WELCOME TO BIOLOGY

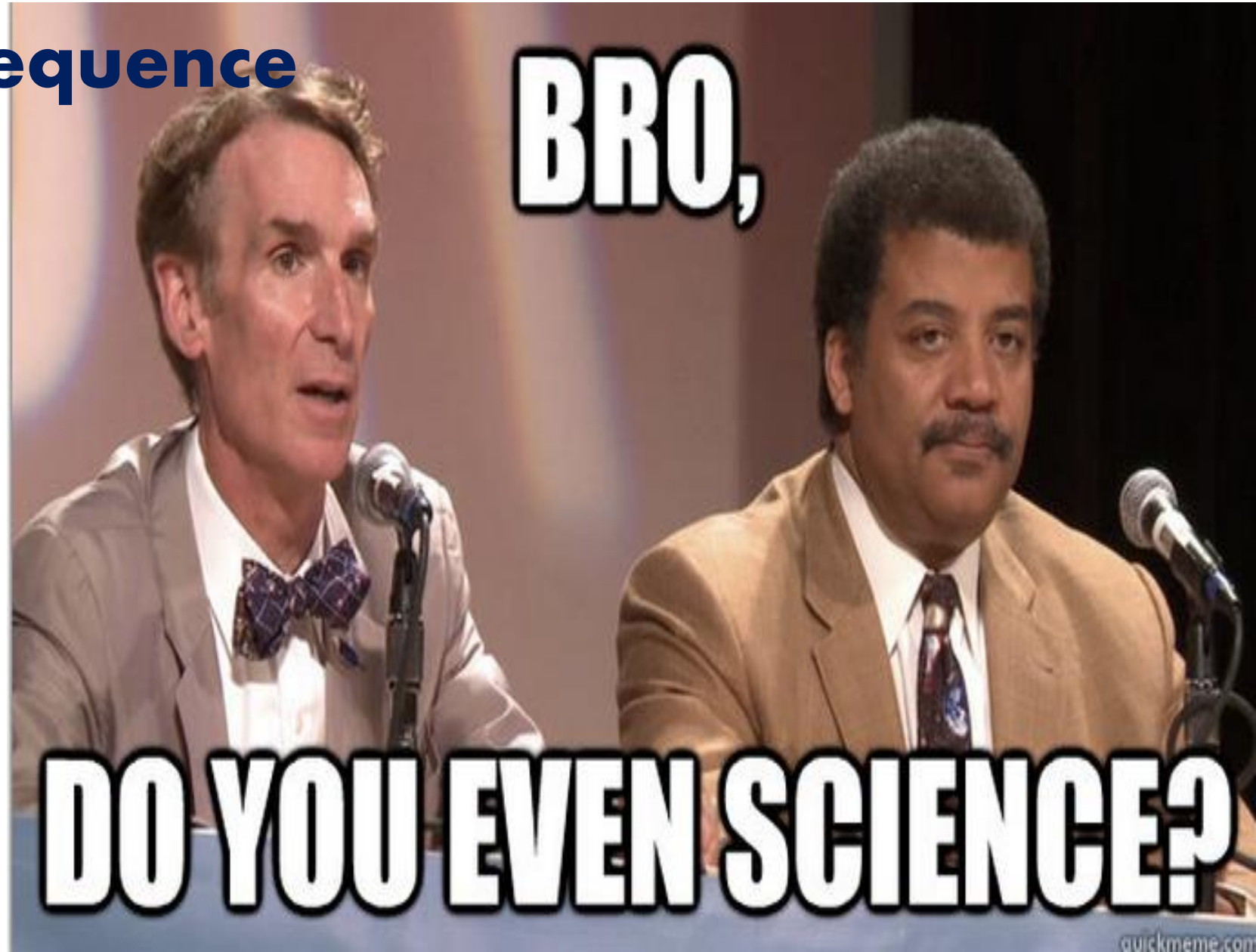
TUESDAY 8/17/21

Phones and ear inserts away please

DAILY AGENDA

1. Our Learning Sequence
2. Lab Prep
3. Unit 1 Science and the Experiment

Notetaking Skills

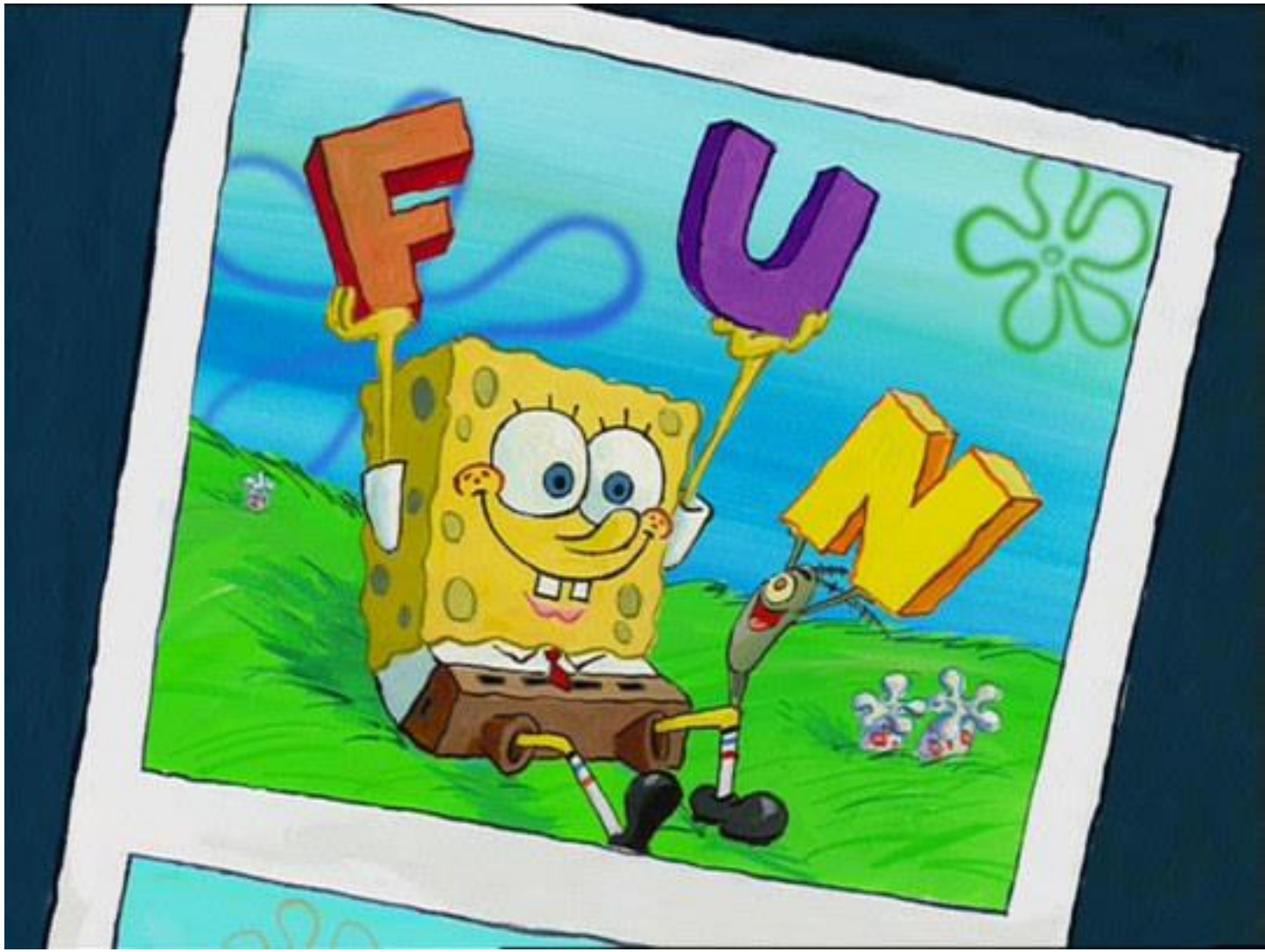


Our Learning Sequence

How do we know what information we are responsible for?

How do we learn the information we are responsible for?

How does working with this information lead to a good grade?



How do we work with information in this class?

