

TEKS Grade 7 - S.7.7 Bundle

FORCE, MOTION, AND ENERGY

- ✓ 7th Grade Science TEKS Curriculum Bundle - S.7.7.A, S.7.7.B, S.7.7.C, S.7.7.D
- ✓ Variety of Lesson and Activity Types
- ✓ Digital + Printable Formats



NEW 2024



Resources Included

- ✓ **Complete S.7.7 - 7th Grade Science TEKS Curriculum** | Force, Motion, and Energy.
- ✓ **Variety of Resource Types** - Includes lessons, activities, assessments, and more.
- ✓ **Daily Teaching Timeline Included** - Includes a ready-to-go, daily teaching timeline.
- ✓ **Digital + Printable Formats** - Ideal for classroom, hybrid, or remote learning environments with flexible access options.

Resources Included

TEKS Grade 7 - S.7.7.A Calculate Average Speed Using Distance and Time

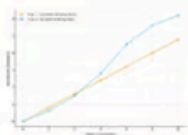
- ✓ 7th Grade Science TEKS Curriculum Bundle
- ✓ Variety of Lesson and Activity Types
- ✓ Digital + Printable Formats



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TEKS Grade 7 - S.7.7.C Measuring and Recording Motion using Distance-Time Graphs

- ✓ 7th Grade Science TEKS Curriculum Bundle
- ✓ Variety of Lesson and Activity Types
- ✓ Digital + Printable Formats



NEW 2024

TEKS Grade 7 - S.7.7.B Speed and Velocity in Linear Motion

- ✓ 7th Grade Science TEKS Curriculum Bundle
- ✓ Variety of Lesson and Activity Types
- ✓ Digital + Printable Formats



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TEKS Grade 7 - S.7.7.D Newton's First Law of Motion

- ✓ 7th Grade Science TEKS Curriculum Bundle
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NEW 2024

Daily Teaching Timeline Included for Each Standard

TEKS – Grade 7

5.7.7 Force, motion, and energy. The student describes the cause-and-effect relationship between force and motion.

5.7.7.A – Calculate average speed using distance and time measurements from investigations.

Resources:

- Calculating Average Speed, Velocity, and Displacement – Lesson
- Speed Challenge - Activity

TEKS Science Daily Teaching Plan

Lesson Length: 55 minutes

Timeframe: 2 Days

Day	Lesson/Activity
Day 1	Calculating Average Speed, Velocity, and Displacement – Lesson
Day 2	Calculating Average Speed, Velocity, and Displacement – Lesson Speed Challenge

TEKS Science Daily Teaching Plan

Lesson Length: 55 minutes,
Timeframe: 4 Days

Calculating Average Speed, Velocity, and Displacement – SE Lesson

Engagement Phase
Your students will watch the video "Gridiron Physics" and answer the questions found in the file – *Engagement – Gridiron Physics*

Teacher Notes:

- The video is about 5 minutes long.
- You may need to show the video more than once or pause when an answer is given to one of the questions.

Duration: 20 – 30 minutes

Teacher Role – Facilitate learning and guide student understanding

- Goals**
- ☐ Connect student's experiences
 - ☐ Create interest
 - ☐ Ask questions
 - ☐ Understand the objectives of the lesson.

Exploration Phase

Exploration – Lab Station Activity

In groups of 2-3, have your students complete *Exploration – Lab Station Activity*. Once they're done, they will submit their passport to you.

Teacher Notes:

The complete instructions for my Lab Station activity can be found in the *START HERE – Instructions* file.

Duration: 1 hour

Teacher Role – Facilitate learning and guide student understanding

- Goals**
- ☐ Students receive real experience with the topic
 - ☐ Students use and develop creative thinking skills
 - ☐ Students make observations, record results, and make connections

Assessment Phase

Exit Point Lesson

The lesson is focused on

This lesson is designed to

There is one element of

Interact and connect

The lesson covers

➤ Motion

➤ Scalar quantities

➤ Average speed

➤ $v = d/t$

➤ Linear motion

➤ Velocity

➤ Displacement

➤ Position

TEKS – Grade 7

5.7.7 Force, motion, and energy. The student describes the cause-and-effect relationship between force and motion.

5.7.7.C – Measure, record, and interpret an object's motion using distance-time graphs.

Resources:

- Ramp and Toy Car Motion Investigation
- Walking Motion Lab

TEKS Science Daily Teaching Plan

Lesson Length: 55 minutes

Timeframe: 2 Days

Day	Lesson/Activity
Day 1	Ramp and Toy Car Motion Investigation
Day 2	Walking Motion Lab

TEKS – Grade 7

5.7.6 Matter and energy. Matter and energy. The student distinguishes between elements and compounds, classifies changes in matter, and understands the properties of solutions. The student is expected to:

5.7.6.A – The student is expected to compare and contrast elements and compounds in terms of atoms and molecules, chemical symbols, and chemical formulas.

