

California Grade 7 Science

Full Year Science Curriculum

Preferred Integrated Model



- ✓ **Complete Curriculum for California 7th Grade Preferred Integrated Science Instruction Model**
- ✓ **Over 150 Resources Included, Grouped into Standard and Presented in the Preferred Order According to the California Department of Education**
- ✓ **Save you over 75%**



NGSS Included

- **MS-LS1 From Molecules to Organisms: Structures and Processes**
- **MS-LS2 Ecosystems: Interactions, Energy, and Dynamics**
- **MS-ESS2 Earth's Systems**
- **MS-ESS3 Earth and Human Activity**
- **MS-PS1 Matter and Its Interactions**
- **MS-ETS1 Engineering Design**

MS-LS1 California Grade 7 Science - Full Standard

Preferred Integrated Model

- ✓ Molecules to Organisms: Structures and Processes
- ✓ Complete MS-LS1 Standard for California 7th Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



MS-LS2 California Grade 7 Science - Full Standard

Preferred Integrated Model

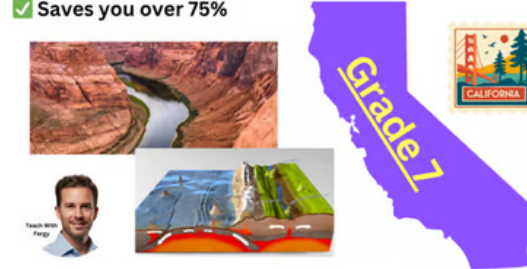
- ✓ Interactions, Energy, and Dynamics
- ✓ Complete MS-LS2 Standard for California 7th Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



MS-ESS2 California Grade 7 Science - Full Standard

Preferred Integrated Model

- ✓ Earth's Systems
- ✓ Complete MS-ESS2 Standard for California 7th Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



MS-ESS3 California Grade 7 Science - Full Standard

Preferred Integrated Model

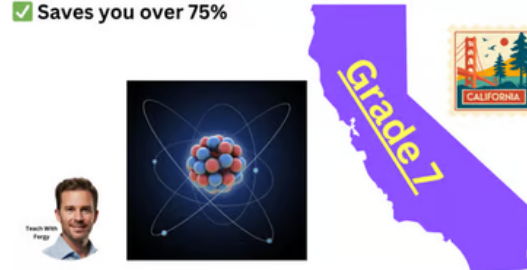
- ✓ Earth and Human Activity
- ✓ Complete MS-ESS3 Standard for California 7th Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



MS-PS1 California Grade 7 Science - Full Standard

Preferred Integrated Model

- ✓ Matter and its Interactions
- ✓ Complete MS-PS1 Standard for California 7th Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



MS-ETS1 California Grade 7 Science - Full Standard

Preferred Integrated Model

- ✓ Engineering Design
- ✓ Complete Standard for California 7th Grade Preferred Integrated Science Instruction Model
- ✓ Saves you over 75%



BONUS - ENTIRE STORE ACCESS!

As a special bonus for purchasing, you will get access to my ENTIRE STORE for 6 months. That means unlimited access to all my

- ✓ Lessons**
- ✓ Lab Station Activities**
- ✓ Scavenger Hunts**
- ✓ Review Activities**
- ✓ Assessments and so much more!**

