



Science – Seventh Grade 2026-27

First Quarter

SCIENCE

Week 1, Aug 3-7 (4-day week)

Unit 1: Matter & Its Interactions

7.PS1.1 Evaluate and communicate information that all substances in the universe are made of many different types of atoms that combine in various ways.

Essential Question:

Why are there so many different substances in the universe if only a limited number of atoms exist?

Week 2, Aug 10-14

7.PS1.1 Continued

7.PS1.2 Collect and analyze data about the physical properties of the components of a mixture to use as evidence that the identities of the components change during a chemical reaction.

Essential Question:

How can we use data about physical properties to tell if a substance is the same or has changed?

Week 3, Aug 17-21

7.PS1.2 Continued

Unit 1 Matter and Its Interactions (7.PS1.1-2)

Week 4, Aug 24-28

Unit 2 Changes in Matter

7.PS1.3 Develop a model to explain how changes to a system can be explained by changes in temperature and/or pressure and the effect of those changes on particle motion and/or spatial arrangement.

Essential Question:

How do pressure and temperature affect the movement and arrangement of particles in solids, liquids, and gases?

Week 5, Aug 31-Sept 4

7.PS1.4 Use computational thinking to demonstrate that all atoms in the reactants are present in the products of a chemical reaction, supporting the Law of Conservation of Mass.

Essential Question:

How can we use counting and modeling to prove that atoms are conserved during a chemical reaction?

Week 6, Sept 7-11 (4-day week)

7.PS3.1 Plan and carry out an investigation to demonstrate that the interaction between substances can cause chemical reactions that release or store energy.

Essential Question:

How can we tell if a chemical reaction releases energy or stores energy?

Week 7, Sept 14-18

7.PS3.1 Continued

Week 8, Sept 21-25

Unit 2 Changes in Matter (7.PS1.3-4, 7.PS3.1)

District Science Checkpoint Assessment 1

7.PS1.1-4, 7.PS3.1

Week 9, Sept 28-Oct 2

Re-testing in Groups

Data Conferences

Begin teaching 7.LS1.1 (Q2 Week 1)



Science – Seventh Grade 2026-27

Second Quarter

SCIENCE

Week 1, Oct 12-16

Unit 3: Cell Structures

7.LS1.1 Develop models that identify and explain the structure and function of major cell organelles and structures (i.e., vacuoles, chloroplasts, lysosomes, mitochondria, cell membrane, cell wall, nucleus, cytoplasm) as they contribute to the life activities within a system.

Essential Question:

Why is the cell considered a system, and how do its parts work together?

Week 2, Oct 19-23

7.LS1.1 Continued

Week 3, Oct 26-30

7.LS1.2 Obtain information about the cellular structures of unicellular and multicellular organisms across kingdoms and domains in order to compare how these structures support the functions (i.e., obtain food, water, waste disposal, and the environment in which they live) of the organism. **(focus on cellular differences in Kingdoms)**

Essential Question:

Why do organisms in different kingdoms and domains have different cellular structures?

Unit 3 Assessment Cell Structure (7.LS1.1-2)

Week 4, Nov 2-6 (4-day week)

Unit 4 Body Systems

7.LS1.3 Develop and use a hierarchical model of a multicellular organism to explain that the body of humans and other animals is a system of multiple interacting subsystems specialized for particular body functions [e.g., digestion, respiration, excretion, circulation, sensation (nervous and integumentary), locomotion (musculoskeletal), reproduction, and immunity].

Essential Question:

How do different body systems and their substructures work together to keep an organism alive and healthy?

Week 5, Nov 9-13

7.LS1.3 continued

Week 6, Nov 16-20

7.LS1.5 Obtain and communicate information to provide evidence that illustrates the causal relationships between information received by sensory receptors and behavior, both immediate and over longer time scales.

Essential Question:

How do we use evidence to explain the connection between what we sense and how we act?

Week 7, Nov 23-24 (2 days)

7.ETS1.1 Examine a problem from the medical field (e.g., prosthetic limbs, organ transplants) and design a solution taking into consideration the criteria, constraints, and relevant scientific principles of the problem that may limit possible solutions.

Essential Question:

How can we use scientific principles and design thinking to develop effective solutions to real-world medical problems while considering limitations and constraints?

