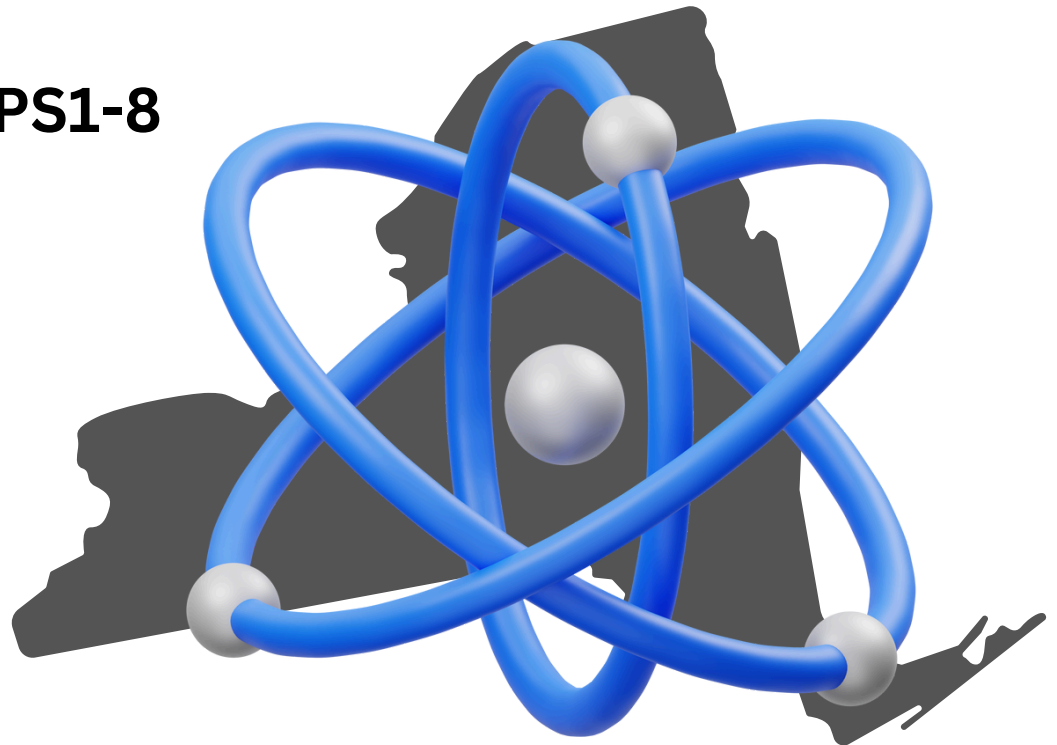


New York State P-12 Science Learning Standards (NYSSLS)

MS. Structures and Properties of Matter

- ✓ Complete Standard for New York Middle School - Structure and Properties of Matter Standard
- ✓ MS-PS1-1, PS1-3, PS1-4, PS1-7, PS1-8
- ✓ The Bundle will SAVE you 70%



UPGRADE to the Bundle



This Bundle:

- Get immediate access to my **COMPLETE** New York State Middle School Curriculum
- Every standard covered at a **HUGE DISCOUNT**

New York Middle School Science Curriculum

New York State P-12 Science Learning Standards (NYSSLS)

- ✓ Standards are directly aligned to New York State Middle School Science Standards according to the New York State Education Department
- ✓ The Bundle will SAVE you 80%



Click here to have a look

Resources Included

MS-PS1-1

- Atomic Structure and Notation Lesson
- Atomic Theory and Model Lesson
- Atoms - History and Theory – Scavenger Hunt
- Atoms Elements and Compounds Digital Interactive Notebook – Chapters 2, 3, and 4
- Atoms Elements and the Periodic Table Word Search and Scramble
- Crash Course Chemistry the History of Atomic Chemistry
- The Periodic Table Lesson
- Counting Atoms in Compounds Worksheet
- Chemical Symbols Formulas and Compounds Lesson

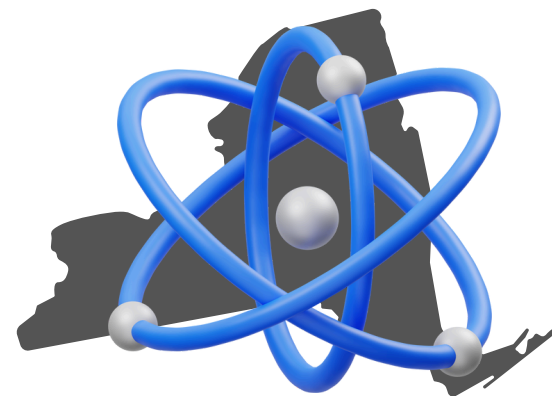
MS-PS1-3

- Synthetic Materials Lesson
- Synthetic Material Research Assignment
- Biofuels from Algae Reading
- The Development of Synthetic Insulin Reading

