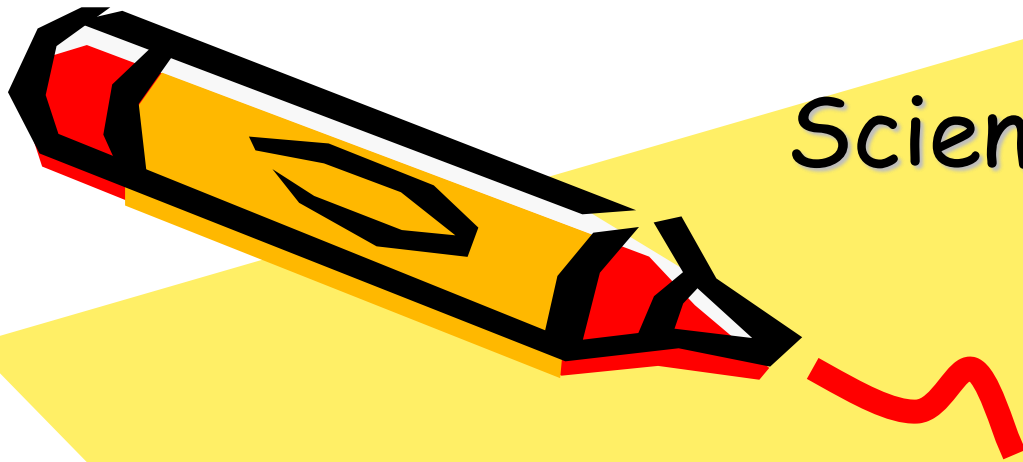


Science 7 2015-2016

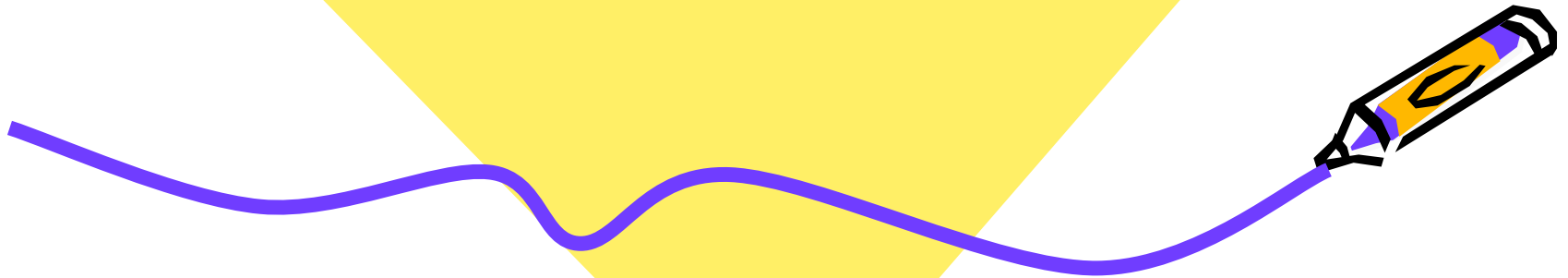


Teaching Goals:

"Promote student engagement, self esteem, autonomy and responsibility"

"Grade Level Content for Science"

"Adapting to Jr./Sr. High"



Science 7 Class Overview

1st Semester: Weather, Elements, Periodicity and Chemical Properties

Nature of Science

Definitions of Science and Metrics

Weather and Climate

Sun and other Factors Affecting Weather - temperature, moisture and wind

Atmosphere - convection/conduction, pressure and temperature, local and global wind

Water Cycle - Rain pH, Water Filtration, Groundwater, Erosion, Hydroelectric

Effects of Human Activity - pollution, climate change, extinction

Atoms and Periodic Table

Atoms, Elements, and Periodic Table

Investigating Matter

Review: Compounds, Substances and Mixtures

Physical and Chemical Properties - Color, Density, Phase Change, Factors affecting Reactions

Acids and Bases - pH Testing, Natural Indicators

2nd Semester: Cells, Inheritance and Waves

Cells

Cells - Structure and Function and Microscopy

Cell Energy and Nutrients - Photosynthesis, Respiration, Big3/little 4, Membrane Transport

