

Science 10
Monday, February 12/18

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1. Assignment - Autobiographical Poem
- 3 Days Late
 2. Assignment - What's in a Name?
- Due: Today, Monday, Feb. 12/18
 3. FA - Periodic Table of Elements - Tomorrow
 - Color in families/periods.
 - Identify elements as metals, nonmetals and metalloids.
 4. Atomic Number
 5. Reminder: Bohr Diagrams
 6. Ions
 7. Trends in Ions
 8. Periodic Table of Ions
 9. Summary - Practice - Chemistry Worksheets
 10. Duo-tangs: Practice Worksheets
-
11. Worksheet - Chemistry: Ions and Subatomic Particles
 12. Prefixes
 13. Naming Monatomic Ions
 14. Worksheet #1 - Monatomic Ions
 15. Assignment - Your Name in Chemical Symbols
- Due: _____
 16. Ionic Bonds
 17. Simple Binary Ionic Compounds
 18. Worksheet #2 - Simple Binary Ionic Compounds
 19. Polyatomic Ions
 20. Polyatomic Ion Bingo
 21. Ionic Compounds Containing Polyatomic Ions
 22. Worksheet #3 - Ionic Compounds Containing Polyatomic Ions

Physics 112

Monday, February 12/18

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1. **Assignment - My Alphabetical Autobiography**
 2. Check:
Worksheet - Conversions and Rearranging Formulas
 3. SA: Basics Skills - Topics
 4. **SA - Basic Skills: Wednesday, Feb. 14/18**
 5. Learning Targets - Unit 1: Kinematics
 6. Concepts - U1 Section 1: Vector Analysis
 7. Mechanics
 8. Types of Physical Quantities
 9. Vectors: Direction, Notation & Representation
 10. Physical Quantities to Know - To Be Continued
-
11. Adding Vectors Graphically
 12. Worksheet - Order of Vector Addition
 13. Range of Resultant Magnitudes
 14. Review: Law of Pythagoras and Primary Trig Ratios
 15. Adding Vectors Analytically
 16. Worksheet – U1-S1: Vector Analysis

$$8. \quad h = \frac{A - 2lw}{2w + 2l} \quad [l]$$

$$h(2w + 2l) = A - 2lw$$

$$2hw + 2hl = A - 2lw$$

$$2hl + 2lw = A - 2hw$$

$$l(2h + 2w) = A - 2hw$$

$$l = \frac{A - 2hw}{2h + 2w}$$

$$12. \quad \frac{f_o}{f_s} = \frac{(v) - v_o}{(v) + v_s} \quad [v_s]$$

$$f_o(v + v_s) = f_s(v - v_o)$$

$$v + v_s = \frac{f_s(v - v_o)}{f_o}$$

$$v_s = \left[\frac{f_s(v - v_o)}{f_o} \right] - [v]$$

Answers -> Rearranging Formulas

1. $b = \frac{2A}{h}$

4. $a = \frac{2A}{h} - b$

2. $r = \sqrt{\frac{v}{\pi h}}$

5. $C = \frac{5F - 160}{9}$

3. $x = \frac{-By - C}{A}$

6. $c = \sqrt{b^2 + a^2}$

$$x = \frac{-By}{A} - \frac{C}{A}$$

$$7. \quad v = \sqrt{\frac{2k}{m}}, \quad [k]$$

$$k = \frac{v^2 m}{2} = \frac{1}{2} v^2 m$$

$$* 8. \quad h = \frac{A - 2lw}{2w + 2l} \quad [l]$$

$$l = \frac{A - 2hw}{2h + 2w}$$

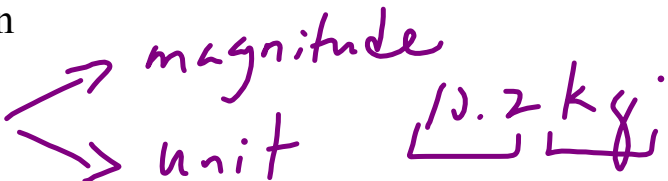

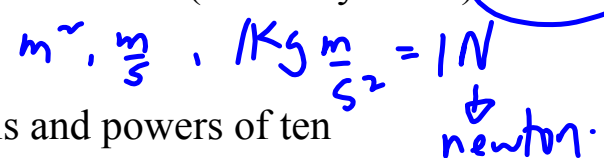
$$\# 9. \quad d = \frac{L\lambda}{x} \quad \leftarrow \text{lambda}$$

$$\# 10. \quad s = \frac{b+3}{x} = \frac{b}{x} + \frac{3}{x}$$

$$\# 11. \quad s = \sqrt{p - hy}$$

$$\# 12. \quad V_s = \left[\frac{f_s (v - v_0)}{f_0} \right] - \boxed{v}$$

SA: Basics Skills - Topics

1. physics - definition
2. physical quantity - definition
3. measurements - two parts