1. Information is divided into units, and is presented in various ways…

Group Discussion Lecture (with notetaking) Videos Textbook

2. Students are given the opportunity to work with, practice, and better understand the new information.

Labs and Activities Worksheets Computer Interactives

Modeling, Drawing, Diagramming, Coloring

3. Students use their handwritten notes and knowledge to complete a set of typed, outlined, lecture notes.

The notes contain blanks and are given with a word bank.

4. Students demonstrate their familiarity and understanding of the material with

open-notes, timed assessments

Lab Prep **Assemble Groups**

1. Obtain 2 cups from tray; Wash and dry cups

<u>Perform steps 2 - 6 for each cup</u>

2. Cut a 100 cm length of paper towel and fold it in half one way and then again in the other orientation so that it is doubled over

3. Use this towel to line the inside of your cup as described

4. Cut a 100 cm strip of paper towel and wad it into a ball – stuff it into the bottom of the cup; <u>show Mr. Fletcher</u>

5. Using the plate to weigh on, weigh approximately 10 grams of cotton balls and stuff in cup

6. Wrap tape directly below rim of the cup so that it tapes back on itself

7. Label each with period and table number; label one with "0%" and one with % from board

"Period ___ Table ____ ____%" See board for your %

8. Cut 2 squares of plastic wrap large enough to cover and overhang the mouth of the cup

9. Secure the plastic wrap in place with a rubber band and label each wrap

"P ___ T ___ _____%" 0% or see board for your %

10. Store in the designated box and get cleanup OK

Lectures and Notetaking

The information you will be responsible for is presented in lecture format.

I suggest that during those lectures you take notes. We will work on notetaking skills.

Notetaking during lecture is primarily done for three reasons…

1. To help the brain stay engaged during the lecture
2. To record the key points of the lecture to study and otherwise use later
3. Practice improves notetaking skills

How can you get credit for your notes?

1. Notebooks collected 4 times a year and graded
2. Notes are used to complete fill-in-the-blank unit notes, which are graded

Tips for Effective Notetaking

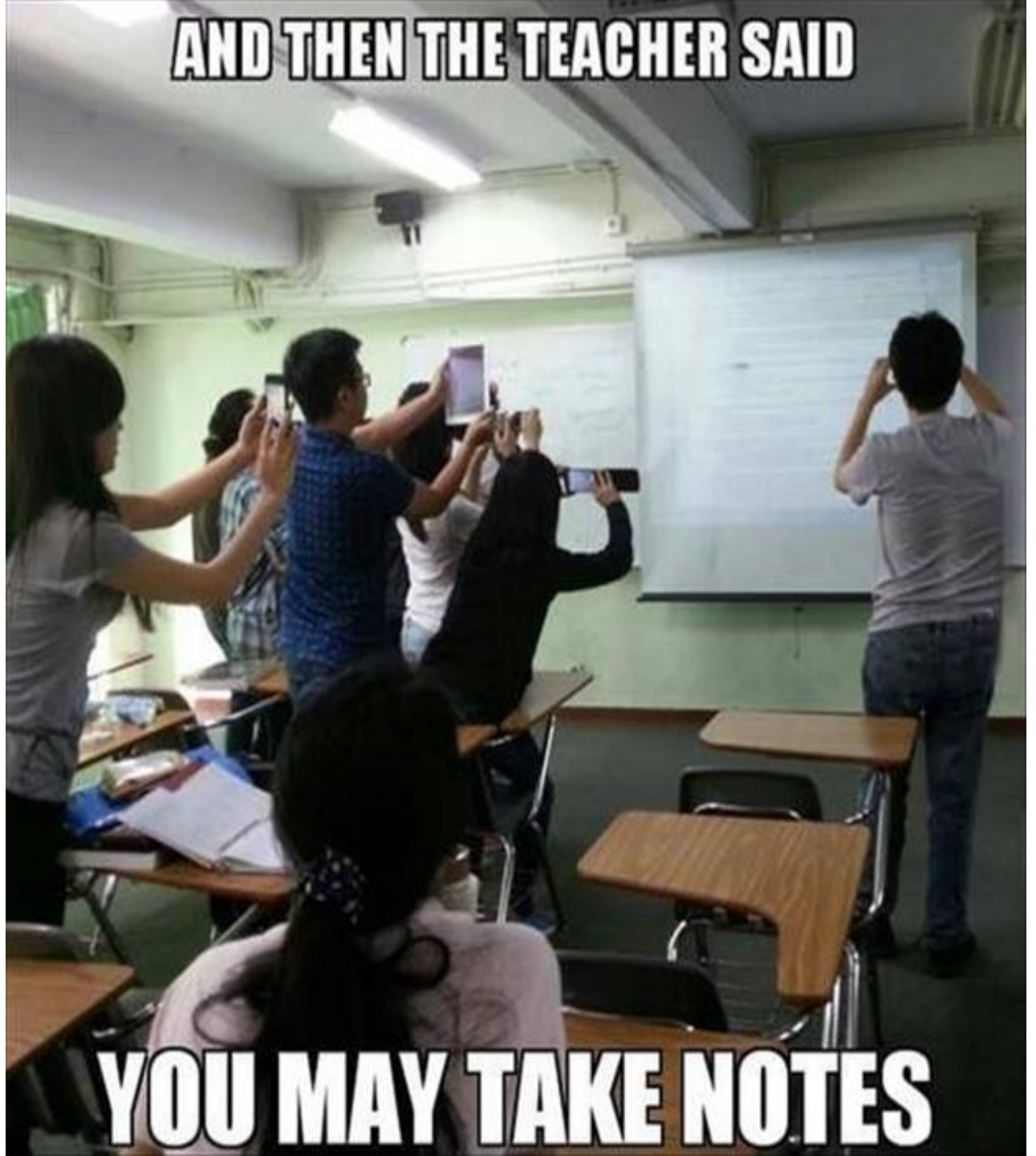
- ✓ Have a "Biology Notes" section of your notebook; keep all notes in chronological order