Cell Cycle - Cell Growth, Mitosis and Cell Division

Differentiation- Tissues, Organs and Systems

Patterns of Inheritance

Mendelian Genetics - traits, alleles, monohybrid cross and Punnett Square

Molecular Genetics - DNA, Chromosomes, Genes and Meiosis

Reproductive Strategies - Budding, Fragmentation, Fission and Gamete Formation

Waves

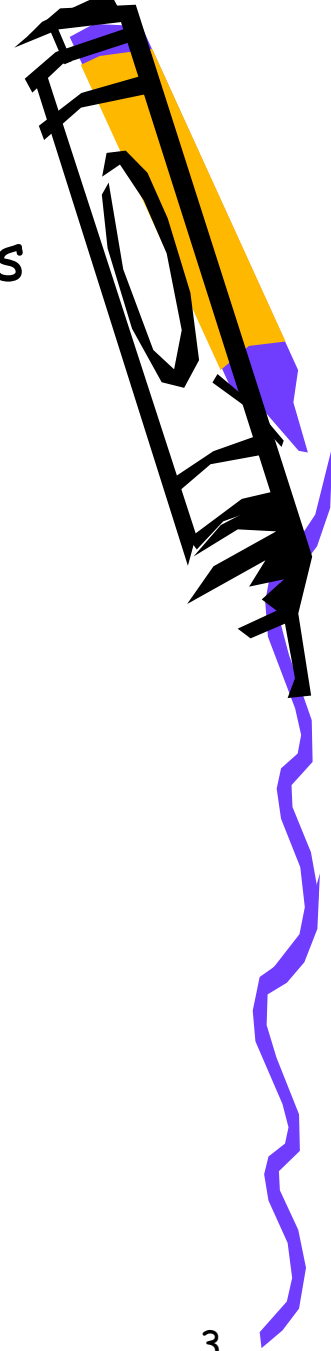
Waves and Energy - Longitudinal, Transverse, frequency, wavelength and amplitude

Waves Around Us - Sound, Electromagnetic, Seismic, Ocean



Guiding Our Learning

- State of Michigan Content Expectations
 - Grade Level Content Expectations for Science
 - High School Science Content Expectations for Science (Pre-requisites)
- New Lothrop Curriculum Document
- Class Notes and Handouts
- Textbooks: Prentice Hall Science
 - Cells, Heredity, Matter, Sound and Light, Weather
- Library
 - Periodicals and Books
- Internet
 - Edline, Discovery Videos, NOVA and PBS



Class Activities

Daily

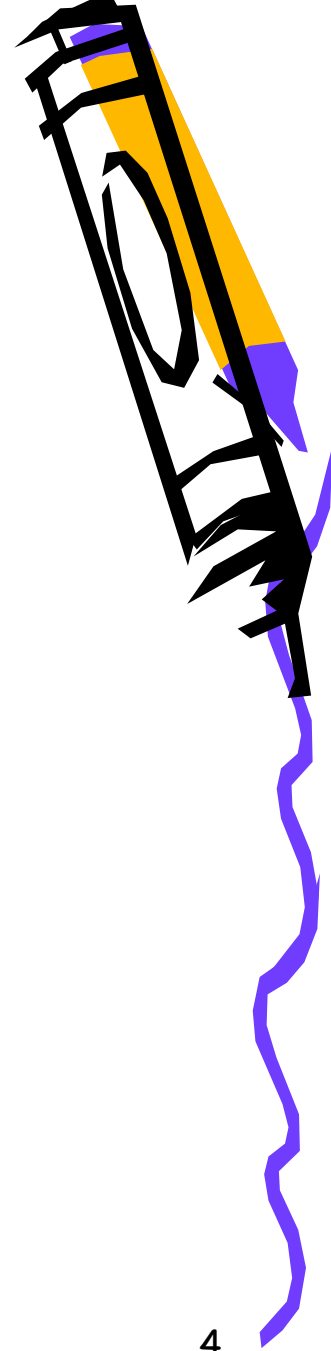
- Notes
- Discussion and Questions
- Research and Study
- Completing Assignments

