

Flying Colors Science Resource Library: Physical Science

Atoms & Elements NGSS MS-PS1-1

Elements & the Periodic Table Unit Plan
Atoms and Elements Presentation
Structure of Atoms Foldable
Structure of Atoms Worksheet
Structure of Atoms Quiz
Inquiry-Based Introduction to the Periodic Table
Periodic Table Presentation
Practice Using the Periodic Table Worksheet

Mystery Elements Reading & Questions Atoms, Elements, & Periodic Table CER

Naming Elements Reading & Questions

Periodic Trends Reading & Questions

Periodic Trends Worksheet

Periodic Trends Activity

Periodic Trends CER Activity

Periodic Table Quiz

Element Research Project

Periodic Table Test Review Worksheet

Periodic Table Test

Discovery of Elements Timeline Project

Properties of Matter Mass, Weight, Volume, Density

Mass and Weight Comparison Worksheet
Properties of Matter Review Worksheet
Mass, Weight, Volume Quiz
Mass, Weight, Volume Test
Density Concept Introduction Worksheet
Density and Object Size Worksheet
Density of Liquids Worksheet
Density Practice Problems Worksheet
Density Challenger Worksheet
Density Review Worksheet
Density Quiz
Density Test

Classification of Matter

Classification of Matter Unit Plan Inquiry-Based Introduction to Classifying Matter Classification of Matter Presentation Elements vs. Compounds Brochure **Compounds Presentation** Modeling Elements, Compounds, & Mixtures Counting Atoms in Formulas Worksheet **Characteristic Properties Worksheet** Characteristic Properties Quiz How are Compounds Named? Text & Questions Compounds Quiz **Mixtures Presentation** Separating Mixtures Activity (Paper-Based) Mixtures and Solving Crimes Reading & Questions Classification of Matter Cereal Lab Classification of Matter Quiz Classification of Matter CER Activity Classification of Matter Worksheet Classification of Matter Review Flash Cards Top 10 Chemicals that Changed History Classification of Matter Test Review Classification of Matter Test

Natural versus Synthetic Materials and Impact on Society NGSS MS-PS1-3

Natural vs. Synthetic Materials Unit Plan
Natural vs. Synthetic Materials WebQuest
Natural vs. Synthetic Materials Article & Questions
How Oil is Obtained Article & Questions
Natural & Synthetic Materials Timeline Project
Top 10 Synthetic Materials of the Future Reading & Questions
Materials of the Future Research Project
Natural vs. Synthetic Materials Assessment

Physical and Chemical Changes NGSS MS-PS1-2, MS-PS1-5, and MS-PS1-6

Physical & Chemical Changes Unit Plan Physical & Chemical Properties Reading & Questions Physical & Chemical Changes Presentation Physical & Chemical Changes Sorting Activity Physical & Chemical Changes Worksheet Physical & Chemical Changes CER Activity Chemical Reactions Presentation Reactants and Products Review Worksheet **Chemical Reactions Worksheet** Evidence of Chemical Reactions Hands-On Stations Everyday Chemical Reactions Article & Worksheet Law of Conservation of Mass Worksheet Law of Conservation of Mass Reading & Worksheet Law of Conservation of Mass Lab Law of Conservation of Mass Ouiz Physical & Chemical Changes Penny Lab Physical & Chemical Changes Review Flash Cards Physical & Chemical Changes Quiz Physical & Chemical Changes Test Review Worksheet Physical & Chemical Changes Test Poster Project for Physical and Chemical Changes

EnergyNGSS MS-PS₃₋₁, MS-PS₃₋₂, and MS-PS₃₋₅

Energy Unit Plan Forms of Energy Notes Presentation Forms of Energy Worksheet Hands-On Energy Stations **Energy Transformations Notes Presentation Energy Transformations in Renewable Energy Energy Transformations Activity Energy Transformations Quiz** Types of Renewable Energy Article & Questions Mass, Speed, Kinetic Energy Notes Presentation Graphing Speed, Mass, Kinetic Energy (Cars) Graphing Speed, Mass, Kinetic Energy (Sports) Energy CER & Data Analysis Activity Potential & Kinetic Energy Lab Speed, Mass, Kinetic Energy Quiz **Energy Quiz Energy Review Games Energy Unit Review Worksheet Energy Test**