TWIF



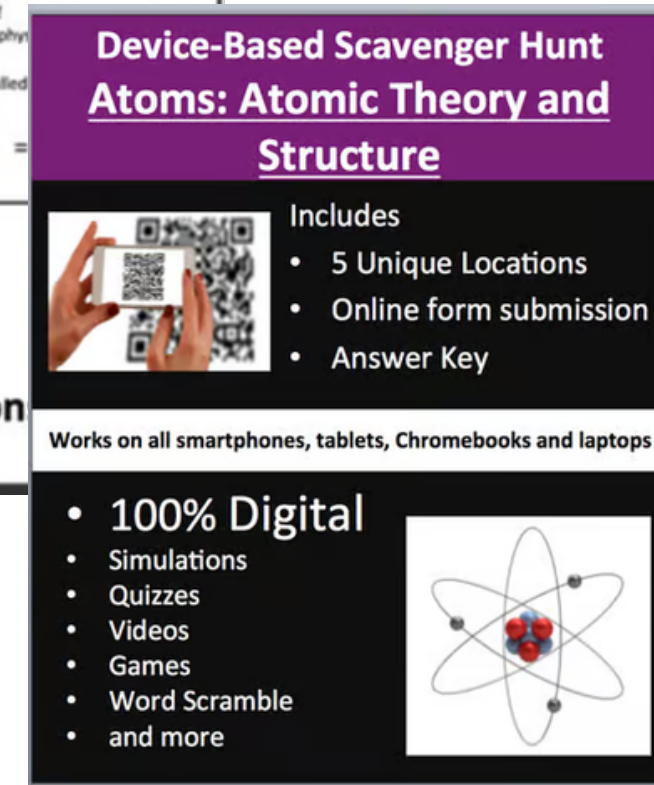
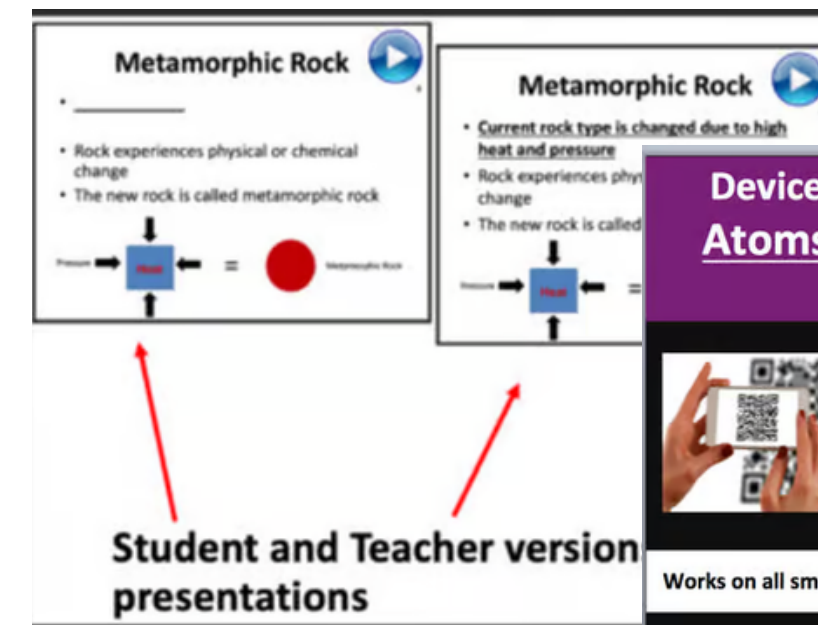
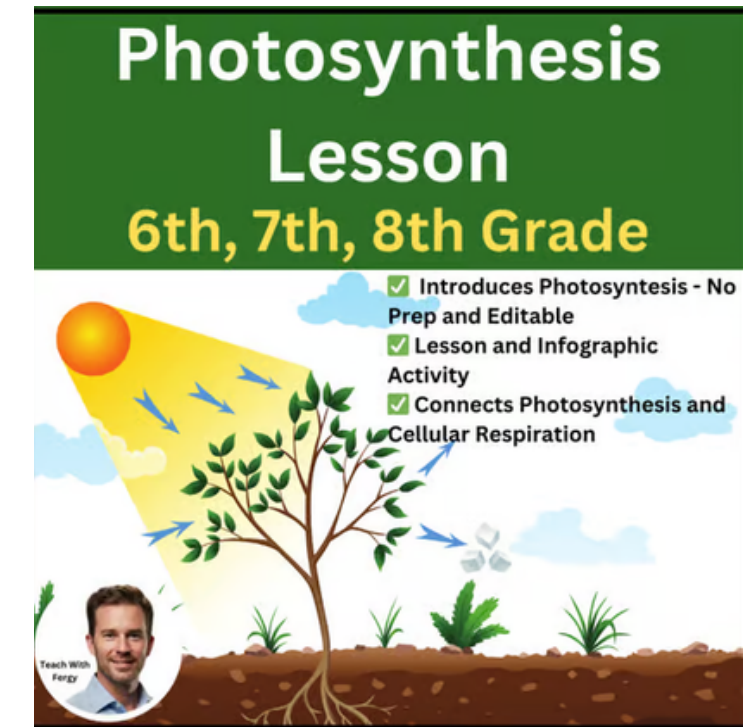
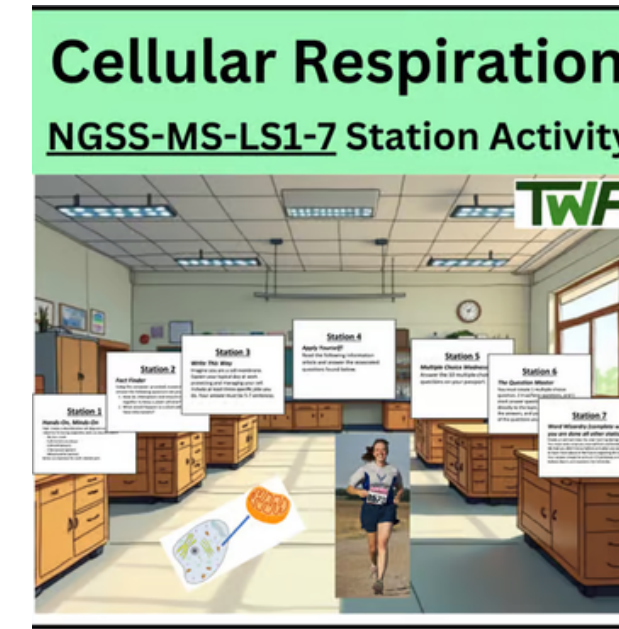
Classroom Fit Guarantee