Resources Included

MS-PS1-4

- Relationship Between Kinetic Energy Mass Speed Lesson
- Particle Motion Temperature and States Lesson
- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments
- Matter and the Particle Theory Lab Station Activity
- Matter and Particle Theory Science Word Sprint
- Matter and the Particle Theory Infographic Assignment



MS-PS1-7

- Mass, Volume, Density, and Buoyancy Lesson
- Mass, Volume, Density, and Buoyancy – Scavenger Hunt Activity
- Mass, Volume, Density, & Buoyancy Lab Station Activity
- How Do Ships Float – Reading
- Aluminum Foil Boat - STEM Engineering Challenge
- Paddle Boat - STEM Engineering Challenge

MS-PS1-8

- Pure Substances and Mixtures – Lesson
- Pure Substances and Mixtures - Lab Station Activity
- Desalination of Drinking Water Comprehension – Reading
- Solutions and Mechanical Mixtures – Lesson
- Oil Spills – Reading
- PBL - Mixtures - Mix It Up!

NGSS MS-PS1-1

Curriculum Bundle

Atomic Composition of Simple Molecules

- ✓ 4 Lessons and 7 Activities
- ✓ Everything You Need to Teach NGSS MS-PS1-1



NGSS MS-PS1-4

Curriculum Bundle

Thermal Energy & Particle Motion

- ✓ 2 Lessons and 5 Activities
- ✓ Everything You Need to Teach NGSS MS-PS1-4

NGSS MS-PS1-3

Curriculum Bundle

Synthetic Materials and Natural Resources

- ✓ 1 Lesson and 3 Activities
- ✓ Everything You Need to Teach NGSS MS-PS1-3



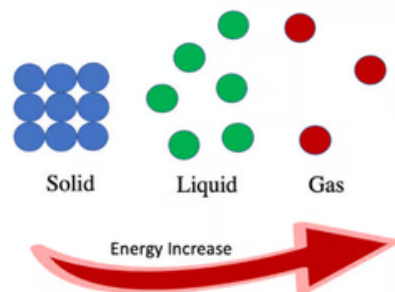
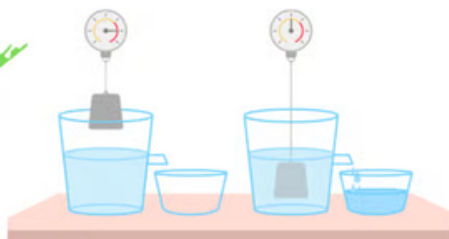
NGSS MS-PS1-7

Curriculum Bundle

Identifying Matter by Density

- ✓ 1 Complete Lesson, 5 Activities
- ✓ Everything You Need to Teach NGSS MS-PS1-7

New York State
Specific Standard



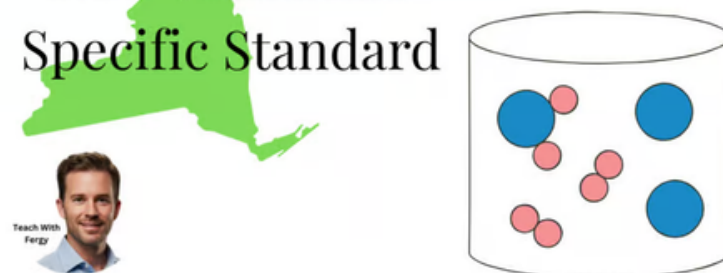
NGSS MS-PS1-8

Curriculum Bundle

Demonstrate that Mixtures are Combinations of Substances

- ✓ 2 Complete Lessons, 4 Activities
- ✓ Everything You Need to Teach NGSS MS-PS1-8

New York State
Specific Standard



Everything You Need to Teach Middle School Structure and Properties of Matter in New York State using NYSSLS

Complete Lessons

The Atomic Theory

- Atomic Theory
- Atom Size
- Democritus
- Dalton – Ball Model
- J.J. Thompson – Raisin Bun Model
- Rutherford – Gold Foil Experiment
- Bohr – Rutherford Model
- Bohr – Rutherford Diagrams



Google Slides
Versions
Google Classroom

Synthetic Materials

Included in your bundle:

- Synthetic vs Natural Materials
- Advantage and Examples of Natural Materials
- How Synthetic Materials are Made
- Examples of Synthetic Materials
- Environmental Impact of Synthetic Materials
- Medicines



Middle School

TWF

Synthetic vs. Natural Materials

Examples include nylon, polyester, and spandex

Natural materials are materials made directly by living things

Examples include cotton, silk, and wool

Synthetic vs. Natural Materials

Synthetic materials are materials made through a chemical reaction

Examples include nylon, polyester, and spandex

Natural materials are materials made directly by living things

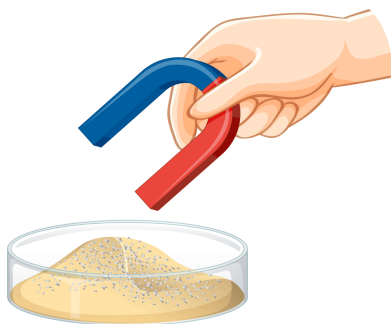
Examples include cotton, silk, and wool

Student and Teacher versions of the presentations

The Atom is Really, Really Small!