Energy Transformations Toy Project

Particle Motion and Heat NGSS MS-PS1-4, MS-PS3-3, and MS-PS3-4

Particle Arrangement Reading & Worksheet Particle Motion Worksheet Particle Motion Lab Particle Motion CER & Data Analysis **Temperature Worksheet** Thermal Equilibrium Reading & Worksheet Thermal Expansion Worksheet Particle Motion & Phase Change Quiz 3 Types of Heat Transfer Text & Questions Modeling Convection Hands-On Activity Density & Convection Currents Text & Questions **Convection Worksheet** Heat Transfer/Insulator Lab **Insulating Device Project** Heat Transfer Worksheet (Higher Rigor) Thermal Energy CER Activity Types of Heat Transfer Quiz Heat Unit Review Worksheet Particle Motion and Heat Test

Speed

Calculate & Graph Speed Worksheet
Falling Dominos Speed Lab
Speed of World Record Runners Worksheet
Speed Graphs CER Stations Activity
Speed and Speed Graphs Test

Newton's Laws NGSS MS-PS2-1 and MS-PS2-2

Newton's Laws Unit Plan
Newton's Laws Presentation
1st Law Graphing Inertia Activity
1st Law Activity Stations
2nd Law Calculate & Graph F=MA
2nd Law F=MA Hands-On Lab
3rd Law Activity Stations
3rd Law Activity Stations
3rd Law Action/Reaction "Two Truths & a Lie"
Newton's Laws Review Worksheet
Newton's Laws Quiz
Newton's Laws CER Activity
Newton's Laws Test
Newton's Laws Poster or Video Project
Speed AND Newton's Laws Test

Electricity and Magnetism NGSS MS-PS2-3 and MS-PS2-5

Electric Charges & Electric Forces Reading & Worksheet
Static Electricity Reading & Worksheet
Electric Charges Worksheet
Static Electricity CER & Data Analysis Activity
Electric Charges Quiz
Online Circuits Activity

Circuits Quiz

Electric Charges & Field Lines Online Activity

Magnetism CER Stations Activity

Top 10 Real-World Uses of Magnets Articles & Questions

Magnetism Quiz

Electricity and Magnetism Test

GravityNGSS MS-PS2-4 and MS-PS2-5

Gravity Unit Plan
Gravity Notes Presentation
Gravitational Interactions Worksheet
Graphing Gravity Activity
Mass & Weight Comparison Activity
Weight on Different Planets Activity
Gravity CER & Data Analysis Activity
Gravity & the Birth of the Universe Reading & Questions
Gravity & the Birth of our Solar System Reading & Questions
Gravity's Role in Planetary Orbits Reading & Questions
Gravity's Role in Black Holes Reading & Questions
10 Ways Life Would Be Different Without Gravity Reading & Questions
Gravity Assessment

Waves NGSS MS-PS4-1, MS-PS4-2, and MS-PS4-3

Waves Text & Worksheet

Analog & Digital Signals Article & Graphing

Analog Waves "Texting" Activity

Analog & Digital Signals Quiz

Light Quiz

Sound Waves Quiz

Waves Review Worksheet

Waves CER Stations Activity/Worksheet

Top 10 Real-World Uses of Waves Reading & Questions

Waves Quiz

Waves Test

Final Exam

Physical Science Final Exam

Physical Science Scientist Biographies

Dmitri Mendeleev Biography & Questions

Nikola Tesla Biography and Worksheet

Isaac Newton Biography & Questions

Olga González-Sanabria (NASA Engineer) Biography & Questions

Bisi Ezerioha (Engineer) Biography & Questions

Grab-and-Go Physical Science Sub Plans

Top 10 Real-World Uses of Waves Reading & Questions

10 Ways Life Would Be Different Without Gravity Reading & Questions

Top 10 Real-World Uses of Magnets Articles & Questions

Top 10 Everyday Chemical Reactions Article & Worksheet

Top 10 Chemicals that Changed History

Top 10 Synthetic Materials of the Future Reading & Questions