I want you to feel confident when you purchase from Teach With Fergy. If a resource is not the right fit for your students, simply contact me and I'll provide double your purchase amount in store credit toward another resource in my store.



Everything You Need to Teach 7th Grade Science in California using the Preferred Model

- Lesson Bundles
- Lessons in PowerPoint and Google
- Homework and/or Worksheets
- Provided for Many Lessons
- Teacher and Student Versions of Each Lesson
- Many Activities, Projects, Review Activities, STEM Challenges



Each Sub-Standard is Explained and the Resources it Incorporates are Outlined

Next Generation Science Standards Package MS PS1 Matter and its Interactions

Note: There may be resources that overlap between the standards. Simply choose the order that best fits your classroom. Also, there are more resources here than you will most likely decide to use. I have provided extra so you can make the best decision for your students on what is best to include.

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

MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred. [Clarification Statement: Examples of reactions could include burning sugar or steel wool, fat reacting with sodium hydroxide, and mixing zinc with hydrogen chloride.] [Assessment Boundary: Assessment is limited to analysis of the following properties: density, melting point, boiling point, solubility, flammability, and odor.]

Resources:

- Physical and Chemical Properties Lesson
- Physical and Chemical Changes – Scavenger Hunt
- Physical and Chemical Properties and Changes Science Word Sprint
- Physical and Chemical Properties Changes Lab Station Activity
- Physical and Chemical Properties Word Search and Scramble Activity
- Matter Lesson
- Chemical Reactions Lesson
- Density and Buoyancy 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

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-PS1-5. Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved. [Clarification Statement: Emphasis is on law of conservation of matter and on physical models or drawings, including digital forms, that represent atoms.] [Assessment Boundary: Assessment does not include the use of atomic masses, balancing symbolic equations, or intermolecular forces.]

