

MEOW, The Mini-Experiment of the Week

MEOW is an assignment in which students use materials found in the home to do an easy experiment, think about it, and write it up. Most importantly they are asked to tell what the experiment has to do with what they are studying in class.

For your students who have missed out on science in previous school years, this can be an invaluable tool for building the background information you want them to have in your class. For all students, having hands-on homework gets right to the point of what science is about: finding out what works and what doesn't first hand. It can make a big difference in the students' interest and in their understanding of the labs you do in class.

There are many sources for simple experiments - the Janice Van Cleve books (Chemistry, Ecology, etc.), the Physics for Kids series (Mechanics, Acoustics), some of the experiments in Exploratorium books *The Cheshire Cat & Other Popping Experiments on How We See the World*, and *The Spinning Blackboard*.

Below is the grade sheet, a critical part of the value of the assignment. You could use MEOW every week or adapt it to an occasional unit, depending on the needs of your students.

Name:

Date:

Per:

MEOOW Grade Sheet (To be completed by the teacher) Mini Experiment of the Week

Use the scoring rubric below to complete your lab report. Attach this sheet as a cover page for your report.

- | | | |
|----|---|-------|
| 1. | Title of experiment | 1 pt |
| | Materials used | 1 pt |
| | Procedure | 3 pts |
| 2. | Prediction | 5 pts |
| | What do you think is going to happen? | |
| 3. | Detailed observations | 5 pts |
| 4. | Results | 5 pts |
| | Why do you think what you observed happened? | |
| 5. | Conclusion | 5 pts |
| | What did you learn? | |
| | What does this have to do with what we are studying in class? | |
| 6. | Overall presentation | |
| | Sections clearly identified | 2 pts |

Adapted from a worksheet developed by Suzanne Ingly

Space between each section 1 pt
Neat and well-organized 2 pts

Your grade: _____
30

Things you should address for a better grade on your next MEO:

Part 1.

- No title of experiment
- Materials not listed
- Procedure unclear or incomplete

Part 2.

- Prediction copied from directions
- Prediction doesn't make sense

Part 3.

- Observations vague
- Observations lack details

Part 4.

- More thought needed
- Results vague

Part 5.

- Lacks linking of learning
- More detail needed

Part 6.

- Sections need to be identified
- Space needed between sections
- More careful editing needed