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| DEPARTAMENTO DE CIENCIAS NATURALES  | Science year 71st Term Formative Activity  |
| Name and surname  |
| Date: Results. MYP:\_\_\_\_\_\_\_\_\_.  |

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| **Task** | **Design an Investigation: The Chomp Challenge** |

## Criterion B: Inquiring and designing

**Level 7 – 8**

The student is able to:

i. **explain** a problem or question to be tested by a scientific investigation

ii. **formulate** and **explain** a testable hypothesis using correct scientific reasoning

iii. **explain** how to manipulate the variables, and explain how sufficient, relevant data will be collected

iv. **design** a logical, complete and safe method in which he or she selects appropriate materials and equipment.

**Task:** Design an experiment that investigates the **how many chomps someone can do with a chewy sweet** (dependent variable) and one factor that you choose (independent variable).

Brainstorm what factors might change how many times you could chew a sweet in 1 minute. Choose one to investigate. What things should you keep the same to make it a fair test? Can you describe exactly how you will count the number of chews?

Plan the investigation by completing each section of the format below. You will need to use <http://www.sciencesfp.com/how-to-write-a-lab-report.html> to help complete each section and check the example investigation on the same page to help.

**Research Question**

(What you will study)

**Background Information**

(How do humans chew? What are chewy sweets made out of?)

**Hypothesis**

(A good hypothesis will clarify and create focus for the research question)

**Variables**

Independent (what you are changing and how you will change it), 3 different amounts, 3 times each.

Dependent (what you are measuring and how you are measuring it with the corresponding units)

Controlled (include all the relevant or important controlled variables)

**Materials**

**Method** (Write down everything you need to perform the experiment)

**References**

APA style

Use <http://www.citethisforme.com/>

You only need to copy and paste the part after “bibliography:”

Remember that Wikipedia or yahoo answers IS NOT a reference, it is a starting point to find other acceptable references.

**Use the above mark scheme to make sure you have completed the task to MYP levels 7 – 8 by having a clear research question, well-researched background information that is used to support your hypothesis, correctly named equipment and a clear method in a numbered list that will generate data to write in a table and answer your research question.**

**You can submit the lab report by 24th October.**