Week 8, Nov 30-Dec 4

Continue 7.ETS1.1

Unit 4 Assessment Body Systems (7.LS1.3 & 1.5, 7.ETS.1.1)

Week 9, Dec 7-11

Unit 5: Environment and Reproduction

7.LS1.4 Analyze data to determine the effect of genetic factors (e.g., specific breeds of organisms and their typical sizes) and environmental factors (e.g., food and space availability) that influence the growth of plants and animals.

Essential Question:

How can we use data to show how growth is affected by genes, the environment, or both?

Week 10, Dec 14-18 (4.5 days)

District Science Checkpoint Assessment 2

7.LS1.1-3, 7.LS1.5, 7.ETS1.1

Re-testing in Groups

Data Conferences



Science – Seventh Grade 2026-27

Third Quarter

SCIENCE

Week 1, Jan 6-8 (3-day week)

Continue Unit 5: Environment and Reproduction

7.LS1.6 Develop and use a model (e.g., Punnett squares, diagrams, and simulations) as evidence to demonstrate why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.

Essential Question:

How do models help us understand genetic similarities and differences in offspring?

Week 2, Jan 11-15

7.LS1.6 Continued

Unit 5 Assessment Environment and Reproduction

(7.LS1.4 & 7.LS1.6)

Week 3, Jan 18-22 (4-day week)

Unit 6 Genetics

7.LS3.1 Evaluate and communicate information that chromosomes contain many distinct genes which code for the production of proteins, impacting the traits of an individual.

Essential Question:

How do genes code for proteins, and why are proteins important for living organisms?

Week 4, Jan 25-29

7.LS3.2 Construct an explanation to describe how the impact of changes to genes (i.e., mutations) located on chromosomes may result in harmful, beneficial, or neutral effects to the structure and function of the organism.

1. Genotype vs Phenotype

2. Mutations: Benefit vs. Harm vs. Neutral

Essential Question:

How can a mutation in a gene affect the structure and function of a protein?

Week 5, Feb 1-5

7.LS3.3 Predict the probability of individual dominant and recessive alleles to be transmitted from each parent to offspring during sexual reproduction and represent the phenotypic and genotypic patterns using ratios.

Essential Question:

How does the combination of alleles from each parent affect the probability of traits in the offspring?

Unit 6 Assessment Genetics (7.LS3.1, 7.LS3.2, & 7.LS3.3)

Week 6, Feb 8-12 (4-day week)

Unit 7: Cycles of Matter

7.LS1.7 Develop a model using evidence that explains the process of photosynthesis, cellular respiration, and anaerobic respiration in the cycling of matter and flow of energy into and out of organisms.

Essential Question:

How do photosynthesis and cellular respiration move matter and energy through ecosystems?

Week 7, Feb 15-19 (4-day week)

7.PS3.2 Develop a model to explain how food is utilized through chemical reactions to form new molecules that support growth, resulting in the release of energy as matter moves through an organism.

Essential Question:

What chemical changes happen to food as it moves through an organism?

Week 8, Feb 22-26 (4-day week)

7.PS3.2 Continued

Week 9, Mar 1-5

Review/Reteach

Unit 7 Assessment Assessment Cycle of Matter (7.LS1.7, 7.PS3.2)

Week 10, Mar 8-12

District Science Checkpoint Assessment 3

7.LS1.4, 7.LS1.6, 7.LS3.1-2, 7.LS1.7, 7.PS3.2

Re-testing in Groups

Data Conferences



Science – Seventh Grade 2026-27

Fourth Quarter

SCIENCE

Week 1, Mar 22-26 (4-day week)

7.LS.2.1 Develop a model to depict the cycling of matter, including the flow of energy among biotic and abiotic parts of an ecosystem.

Essential Question: How do photosynthesis and cellular respiration move matter and energy flow through an ecosystem?

Week 2, Mar 29-Apr 2 (4-day week)

PBL/Project/Enrichment - Life Science standards

Week 3, Apr 5-9

PBL/Project/Enrichment - Earth Science standards

Week 4, Apr 12-16

STEM PBL/Project/Enrichment

Week 5, Apr 19-23

Earth Day April 22

STEM PBL/Project/Enrichment

Week 6, Apr 26-30**STEM PBL/Project/Enrichment****Week 7, May 3-7****STEM PBL/Project/Enrichment****Week 8, May 10-14****STEM PBL/Project/Enrichment****Week 9, May 17-21****STEM PBL/Project/Enrichment****Week 10, May 24-27 (3.5-day week)****STEM PBL/Project/Enrichment**