Resources:

- Atomic Structure and Notation – Lesson
 - Subatomic Particle Worksheet
- Chemical Symbols, Formulas and Compounds – Lesson
 - Counting Atoms Worksheet
- Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle
 - Chapter 1 - The Particle Theory and Classification of Matter
 - Chapter 2 - Atomic Theory
 - Chapter 3 - Atomic Structure and Notation
 - Chapter 4 - The Periodic Table
 - Chapter 5 - Chemical Symbols, Formulas, and Compounds

TEKS Science Daily Teaching Plan

Lesson Length: 55 minutes

Timeframe: 2 Weeks, 10 Days

Day	Lesson/Activity
Day 1	Atomic Structure and Notation – Lesson Subatomic Particle Worksheet
Day 2	Atomic Structure and Notation – Lesson Subatomic Particle Worksheet
Day 3	Chemical Symbols, Formulas and Compounds – Lesson Counting Atoms Worksheet
Day 4	Chemical Symbols, Formulas and Compounds – Lesson Counting Atoms Worksheet
Day 5	Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle Chapter 1 - The Particle Theory and Classification of Matter
Day 6	Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle Chapter 2 - Atomic Theory
Day 7	Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle Chapter 3 - Atomic Structure and Notation
Day 8	Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle Chapter 4 - The Periodic Table
Day 9	Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle Chapter 5 - Chemical Symbols, Formulas, and Compounds
Day 10	Atoms, Elements, and Compounds - Digital Interactive Notebook Bundle Review and Practice Activities

TEKS – Grade 7

5.7.7 Force, motion, and energy. The student describes the cause-and-effect relationship between force and motion.

5.7.7.D – The student is expected to analyze the effect of balanced and unbalanced forces on the state of motion of an object using Newton's First Law of Motion.

Resources:

- Newton's 1st Law of Motion - Lesson
- Newton's 1st Law of Motion - Activities

TEKS Science Daily Teaching Plan

Lesson Length: 55 minutes

Timeframe: 3-4 Days

Day	Lesson/Activity
Day 1	Newton's 1st Law of Motion - Lesson
Day 2	Newton's 1st Law of Motion – Activities • Activity 1: Coin and Card Inertia Challenge
Day 3	Newton's 1st Law of Motion – Activities • Activity 2: Balloon Rocket Motion Test
Day 4	Newton's 1st Law of Motion – Activities • Activity 3: Chair Push and Friction Investigation

Lessons, Activities, Assessments, and more

Atomic Structure and Notation

- Atoms and subatomic particles
 - Protons, Neutrons, and Electrons
- Atomic Number
- Atomic Mass
- Isotopes
- Calculating Average Atomic Mass
- Periodic Table Notation
- Chemical Symbol



Periodic Table

- Before the Periodic Table
- Mendeléeev
- The Current Periodic Table
- The Elements
- Atomic Number
- Atomic Mass
- Valence Electrons
- Metals, Non-Metals, and Metalloids
- Columns and Families
- Rows and Periods



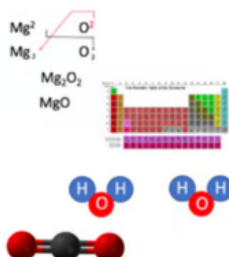
Newton's First Law of Motion

- Teaches: Newton's 1st Law of Motion including Theory, Applications, and Student Activities.
- Ideal for Middle School Science
- No-Prep Resource



Chemical Formulas & Compounds

- Symbols
- Element Names
- Counting Atoms
- Naming Compounds
- Combining Capacity
- Building a Molecule
- Criss-Cross Rule



Device-Based Scavenger Hunt: Elements and the Periodic Table

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

Works on all smartphones, tablets, Chromebooks and laptops

- 100% Digital
- Simulations
- Quizzes

The Periodic Table Task Cards and Review Activity

Perfect for learning or reviewing The Periodic Table

- 15 Task Cards + Activity
- Elements, Rows, Groups
- Atomic Mass and Families

This Task Card Resource is unique. It can be utilized in a clue gathering, puzzle solving.

1. Silicon is a found in group _____

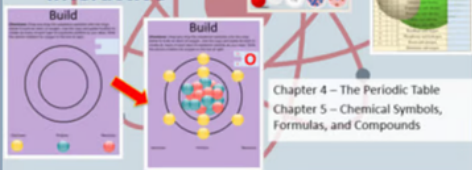
2. This element is a found in period 4, _____

Atoms, Elements, and Compounds

Digital Interactive Notebook

Chapter 1 – Particle Theory and Classification of Matter
Chapter 2 – Atomic Theory
Chapter 3 – Atomic Structure and Notation

100% Digital and Interactive



Elements of the Periodic Table Word Search and Scramble

THREE Activities in One!

- Basic 25-Term Word Search
- Scrambled Words Word Search
- Word Scramble and Define Activity



Element Names and Symbols

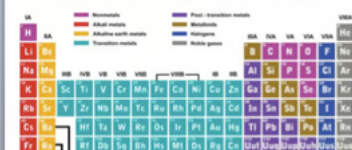
TWF BINGO

Vanadium	Cobalt	Beryllium	Neon
Silver	Hydrogen	Osmium	Platinum
Aluminum	Calcium	Palladium	Antimony
Silicon	Iron	Zinc	Germanium



The Periodic Table Lab Station Activity

PERIODIC TABLE OF THE ELEMENTS



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

Who is this Bundle for?

- **Teachers who teach 7th grade science in Texas**
- **Teachers who want multiple resources at their fingertips including lessons and a variety of activities, in order to prepare their students for the STAAR Science Exam**
- **Teachers who don't have time to develop their own resources or organize what to teach and when**