Weekly

- Homelabs
- Investigations

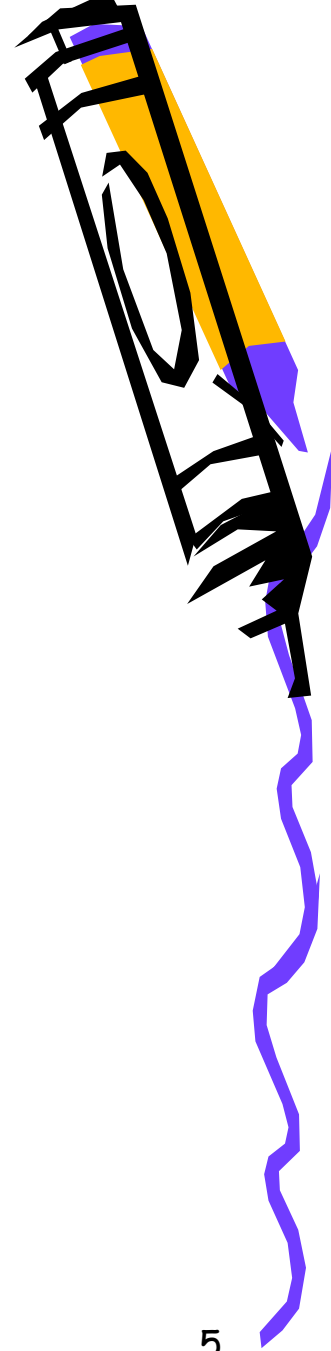
Bi-Weekly

- Quizzes
- Assessment (test, presentation, projects, etc)



Required Materials

- Pencil or other writing instrument
- Spiral Notebook
 - Notes
 - Section Questions (all questions written out)
 - Vocabulary
 - Chapter Reviews
- 3 Ring Binder
 - Hand outs
 - Projects
 - Drawings
 - Other loose papers



Teacher Responsibilities

1. Expectations for Behavior

- Respectful
- Responsible
- Honest
- Caring

2. Enforce School Rules, including...

- Cell Phone
- Tardy
- Attendance
- Dress
- Academic Integrity

3. Establish Classroom Procedures, including...

- Starting Class
- During Formal Instruction
- During Independent Work Time
- Classroom Cleanliness
- Formal and Informal Communication
- Lab Safety
- Late Work
- Right to Learn



Student Responsibilities

1. Know and Follow School Rules, Including

- Cell Phone
- Tardy
- Attendance
- Dress
- Academic Integrity

2. Know and Follow Classroom Rules, Including

- Behavior
- Procedures
- Lab Safety

1. Review Edline

2. Complete all Assignments, Labwork and Assessments

- "Zero or 30"

Science Tutoring is on Tuesday after school in Mr. Delemeester's room from 3 - 4 pm.

Please see Mr. Delemeester outside of class for additional help if you are having difficulty



Grades

Earning Credit

Categories: Class, Lab, Test and Behavior

Scoring: Completion (check system) or Graded (number score)

Calculation of Grades

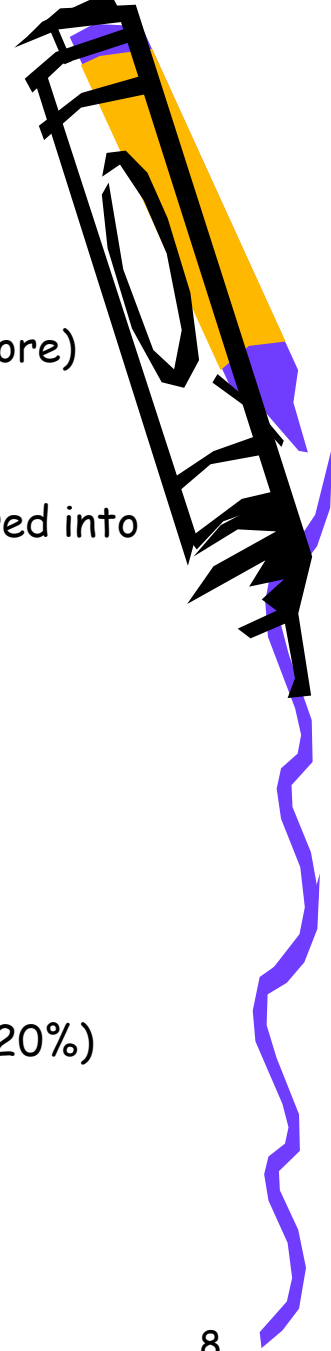
- Grades are calculated automatically as scores are entered into the electronic grade book

Quarter Grades

- Classwork (30%)
- Lab (30%)
- Test (30%)
- Behavior (10%)

Semester Grades

- Quarter 1 (40%) + Quarter 2 (40%) + Semester Exam (20%)



Do You Have Any Questions?