- ✓ Title each section of a new topic; date each entry in left hand margin whenever you begin taking notes

8/17/21 Unit 1: Science and the Experiment

- ✓ Don't put down your writing implement – note taking keeps us mentally engaged

- ✓ **Bathroom/distractions can wait**



✓ Develop your own shorthand when taking notes

- Eliminate words important for grammar but not notes (*a, the*, etc.)
- Abbreviate words that are easily understood or used often in the notes

(experiment = expermt chemical reaction = chem react)

✓ Use symbols (=, +, /, etc.) to substitute for words

✓ Take notes as bullet points or short sentences; use indenting and outdenting to show organization

Avoid writing in paragraph or complete sentence form

✓ Almost always, new vocabulary terms and listed terms are important

✓ Not everything on the slide needs to be copied (multiple examples, things repeated for emphasis, etc.)

✓ Lecture presentations are in google classroom – if you fall behind in class you can always look at the slide presentation later when you have time

Unit 1: Science and the Experiment

- We are going to start our first lecture presentation but also practice notetaking.
- Read the first two slides with me; take notes
- Then we'll go back and look at an example of notes from these two slides.

Unit 1 Science and the Experiment

Science

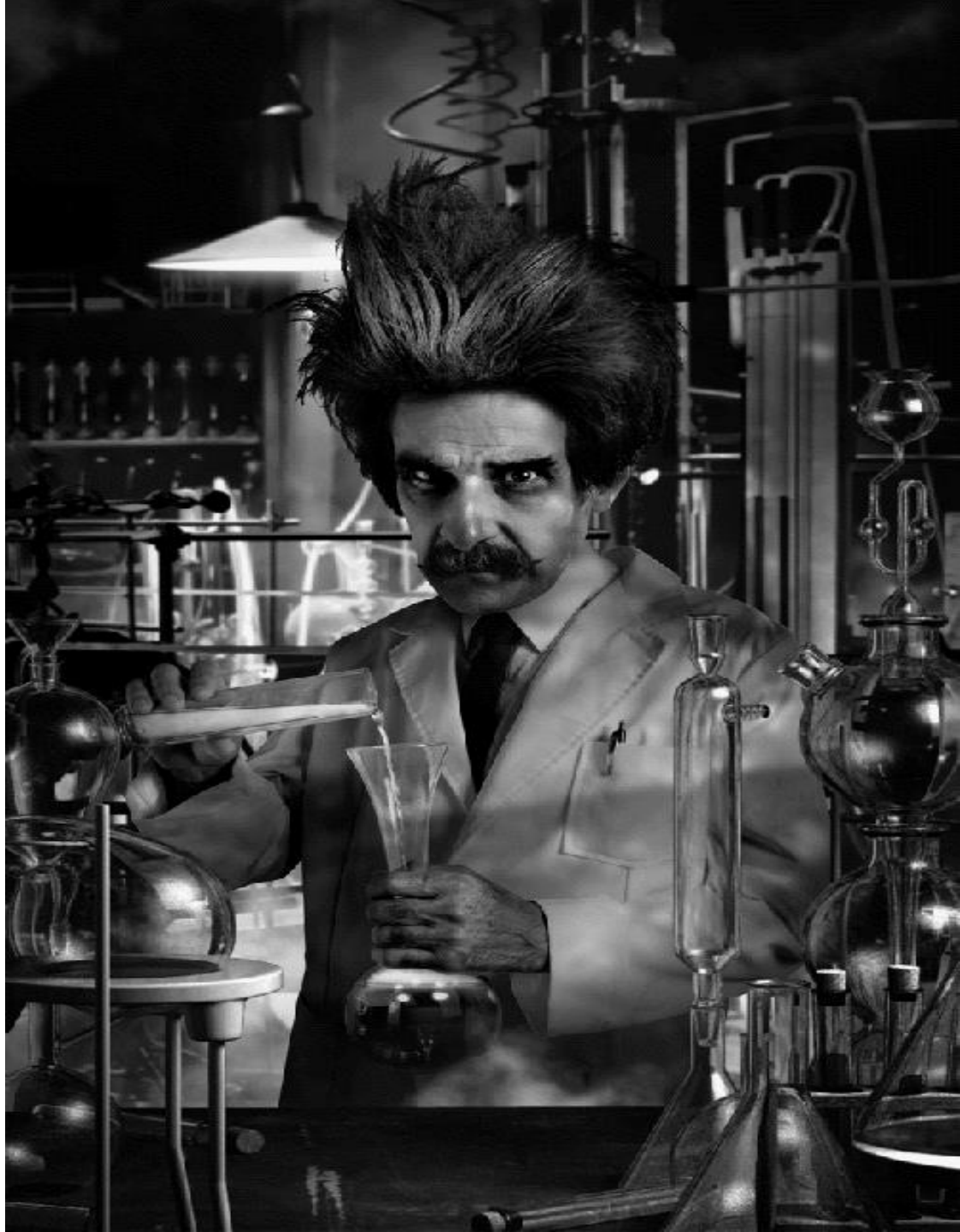