Resources:

- Matter Exploring the World Around You Reading
- Atomic Structure and Notation Lesson
- Atoms - History and Theory – Scavenger Hunt
- Crash Course Chemistry The History of Atomic Chemistry
- Law of Conservation of Mass Lesson

MS-PS1-6. Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes. * [Clarification Statement: Emphasis is on the design

Complete Lessons

Photosynthesis Lesson

6th, 7th, 8th Grade

- ✓ Introduces Photosynthesis - No Prep and Editable
- ✓ Lesson and Infographic Activity
- ✓ Connects Photosynthesis and Cellular Respiration



Rock Types and the Rock Cycle

MIDDLE SCHOOL – EARTH SCIENCE

- Earth's Layers
- The Plate Tectonic Theory
- Earth's Primary & Secondary Plates
- Continental Drift
- The Changing Earth
- Plate Boundaries
 - Divergent, Convergent, & Transform Boundaries



Physical and Chemical Properties and Changes

- What is Matter
- States of Matter
- Chemical vs. Physical Properties
- Qualitative vs. Quantitative Properties
- Chemical vs. Physical Change
- Energy



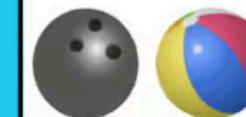
Google Slides and Versions in Google Classroom

Relationship Between Kinetic Energy Mass and Speed

Included in your Lesson:

- What Energy Is
- Kinetic Energy
- Kinetic Energy and Mass
- Kinetic Energy and Speed
- Examples
- Practice
- Student-Designed Experiment

Middle School



TWF

Google Access

Thank you for your purchase. Clicking the link button below will automatically create a copy of the Google resources and place them into your Google Drive. You'll find the folder inside the 'Shared with me' section on the left side of your Drive.

Important: Before you click, make sure you're signed in to the Google account you'd like the resources placed into. If the resources are added to the wrong account, simply sign out and then into the correct one and repeat the process.

Click here to place a copy of your resources into your Google account

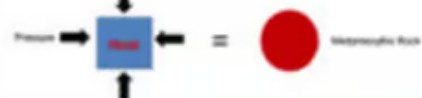
TWF

Google Classroom Ready
One-Click Google Slides Access

Homework and Worksheets

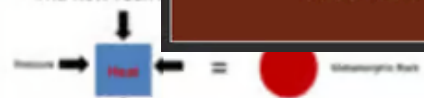
Metamorphic Rock

- Rock experiences physical or chemical change
- The new rock is called metamorphic rock



Meta

- Current rock type
- Heat and pressure
- Rock experiences change
- The new rock is called metamorphic rock



Student and Teacher versions of the presentations

Kinetic Energy

The amount of energy an object has depends on its mass and how fast it is going.



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

The Law of Conservation of Mass Worksheet

For each equation below, count the atoms on the reactant side and product side and determine if they are following the law of conservation of mass. Circle the checkmark if it does and the 'X' if it doesn't.

Does the equation follow the law of conservation of mass?

