Physical Science 101
Syllabus

- Announcements
- Extra stuff
Tests

- 4 tests (dates on syllabus)
- Comprehensive final
- Final percent will count for any tests you miss
- Short response format
- Stuff from the book
Class

- Presentations
- Student-Response Questions
- Demos?
- Discussions
Outside of class

- Read the book, really it is not bad
- Do the homework
- Maybe some other activities
- For now:
  - Read the prologue
  - Review Questions: 7
  - Exercises: 2, 3
What happens if you miss test # 2?

1. You get a zero for test 2
2. You need documentation to take a make up exam
3. Your test 2 grade is the grade from your final
4. You fail the course
If you carefully collect enough data you can prove something to be true.

1. Strongly Agree
2. Somewhat agree
3. Neutral
4. Somewhat Disagree
5. Strongly Disagree
A hypothesis is not just an educated guess

1. Strongly Agree
2. Somewhat agree
3. Neutral
4. Somewhat Disagree
5. Strongly Disagree
Scientists mostly work alone

1. Strongly Agree
2. Somewhat agree
3. Neutral
4. Somewhat Disagree
5. Strongly Disagree
You can’t do science without experiments

1. Strongly Agree
2. Somewhat agree
3. Neutral
4. Somewhat Disagree
5. Strongly Disagree
Scientists have to be creative

1. Strongly Agree
2. Somewhat agree
3. Neutral
4. Somewhat Disagree
5. Strongly Disagree
Only students interested in science should have to take science classes

1. Strongly Agree
2. Somewhat agree
3. Neutral
4. Somewhat Disagree
5. Strongly Disagree
Science is all about models

- Model demo

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Science Game plan

• Collect evidence
• Create a model
• Use Model
• Change model when needed
• (model = theory or law or whatever)
Science is not about the truth

- Is a model the truth?
- Models are good if they work, who knows what is true
Science = just like history

• What happened at the Battle of New Orleans?
• Collect evidence
• some evidence is better
• make a model of what happened
• what is the truth? - no one really knows
Inductive vs. deductive reasoning

- Assumed Truths
  - Details
  - Deductive

- Model
  - Details (evidence)
  - Inductive
Science, it’s what human’s do

• Science is like art
• But wait - science makes velcro
• Why study science (and art)?
• Education is not job training