A way of learning about and manipulating the physical universe

- ✓ Recognizes Cause and Effect
- ✓ Requires physical evidence
- ✓ Conclusions and reasoning are public and open to revision

An important way of gaining evidence = *the Experiment*

Many different kinds of experiments - all with this in common…

- *A* **procedure/series of steps** ***with an*** **observable outcome**
- Investigate a **cause/effect question**
- **Repeatable** *in procedure and outcome*



Now let's take a look at an example of notes from these two slides…

Science

A way of learning about and manipulating the physical universe

- ✓ Recognizes Cause and Effect
- ✓ Requires physical evidence
- ✓ Conclusions and reasoning are public and open to revision

Science = way of learn/manipulate physical universe

- ✓ **Cause/Effect**
- ✓ **Physical evidence**
- ✓ **Conclusions/reasoning = public/open to revision**

An important way of gaining evidence = *the Experiment*

Many different kinds of experiments - all with this in common…

- *A* **procedure/series of steps** ***with an*** **observable outcome**
- Investigate a **cause/effect question**
- **Repeatable** *in procedure and outcome*

Evidence = Experiment

Diff. kinds of expt = in common →

- ✓ Procedure → observable outcome
- ✓ Cause/effect quest
- ✓ Repeatable in proced and outcome

You’re doing great so far – so here’s a wheelbarrow full of baby orangutans