Physics 112

Thursday, February 14/19

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1. Questions?
   Worksheet - Conversions and Equations

2. FA - Metric Conversions and Rearranging Equations

3. Handout: Physics to Metric Conversions (Checked in Class)

4. SA - Basic Knowledge and Skills
   - Topics
   - Date: Thursday, Feb. 21/19

5. Unit 1 - Section 1: Vector Analysis - Concept Sheet

6. Mechanics

7. Types of Physical Quantities

8. Vectors: Direction, Notation and Representation

9. Physical Quantities to Know

10. Adding Vectors Graphically

Topics - SA: Basics Knowledge/Skills

1. physics - definition
2. metrology - definition
3. physical quantity - definition
4. measurements - two parts
5. scientific notation
6. accuracy/precision - definitions, interpret scenario
7. percent error calculation
8. significant digits - in a given measurement
   - Precision (+ and -) & Certainty (x and ÷) Rules
9. SI system - quantities and 7 base units (names/symbols)
   - derived units
10. SI prefixes - names, symbols and powers of ten
11. metric conversions - 1 step
    - 2 steps
    - m/s ⟷ km/h
12. rearranging equations

Physics 122

Thursday, February 14/19

http://mvhs.nbed.nb.ca/

1. FA - Force Problem - Type I - Pull
   FA - Force Problem - Type I - Push

2. Questions?
   Worksheet: Type II (Suspended Objects - Complex)

3. FA - Force Problem - Type II - Simple
   FA - Force Problem - Type II - Complex

4. Type III: Inclined Plane Problems

5. Worksheet: Type III (Inclined Planes)

Science 122

Thursday, February 14/19

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1. Questions?
   Worksheet - Convex and Concave Lenses
   - All Mirrors and Lenses

2. FA - Ray Diagrams: Convex and Concave Lenses

3. Lenses in Combination

4. Worksheet - Practice Problems on Lenses in Combination
   Worksheet - Extra Problems - Double Lenses

5. Review Problems (Mirrors and Lenses)

Science 10

Thursday, February 14/19

http://mvhs.nbed.nb.ca/

http://mvhs-sherrard.weebly.com/

1. Assignment - Autobiographical Poem
   5 Days Late

2. Return and Review:
   FA - Chemistry to Chemical Symbols

3. Questions?
   Worksheet: Bohr-Rutherford Diagrams

4. SA - Chem #1
   - Topics
   - Date: To Be Determined

5. Assignment: Periodic Table of Me, Myself and I
   Date: Tuesday, Feb. 19/19

6. FA - Standard Atomic Notation and Bohr-Rutherford Diagrams

7. Review: SA - Chem #1

Science 10

Formative Assessment – Chemistry to Chemical Symbols

Name - _____ Date - _____

Complete each statement with a word from the box below that makes each statement true.

symbol	electron	subatomic
neutron	chemistry	element
proton	nucleus	atoms
capitalized	matter	

a) The first letter of a chemical symbol is always _____.

b) There are three particles smaller than an atom. They are called _____ particles.

c) An element is represented by a chemical _____.

d) A positively charged particle in the nucleus of an atom is called a(n) _____.

e) _____ are the building blocks of matter.

f) _____ is the study of matter.

g) The center or core of an atom is called its _____.

h) A(n) _____ is made up of atoms and cannot be chemically broken down into simpler substances.

i) A(n) _____ is found in an orbit surrounding the nucleus of an atom.

j) The neutral subatomic particle is called a(n) _____.

k) _____ is anything that takes up space and has mass.

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Topics: SA - Chem #1

1. chemistry
2. matter
3. types of properties: physical and chemical
4. types of changes: physical and chemical
5. atoms -> building blocks of matter
   -> three subatomic particles: p^+, n, e^-
   -> locations of three subatomic particles
   -> electrically neutral: $\#p^+ = \#e^-$
6. element
7. chemical symbols
8. periodic table of the elements - periods (rows)
   - groups/families (columns)
   - family and period names
   - location of metals, nonmetals and metalloids
   - ~~characteristics of metals and nonmetals~~
9. atomic number = number of protons
10. standard atomic notation
11. Bohr-Rutherford Diagrams

proton
neutron
electron

Periodic Table of Me, Myself, and I.

Identify the element whose atomic number is the same as: (If the question does not apply to you, write "n/a" in the next column.)	Atomic Number	Chemical Symbol	Element Name
your age.	50	Sn	tin
the day you were born.	10		
the month you were born.	7		
the last two digits of the year you were born.	68		
the grade you are currently in.	N/A	N/A	N/A
the number of siblings you have.	3		
the number of pets you have.	1		
your favorite number.	10		
the grade percentage you hope to earn in science this semester.	N/A		

Below, number letters of the alphabet from 1-26. The first three have been done for you.

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

These numbers represent the atomic numbers of elements. Now use this code to assign each letter of your first name a chemical symbol. Spell out your secret first name in chemical symbols below.

Si	H	Si	Li	Mn											

Nancy

14 1 14 3 25
Si H Si Li Mn

Is it possible to spell your first name using chemical symbols?
For example, Cathy can be written as Ca Th Y (Ca=Calcium, Th=Thorium, Y=Yttrium).

Na N C Y

If not, spell out your name using the chemical symbols but highlight the letters of your name.
For example, Derek can be written Dy Er Eu K (Dy=Dysprosium, Er=Erbium, Eu=Europium, K=Potassium).
Do the same with your last name.

S H Er Ra Dy

Na	N	C	Y		S	H	Er	Ra	Dy						