**INVESTIGATING SCIENCE – YEAR 11**

**SCIENTIFIC REPORT TEMPLATE**

**TITLE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

## INQUIRY QUESTION

*What are you trying to find out?*

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1. **HYPOTHESIS**

*What do you think the results of your investigation will be?*

* *Testable statement*
* *Include independent and dependent variables*
* *State relationship between variables*

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1. **PLAN**

Valid and reliable data

**Independent** variable *(What things in the experiment will be different each time you do the experiment? Include units):* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dependent** variable *(What are you measuring? Include units)*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Variables to be **controlled** *(What things will you keep the same each time you do the experiment?)*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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State how many times will you do the experiment to make sure your test is **reliable**?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Identify what type of data will you be collecting (qualitative and/or quantitative)?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MATERIALS/EQUIPMENT**

*List materials, be specific and include quantities*

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DIAGRAM OF SET-UP**

Draw a scientific diagram of what your investigation will look like:

* *Pencil, ruler, labels and line drawing*

1. **METHOD**

List the steps you will follow to complete your investigation:

*(Written in third person, past tense.)*

1.

2.

3.

4.

5.

6.

7.

8.

**Risk Assessment**

*Identify* ***risks*** *or* ***safety*** *concerns might be involved in the experiment and how you will overcome these?*

|  |  |
| --- | --- |
| **Risk** | **How risk will be mitigated** |
|  |  |
|  |  |

1. **RESULTS**

Draw a **table** to display your results

*Independent variable on the left, dependent on the right, title, labels, units*

Draw a **graph** to display your results

A grid paper with small squares

Description automatically generated*Title, labels on correct axis, scale, units, correct graph type***6. DISCUSSION:**

Answer in full sentences.

1. Describe what happened in your experiment

*What patterns or trends did you observe, use data to help explain*

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1. Identify any **problems** you experienced while you were carrying out the investigation?

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1. How could you solve these problems to improve your experiment next time?

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1. How could you make your experiment more **reliable** and **valid** *(Look back at your plan!)*

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**7. CONCLUSION:**

What did you discover in relation to your hypothesis?

*Was your hypothesis supported or rejected?*

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