1. $2\text{N}_2 + 2\text{O}_2 \rightarrow 2\text{N}_2\text{O}_2$

Reactants	Products
N	N
O	O

✓ X

2. $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}_2$

Reactants	Products
H	H
O	O

✓ X

3. $\text{N}_2 + 2\text{H}_2 \rightarrow 3\text{NH}_3$

Reactants	Products
N	N
H	H

✓ X

4. $3\text{Li} + \text{AlCl}_3 \rightarrow 3\text{LiCl} + \text{Al}$

Reactants	Products
Li	Li
Al	Al
Cl	Cl

✓ X

5. $3\text{Rb} + \text{P} \rightarrow \text{Rb}_3\text{P}$

Reactants	Products
Rb	Rb
P	P

✓ X

6. $\text{FeBr}_3 + \text{Na} \rightarrow \text{Fe} + 2\text{NaBr}$

Reactants	Products
Fe	Fe
Br	Br
Na	Na

✓ X

7. $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$

Reactants	Products
H	H
Cl	Cl
Na	Na
O	O

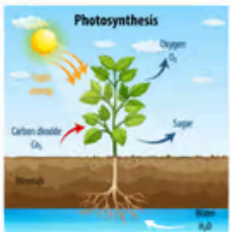
✓ X

Activities, Worksheets, Projects, and Review

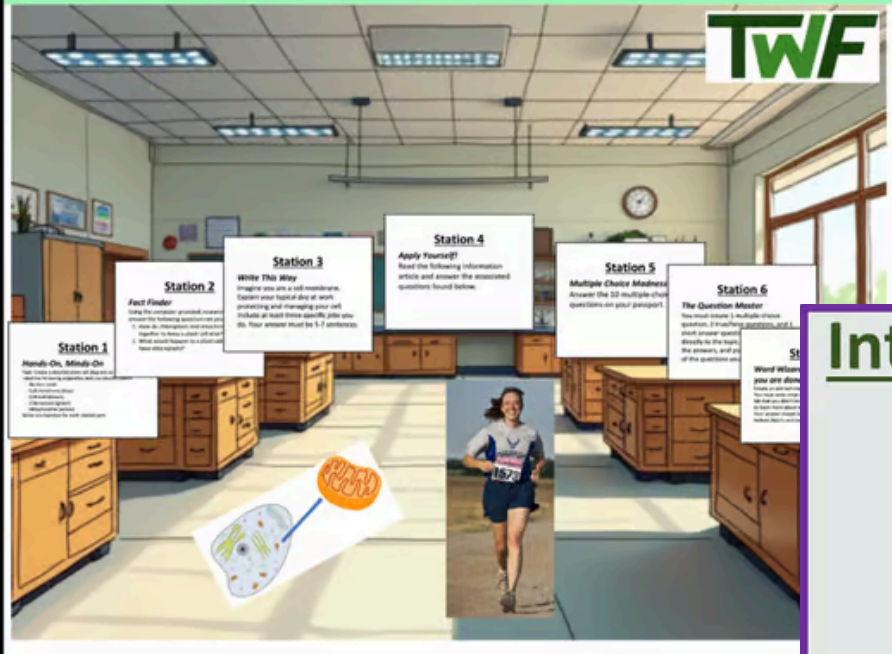
PHOTOSYNTHESIS INFOGRAPHIC ASSIGNMENT

Middle School

- Students are tasked with creating an infographic that demonstrates understanding of photosynthesis
- Full rubric included

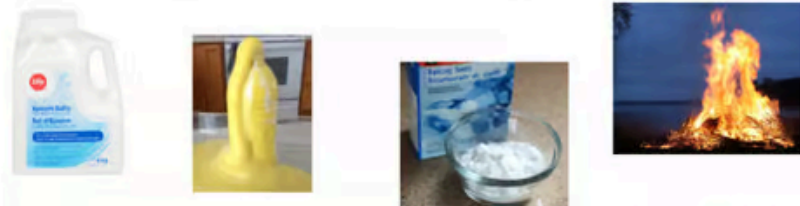


Cellular Respiration NGSS-MS-LS1-7 Station Activity



Thermal Energy Change Reactions Experiments

These demonstrations cover NGSS MS-PS1-6 – Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

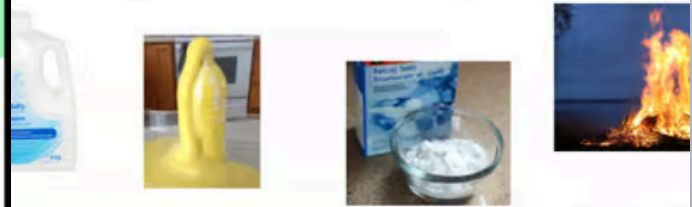


NGSS MS-PS1-6



Thermal Energy Change Reactions Experiments

These demonstrations cover NGSS MS-PS1-6 – Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.



NGSS MS-PS1-6



Device-Based Scavenger Hunt Atoms: Atomic Theory and Structure



- Includes
- 5 Unique Locations
 - Online form submission
 - Answer Key

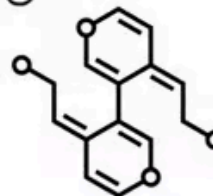
Works on all smartphones, tablets, Chromebooks and laptops

Crash Course Biology 2.0 #20: Carbon & Biological Molecules: What is Life Made Of?

