

Date Feb 6, 2012

Grade 10 Academic

- Enjoyment from learning about the field of Science

WHAT HAVE YOU LEARNED??

I enjoy challenging my mind with new ideas and concepts

I WILL CHALLENGE YOUR MIND

I will assign work to do at home very often... you need to ask questions if you don't understand something!!

Prioritize YOUR Work

Many of you will have tests and assignments due the same day!!

BECOME INDEPENDENT

Online textbook and solutions, tutorials, handouts, Notes

My Website.... Textbook Website ... Janzen's Website

(Homework: Intro to Science Worksheets) Time permitting

No Homework was assigned!

Classroom Drills !!

Date Feb 7

What is Science?

Terms on the Board from worksheets

Handout Worksheets (4 onto 1) with solutions?

Textbook Reference: Appendix _____

Design Your Own Experiment

- get them thinking about some ideas

Did not get to ... Tomorrow

①

Practice Making Your Experiment

Date Feb 8

③

Design Your Experiment Handout

Safety Symbols + Notes WHMIS - Friday

②

Graphing

- what does it tell us

Date

Feb 9

Textbook Scavenger Hunt

- Handout 4 pages

Date Feb 10

Unit 1: Chemistry

1. Physical vs Chemical

- Properties, Change
- Matter categories

2. The Atom

- Counting Protons, Electrons, Neutrons
- Memorizing Elements

The Periodic Table

- groups, periods, names,
- metals non metals metalloids

B-R + Lewis Diagrams

- Models - used to simplify complex ideas

Worksheets - P/T + BR Diagrams

1. Looked at Homework Completion

2. Using the P/T to draw B-R diagrams

- Shells, valence electrons

3. Why do elements react?

- Stable electron configuration

- Just like the Noble gases

4. Begin Bonding

- Ionic bonding - Metals \rightarrow Cations

Non Metals \rightarrow Anions

- Examples of ionic bonding

LiF , BeO , MgCl_2 , Al_2S_3

Quiz on Elements + p, e, n

Date

Feb 15

Continue with Bonding...

- Take up previous day examples
- Forming the Ionic Bond
- Structures of Ionic Compounds

Covalent Bonding

- 2 non metals - both trying to gain electrons
- sharing is the end result of 2 non metals becoming stable
- Examples: Cl_2 , O_2 , H_2O , CO_2

1. Take up examples of covalent bonding
2. Properties of Ionic + Molecular Compounds
 - Read textbook
3. Begin Naming

Review: Ionic vs Molecular

Date

Feb 17

1. Naming Ionic Compounds

- binary

- identify charge of ion

- crossover rule

Formulas

- naming ionic compounds

2. Up to practice table #3

1. Review Ionic name and formula

2. Molecular Compounds

3. Polyatomic ions

1. Naming Quiz
2. Transition Metals
3. Putting it together - review sheet
4. More naming practice
5. Test on naming - Friday or Monday

1. Provide answers for practice test

2. More practice on page 171

3. Chemical reactions (Ch. 4.3)

4. Balancing Reactions

1. Parts of a chemical equation

2. Balancing tricks

- fractions

- H + O last

- $H_2O = H(OH)$

- polyatomics as one thing

3. Worksheet on balancing equations

1. Naming Test

2. Tricks on Balancing Equations

A) Use fractions

B) Single, H, O, solve for last

C) $H_2O = H(OH)$

D) Polyatomic Ions are a single entity

3. Work on Balancing

1. Types of Reactions
- Chapter 6 in textbook

2. Identifying Patterns

3. Work on Identify Types

1. Check Types of reactions worksheet

2. Predicting products

- Syn \rightarrow Ionic
- Decomp \rightarrow Elements
- Single \rightarrow Metal replaces metal
- D

Date March 1

1. Textbook Homework corrections

2. Real Reactions \rightarrow Balanced equations

lead nitrate + potassium iodide

barium chloride + sodium carbonate

copper + silver nitrate

magnesium + HCl

chalk + HCl

1. Types of Reactions Worksheet

- predicting products
- check answers

2. Chapter 5: Acids + Bases

Self Note: Define

pH Scale

Properties

} Read!!

How could you identify an Acid/Base?

Examples of acids + bases in body

Date

March 5

1. What makes an acid?

2. What makes a base?

3. pH scale?

chem
indicators

Date

March 6

1. Neutralization Reactions

2. Enviro chem !

3. Acid and bases question sheet

Date

March 7

Review Chemistry!!!

1. Big quiz / worksheet - solutions online
2. Unit review - back of the unit, solutions online

Date March 8

Chemistry Unit Test

Need periodic tables and polyatomic ions

1. Begin next unit

Optics and light

What is light? Why is a wave a good model for light? What are the properties of light? Label a wave diagram. What is the relationship between frequency and wavelength and energy?

Video: invisible world - beyond sight