Videos embedded directly into the slides. One-click access.

Engaging Activities



Pure Substances and Mixtures Lab Station Activity

7 Lab Station Activities to get your kids out of their seats and engaged in their learning

Designing a Thermal Energy Transfer Device Using Chemical Reactions

4 activities
2 endothermic and 2 exothermic reactions

Reading Comprehension Passage & Questions

Biofuels from Algae

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions

The Standard is Explained and the Resources it Incorporates are Outlined

MS. Structure and Properties of Matter – New York State – Middle School

MS-PS1-1. Develop models to describe the atomic composition of simple molecules and extended structures. [Clarification Statement: Emphasis is on developing models of molecules that vary in complexity. Examples of simple molecules could include ammonia and methanol. Examples of extended structures could include sodium chloride or diamonds. Examples of molecular-level models could include drawings, 3D ball and stick structures, or computer representations showing different molecules with different types of atoms.] [Assessment Boundary: Assessment does not include valence electrons and bonding energy, discussing the ionic nature of subunits of complex structures, or a complete description of all individual atoms in a complex molecule or extended structure is not required.]

Resources:

- Atomic Structure and Notation Lesson
- Atomic Theory and Model Lesson
- Atoms - History and Theory – Scavenger Hunt
- Atoms Elements and Compounds Digital Interactive Notebook – Chapters 2, 3, and 4
- Atoms Elements and the Periodic Table Word Search and Scramble
- Crash Course Chemistry the History of Atomic Chemistry
- The Periodic Table Lesson
- Counting Atoms in Compounds Worksheet
- Chemical Symbols Formulas and Compounds Lesson

MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society. [Clarification Statement: Emphasis is on natural resources that undergo a chemical process to form the synthetic material. Examples of new materials could include new medicine, foods, and alternative fuels.] [Assessment Boundary: Assessment is limited to qualitative information.]

Resources:

- Synthetic Materials Lesson
- Synthetic Material Research Assignment
- Biofuels from Algae Reading
- The Development of Synthetic Insulin Reading

MS-PS1-4. Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed. [Clarification Statement: Emphasis is on qualitative molecular-level models of solids, liquids, and gases to show that adding or removing thermal energy increases or decreases kinetic energy of the particles until a change of state occurs. Examples of models could include drawings and diagrams. Examples of particles could include molecules or inert atoms. Examples of pure substances could include water, carbon dioxide, and helium.]

Resources:

- Relationship Between Kinetic Energy Mass Speed Lesson
- Particle Motion Temperature and States Lesson
- The Insulator – Thermal Insulator Challenge
- Thermal Energy Change Reactions Experiments
- Matter and the Particle Theory Lab Station Activity
- Matter and Particle Theory Science Word Sprint
- Matter and the Particle Theory Infographic Assignment



MS-PS1-7. Use evidence to illustrate that density is a property that can be used to identify samples of matter. [Clarification Statement: Emphasis should be on students measuring the masses and volumes of regular and irregular shaped objects, calculating their densities, and identifying the samples of matter.]

Resource:

- Mass, Volume, Density, and Buoyancy Lesson
- Mass, Volume, Density, and Buoyancy – Scavenger Hunt Activity
- Mass, Volume, Density, & Buoyancy Lab Station Activity
- How Do Ships Float – Reading
- STEM Challenges
 - Aluminum Foil Boat - STEM Engineering Challenge
 - Paddle Boat Challenge – STEM Engineering Challenge

MS-PS1-8. Plan and conduct an investigation to demonstrate that mixtures are combinations of substances. [Clarification Statement: Emphasis should be on analyzing the physical changes that occur as mixtures are formed and/or separated. Examples of common mixtures could include salt water, oil and vinegar, and air.] [Assessment boundary: Assessment is limited to separation by evaporation, filtration and magnetism.]

Resource:

- Pure Substances and Mixtures – Lesson
- Pure Substances and Mixtures - Lab Station Activity
- Desalination of Drinking Water Comprehension – Reading
- Solutions and Mechanical Mixtures – Lesson
- Oil Spills – Reading
- PBL - Mixtures - Mix It Up!

Who is this Bundle for?

- Teachers who teach middle school science in **New York State** and use **NYSSLS**
- Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to meet the standard
- Teachers who don't have time to develop their own resources or organize what to teach and when

