time (e.g., 7 days)**