SBI 3C
J. Kropac

POTATO OSMOSIS LAB

During this lab you will be investigating osmosis using potatoes. Potatoes are water based, and are easily influenced by the environment around them. They take up of lose water easily. You will be sharing your data by writing a formal lab report.

How to complete the lab report:

Below is a list of things that must be included in your lab report. Be sure to use headings to seperate the sections. Your title page must be on a seperate page.

- Title Page (1 mark)
  - Title of lab, name, date, teacher
- Introduction (2.5 marks)
  - Purpose (why are you doing this lab?)
  - Background information (define the terms osmosis, hypertonic, hypotonic)
- Hypothesis (1.5 marks)
  - Under each condition (no salt, high salt, low salt) what do you think will happen to your potato?
  - Don't use the word 'I'
  - If . . . than . . .
- Materials (1 mark)
- Procedure (3 marks)
  - Always write in third person.
- Results (3 marks)
  - Include a TABLE and a BAR GRAPH
- Discussion (6 marks)
  - Which of the solutions represents an isotonic solution? A hypertonic solution? A hypotonic solution?

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How to do the lab:

Take a potato and bore out 4 thin strips. Accurately measure an initial length and mass of each strip and record it in the table.

Obtain 4 clean, dry test tubes and add an equal volume of the following solutions so that each strip is completely covered.

a) No salt
b) Medium salt concentration
c) High salt concentration
d) Control

Allow strips to remain in solution for at least 20 minutes and then remove them carefully and measure the length of each strip. Record final length of each strip in table.

Wash and put away your equipment.

How much salt was used	Initial Mass of Potato	Final Mass of Potato	Initial Length of Potato	Final Length of Potato	Feel/Bend of potato afterwards
No salt					
Medium salt					
High Salt					
Control					

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