TITLE

DATE

STANDARDS

7.3.7

a, b, c, d, e, f, g, h, i, j, k

skills:

- make predictions/testable questions
- collect quantitative data
- incorporate variables - to change and control
- keep accurate records in notebook
- analyze data
- communicate findings with graphs

VOCABULARY

mechanical breakdown -

chemical breakdown -

variable -

control -

MATERIALS

FOCUS QUESTION(S) – (Challenge)

PURPOSE

✓ To show the effect of chemical breakdown on food particle **size**.

(You will show this by creating a model of chemical breakdown.)

PART A - TESTING THE MODEL

MATERIAL/PROCESS	REPRESENTS

PART B - PREDICTION
(See step 6.)

✓ If _____ (size) _____ then _____ (time to break down) _____.
✓ (This is a cause and en effect.)

Write your prediction here:

PLANNING/PROCEDURE
(See step 6.)

What are the **variables** in your experiment?

      -what is changing?

      -what is staying the same?

What will be the **control** that you compare all other results to?

PLANNING/PROCEDURE - continued

Record your procedure here. Number the steps.

DATA
(See step 7.)

What data will you collect? How will you organize it?

CUP	AMOUNT OF FOOD (TABLET)	SIZE OF FOOD (TABLET)	AMOUNT OF STOMACH ACID (VINEGAR)	TIME TO STOP DIGESTING (CHEMICAL REACTION)	RANK/ ORDER OF TIME	OTHER OBSERVATIONS
A						
B						
C						
D						
E						

STOP   **BEFORE YOU CONDUCT YOUR EXPERIMENT, YOU MUST FIRST HAVE ME APPROVE OF YOUR PLAN!**

CLAIMS AND EVIDENCE

(See step 10.)

Create a **BAR** graph of your data.
Be sure to label your axes and title your graph.

AQ4 – (Record your answer to analysis question 4 here.)
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MAKING MEANING CONFERENCE – NOTES FROM CLASS DISCUSSION

CONCLUSION

- Our prediction was correct/incorrect because

_____

_____.

REFLECTION

AQ 5 – Write your answer to analysis question 5 here.

Pick at least one question to answer. Relate your answer to this investigation.

- ✓ What were YOUR OWN thoughts after the investigation?

- ✓ Was there anything you understood better?

- ✓ What connections did you make?

Pick at least one sentence stem to complete. Relate your answer to this investigation.

- This reminds me/us of _____ because _____.
- Now I/we think that _____because_____.
- A problem I had during this investigation was _____. I think/know this happened because _____.
- I/we discovered that _____.

NEXT STEPS/QUESTIONS

Pick at least one sentence stem to complete. Relate your answer to what you think the next investigations may be about.

- What would happen if _____.
- I think what we will do next is _____.
- I want to know more about _____ because _____.