4. scientific notation
5. accuracy/precision - definitions, interpret scenario
6. significant digits - in a given measurement
 - Precision (+ and -) & Certainty (x and \div) Rules
7. SI system - quantities and 7 base units (names/symbols)

 - derived units

8. SI prefixes - names, symbols and powers of ten
9. metric conversions - 1 step
 - 2 steps
 - m/s \longleftrightarrow km/h
10. rearranging equations

Physics 122

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1. Return: FA - Learning Targets DE1.1 and DE1.2

2. Learning Categories

3. Check

Worksheet: Force Problems - Type I - Practice

4. Static Equilibrium - Video

5. Type II: Suspended Objects - Simple

6. Example - Type II: Suspended Objects - Simple

7. [Worksheet - Type II - Simple - Practice](#)

8. Type II: Suspended Objects - Complex

9. Example - Type II: Suspended Objects - Complex

10. Worksheet - Type II - Complex

Science 122

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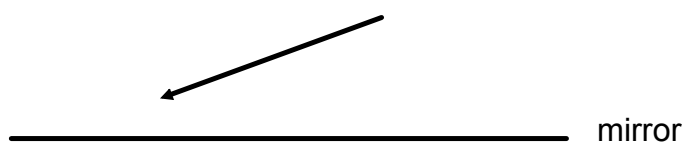
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1. FA - Snell's Law
 2. FA - Plane Mirror
 3. FA - Spherical Mirrors - Ray Diagrams
 4. Check
[Worksheet - Spherical Mirrors - Practice](#)
 5. Lenses
 6. Convex Lens
-
7. Locating an Image Formed by a Convex Lens
 8. Convex Lens - 5 Ray Diagrams
 9. Concave Lens
 10. Lens Equation, Magnification and Sign Conventions

Formative Assessment - Snell's Law

The speed of light in the gemstone Lapis Lazuli is 1.94×10^8 m/s. If light is incident on the gemstone at an angle of 38.0° , what is the angle of refraction in the gemstone?

Formative Assessment - Plane Mirror

Using at least two pairs of incident and reflected rays, determine the location of the object's image. State POST for your image.



P

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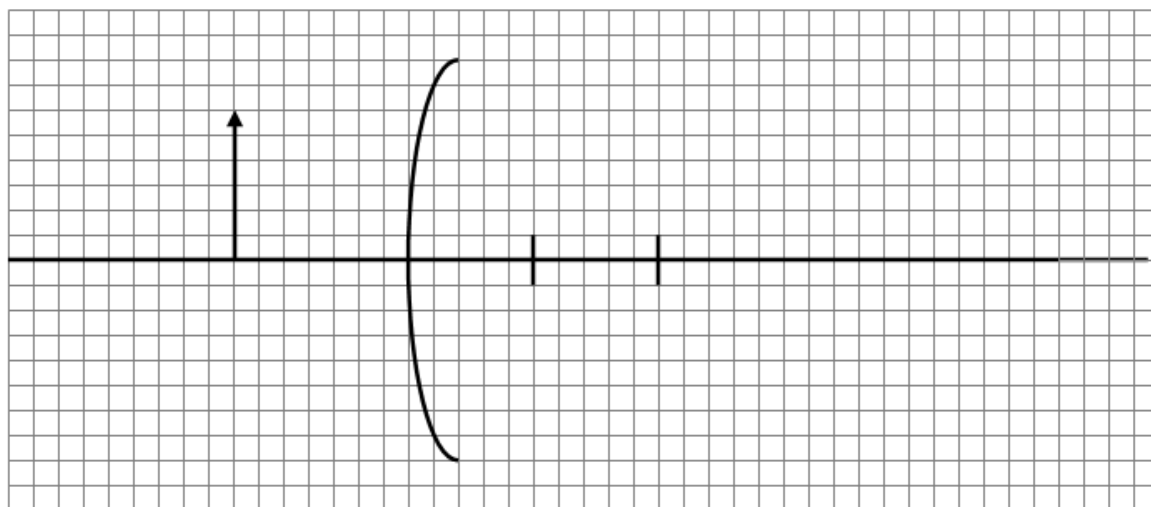
Formative Assessment - Spherical Mirrors - Ray Diagrams

Instructions:

1. Identify the type of mirror used in diagrams #1 and #2. Use the term concave or convex.
2. Locate the image using at least two pairs of rays from the top of the object. Include appropriate labels.

Diagram #1

Type of Mirror - _____

**Diagram #2**

Type of Mirror - _____

