

Feb 5

Course outline

Edmodo

How some innovation has impacted science

Feb 6

What is science?

Group discussion

Future influenced by social media and sharing

Intro to science worksheet.

Homework - science fair website

Read over what is science website

Feb 7

Designing an experiment

Science fair beginnings timeline.

Feb 8

Snow day

Feb 11

Discussing science fair ideas

Cause and effect questions

Intro to chemistry

Safety page - xxiv

Matter flow chart

Physical vs chemical properties

Feb 11.

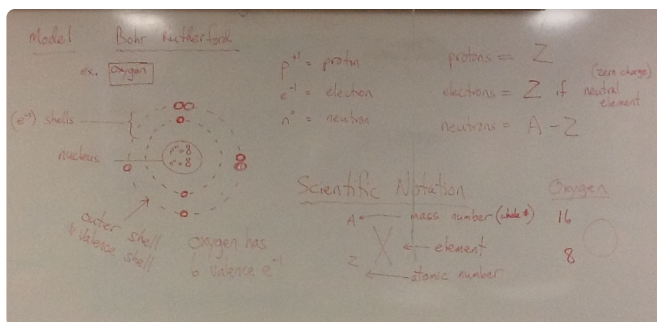
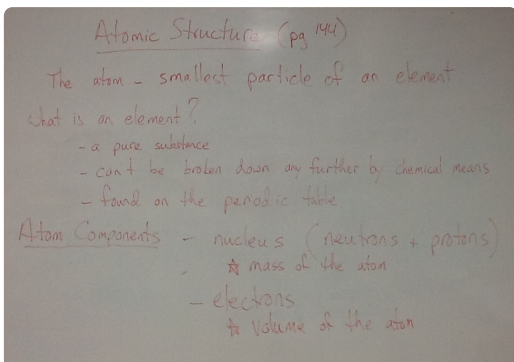
- 1) Design Experiment - Due Thursday  
- Proposal for Science Fair due by end of week
- 2) Begin Chemistry Unit  
- Safety (xxiv → ) WHMIS, Before/During/After, MSDS  
- Matter flowchart  
- Phys vs Chem properties  
- Page 142-143 (terms)

Chemistry

- ① Safety in Classroom  
- WHMIS  
- Safety in Lab  
- MSDS
- ② Matter pg 142-143  
- flowchart
- ③ Phys vs Chem properties  
- terms (examples)
- ④ Terms AHHHH!  
whatever left

Feb 12

## Atomic structure



## Homework

calculating p,e,n

Memorizing element names and symbols

Feb 13

Quiz element names, symbols, p,e,n calculations

Periodic table parts

Section 4.1 questions

Feb 14

Collecting design own experiment / science fair proposal

Solutions to section 4.1 review

Forming compounds - increase stability, fight for electrons

Bohr Rutherford diagram to Lewis symbol to octet rule to transfer or share to ions and an ionic bond or to a covalent bond

Ionic bonding, metal nonmetal, transfer, ions

Feb 15

Properties

Explaining other ionic compounds ( $\text{Na}_2\text{O}$ ,  $\text{MgCl}_2$ ,  $\text{Al}_2\text{O}_3$ )

Explaining molecular compounds

Properties

Modelling the bonding -  $\text{H}_2\text{O}$ ,  $\text{O}_2$

worksheet on chemical bonding

Feb 19

Concerns with chemical bonding?

Naming chemical compounds

Handout naming package

Feb 20

Ionic compound name and formula example

Molecular compound name and formula example

Go over multivalent name and formula

Polyatomics example

Feb 21

Element quiz

Reviewed naming

Described a chemical equation

Law of conservation of mass

Started to look at balancing equations

Feb 22

Quiz on naming table 1 to 4

Balancing tips

Balancing equations worksheet

Feb 25

Concerns over balancing reactions

Hand back design own experiment

Make a mess when balancing

Algebraic method of balancing

Feb 26

Types of chemical reactions

Worksheet on types of reaction

Feb 27

Review patterns for identifying types of reactions

More time for finishing worksheet on word to balanced equations

Feb 28

Take up worksheet on types of reactions and quiz them using flashcardlet  
Large note on properties of acids and bases

March 1

Quiz on naming chemical compounds  
Making note on pH scale, indicators, identifying and naming acids and bases  
The neutralization reaction

March 4

Applications of acid and bases

March 5

Lab on pH

March 6

Review topics

March 7

Unit test

March 8

Begin light / assign electromagnetic spectrum groups

March 18

What is light?  
Properties of light  
Modelling light as a wave

March 19

Light and colour  
Additive and subtractive colour theory  
Sources of light terms

March 20

Handback unit test  
Handout new worksheet on terms of section 10.3  
Drawing shadows  
Work in EM groups presentation tomorrow

March 21

EM presentations

Finish work for the week

March 22

Field trip to waterloo engineering

March 25

Ray diagrams and shadows

Mirrors and ray diagrams

March 26

Literacy test activity

Terms of 10.3

Luminous...

Transparent...

Shadows...

Making shadows - ray diagrams

March 27

Section 11.1

Law of reflection

Labelled diagram

Forming images and SALT

    In a plane mirror

Mar 28

Image formation

    In a concave mirror

    In a convex mirror

Worksheet on image formation

Intro to magnification equation

Textbook practice and section questions

Apr 2

Magnification - solutions

Review ray diagram - parts

Mirror equation - relationship

Worksheet

Apr 3

More calculations

Need all field trip forms for wrigleys

Begin note on refraction

April 4

Field trip to wrigleys

April 5

Need all field trip forms for university of Guelph

Refraction math

Demo, video, gizmos

Apr 8

Apr 9

Total internal refraction

Apr 10

Refraction lab

Apr 11

School cancelled

Apr 12

Collect wrigley's field trip report

Types of lenses

Ray diagrams for lenses

Worksheet on drawing ray diagrams

Apr 15

Negative and positive locations for lenses

Math of lenses

Apr 16

The eye

Apr 17

Applications of lenses

Apr 18

Finish up optics review time

Apr 22

Unit test review time

April 23

Optics unit test

April 24

Begin biology

What is life

April 25

Characteristics. Of life

Cell theory

Prokaryotes vs eukaryotes

Parts and function of cells

April 26

Know everything from chapter 1

Microscope parts and function

Practice quiz on cell functions

Types of microscopes

Contrast, resolution, field of view

April 29

(Video - bbc history of science what is life)

Slides, cell division,

May 3

Cell specialization differentiation

Tissues

May 6

Terms of chapter 1 matching quiz

Microscope activity

May 7

Tissues

Unit return optics

Organs: label and understand function of major animal and plant organs

May 8

The breath of life

Organs

Skin

Lungs

Heart

Digestive organs

Leaf

Flower

Stem

Roots

Organ systems intro sheet

May 9

Present their findings about organ function

The human pump

May 10

Finish organs and systems

Work period due to wonderland trip



May 13

The digestive system

The food machine video

May 14

Plant organs

Homeostasis worksheet