Hello world 1

Phones away - I see them, I take them

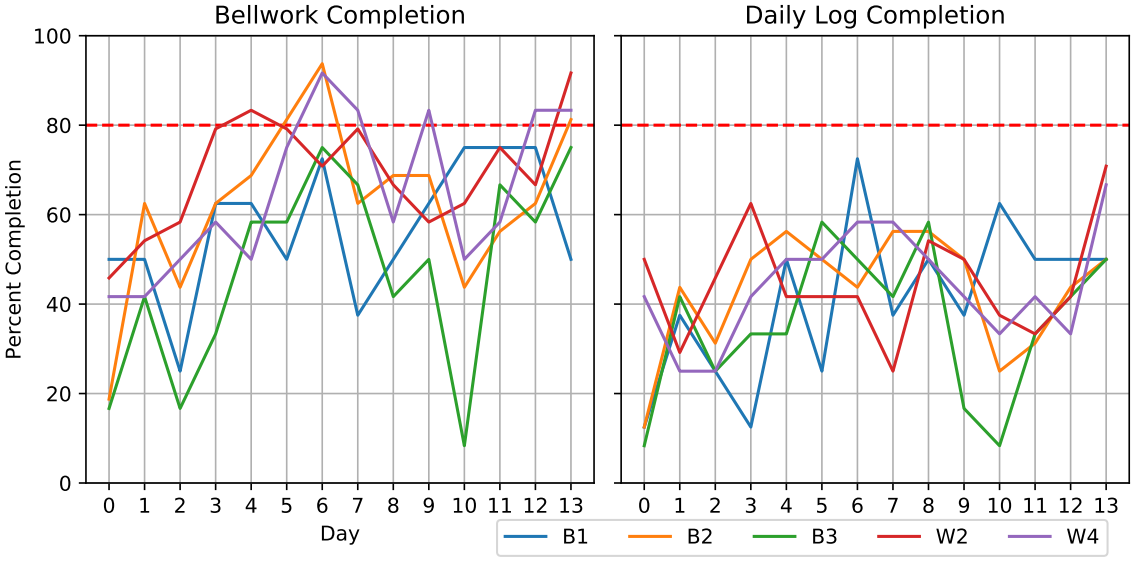
- Come forward and sit 4 to a table in the front of the room
- Everything away, except a pencil

Agenda

- Expectations for Visitors
- Practice
- Background information
- Expectations
- Rotation - if time

A	Bell work
C	1
H	Ask Group
I	Individiual
E	Phone Away - Working
V	Put on your student pants
E	Follow instructions

Completion Update



Vistors

Next class we are having visitors come from Westar Energy.

I expect all of you to be on your best behavior.

- Respect YOURSELF by acting like a mature person when you are in my room.
- Respect your peers by sitting with people that won't distract or bother you.
- Respect objects by keeping your cell phones away and off once class begins.
- Respect adults by paying attention and being engaged with the speakers.

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
E	Headphones away
V	Enhance knowledge
E	Review notes

What it all means

- Find a seat for next class.
- If you need play-doh, I'll have some that you can grab as you come into class. If it is a distraction today, you won't get it next time.
- I HIGHLY recommend putting your phone in the front. IF I SEE IT DURING THE PRESENTATION I"LL:
  - Take it
  - Mark your name
  - Take your phone under ANY circumstance the rest of the semester, no tech time, no using it for music.

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Practice makes purrrrrr-fect

- We'll go out
- You'll come in
  - Put your phone away
  - Get your play-doh if you need it
- Have a seat at your new seat

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Background information 6

First off, at your table number yourselves off, 1-4.

After each discussion, I'll call on a random number and that person will have to report the results of the table.

This means that everyone should be prepared to discuss!

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C	0
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Discussion

What is electricity?

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
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V	Enhance knowledge
E	Review notes

Discussion 8

What do we use electricity for?

A	Lecture / Notes
C	0
H	Raise your hand
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Discussion 9

Why do we use electricity for so many things?

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C	0
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Why electricity

- Huge range of amounts, from 1 electron to GAZILLIONS!!!
- Super efficient - insert wikipedia page
- Many sources
- Relatively easy to store
- And many more

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Terms for Electricty

- Voltage - measured in volts
- Current - measured in amperes
- Resistance - measured in ohms, Ω

All linked with one equation:

$$V = I \times R$$

$$\text{Voltage} = \text{Current} \times \text{Resistance}$$

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What does $V = I \times R$ remind you of?

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What do you think relates to what and WHY?

$$V = I \times R$$

$$F = m \times A$$

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What do you think happens if you apply the same voltage to:

- A poor conductor?
- A good conductor?

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Fun Things about Electricty

- 1 volt times 1 amp is 1 watt.
- There are 746 watts in 1 hp.
- Electricity kills because it can stop your heart.
  - Generally takes atleast 48 volts, but only couple of mA!
  - Note, AC is more dangerous than DC because you can't let go!

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What do you know about magnetism?

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
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V	Enhance knowledge
E	Review notes

What are uses of magnets?

A	Lecture / Notes
C	0
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Magnets - Questions

A moving current makes a magnetic field, and a moving magnetic field make a current.

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What does this mean? 19

Basically, magnetic and electric fields interact, and move charge (electrons) around.

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Discussion

Where are there magnets around you?

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C	0
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Types of magnets

- Electro-magnets
- Perment

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What do you think electro-magnets are?

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What do you think permeant magnets are?

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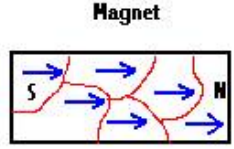

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