- ✓ Classroom Ready - Just Print and Go!
- ✓ Active Engagement - Keep Students' Attention

Direct Video Link Included

WATCH VIDEO



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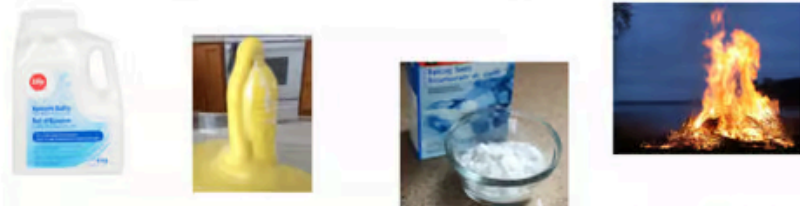
Carbon
12.011

Includes Student Copy and Answer Keys



Thermal Energy Change Reactions Experiments

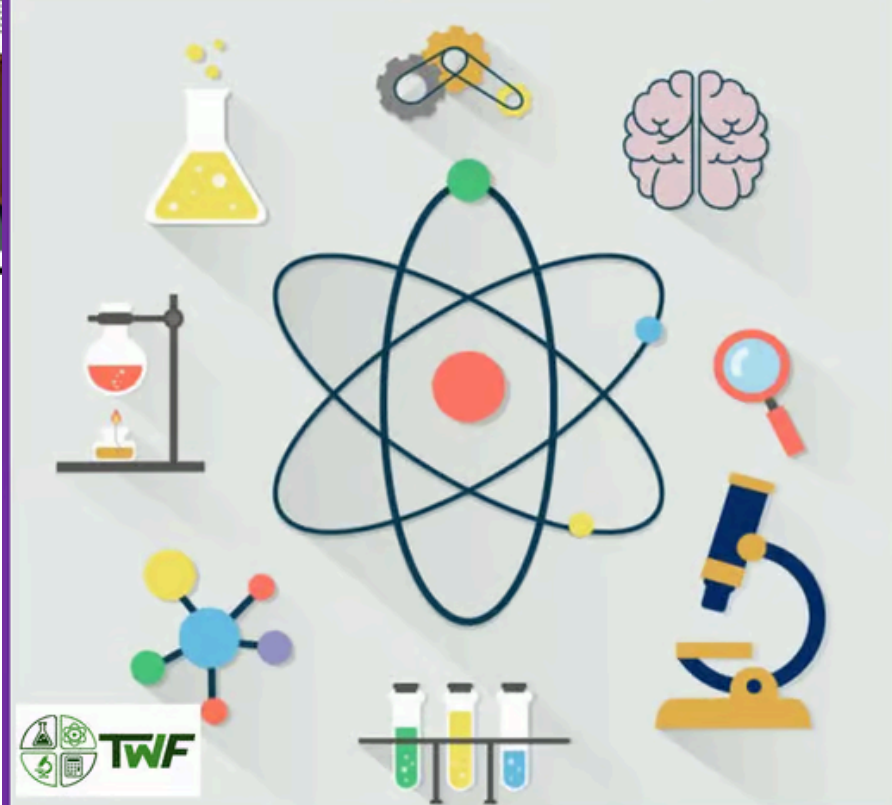
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NGSS MS-PS1-6

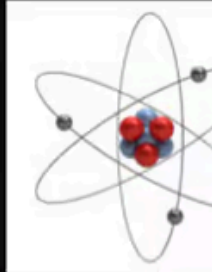


Introductory Chemistry Labs



100% Digital

Simulations
Quizzes
Videos
Games
Word Scramble
and more



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



Who is this Bundle for?

- **Teachers who teach Grade 7 science in California and who use the ‘Preferred Integrated Model’**
- **Teachers who want a variety of resources at their fingertips in order to meet the standards**
- **Teachers who don’t have time to develop their own resources or organize what to teach and when**