

Properties of Matter

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Elements and Compounds	☐ I can use the periodic table to identify: 7.6(B) ☐ the atoms within a chemical formula ☐ the number of each kind of atom within a chemical formula				
	☐ I can compare and contrast elements and compounds in terms of: 7.6(A) ☐ atoms and molecules ☐ chemical symbols ☐ chemical formulas				
Physical and Chemical Changes	☐ I can distinguish between physical and chemical changes in matter. 7.6(C)				
Solutions	☐ I can describe aqueous solutions in terms of: 7.6(D) ☐ solute ☐ solvent ☐ concentration ☐ dilution				
	☐ I can investigate and model how the following affect the rate of dissolution of solid solutes in aqueous solutions: 7.6(E) ☐ temperature ☐ surface area ☐ agitation				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Force and Motion

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Motion	☐ I can calculate average speed using: 7.7(A) ☐ distance measurements from investigations ☐ time measurements from investigations				
	☐ I can distinguish between speed and velocity in linear motion in terms of: 7.7(B) ☐ distance ☐ displacement ☐ direction				
	☐ I can: ☐ measure ☐ record ☐ interpret an object's motion using distance-time graphs. 7.7(C)				
Balanced and Unbalanced Forces	☐ I can analyze the effect of: ☐ balanced forces ☐ unbalanced forces on the state of motion of an object using Newton's First Law of Motion. 7.7(D)				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Thermal Energy

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Thermodynamics	☐ I can investigate how thermal energy moves in a predictable pattern from warmer to cooler until all substances within the system reach thermal equilibrium. 7.8(B)				
Transfer of Energy	☐ I can investigate methods of thermal energy transfer into and out of systems, including: 7.8(A) ☐ conduction ☐ convection ☐ radiation				
Temperature and Kinetic Energy	☐ I can explain the relationship between temperature and the kinetic energy of the particles within a substance 7.8(C)				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

The Solar System

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Solar System Components, Properties, and Locations	☐ I can describe the physical properties, locations, and movements of the: 7.9(A) ☐ Sun ☐ planets ☐ moons ☐ meteors ☐ asteroids ☐ comets ☐ Kuiper belt ☐ Oort cloud				
Newton's Law of Universal Gravitation	☐ I can describe how gravity governs motion within Earth's solar system. 7.9(B)				
Characteristics that Support Life in Space	☐ I can analyze the characteristics of Earth that allow life to exist (the proximity of the Sun, presence of water, and composition of the atmosphere). 7.9(C)				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Earth's Changing Surface

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Earth's Changing Surface	☐ I can describe the evidence that supports that Earth has changed over time, including: 7.10(A) ☐ fossil evidence ☐ plate tectonics ☐ superposition				
Plate Tectonics	☐ I can describe how plate tectonics causes: 7.10(B) ☐ ocean basin formation ☐ earthquakes ☐ mountain building ☐ volcanic eruptions, including: ☐ super volcanoes ☐ hot spots				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Human Impact on the Hydrosphere

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Human Dependence and Influence	☐ I can analyze the: ☐ beneficial influences ☐ harmful influences of human activity on groundwater in a watershed. 7.11(A)				
	☐ I can analyze the: ☐ beneficial influences ☐ harmful influences of human activity on surface water in a watershed. 7.11(A)				
	☐ I can describe human dependence and influence on ocean systems. 7.11(B)				
	☐ I can explain how human activities impact ocean systems. 7.11(B)				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Energy Flow in Ecosystems

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Flow of Energy	☐ I can diagram the flow of energy within trophic levels. 7.12(A)				
	☐ I can describe how the available energy decreases in successive trophic levels in energy pyramids. 7.12(A)				
	☐ I can describe how ecosystems are sustained by: 7.12(B) ☐ the continuous flow of energy within the biosphere ☐ the recycling of matter and nutrients within the biosphere				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Structure, Function, and Evolution

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Human Structure and Function	☐ I can identify and model the main functions of the systems of the human organism, including: 7.13(A) ☐ circulatory ☐ reproductive ☐ respiratory ☐ integumentary ☐ skeletal ☐ nervous ☐ muscular ☐ immune ☐ digestive ☐ endocrine ☐ urinary				
Hierarchical Organization	☐ I can describe the hierarchical organization of cells, tissues, organs, and organ systems within plants and animals. 7.13(B)				
Genetic Diversity	☐ I can compare the results of asexual and sexual reproduction of plants and animals in relation to: 7.13(C) ☐ the diversity of offspring ☐ the changes in the population over time				
Evolutionary Mechanisms	☐ I can describe and give examples of how: ☐ natural selection ☐ artificial selection change the occurrence of traits in a population over generations. 7.13(D)				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				

Taxonomy

Process: Tools to Know		Notes	Check Up		
Investigations	☐ I can plan and conduct investigations and design solutions. 7.1(A), 7.1(B), 7.1(C), 7.2(D), 7.5(A)				
Tools and Equipment	☐ I can use appropriate tools and equipment. 7.1(D)				
Information	☐ I can collect and record information. 7.1(E), 7.1(F)				

Content		Notes	Check Up		
Taxonomic System	☐ I can describe the taxonomic system that categorizes organisms based on similarities and differences shared among groups. 7.14(A)				
	☐ I can describe the characteristics of the recognized kingdoms and their importance in ecosystems such as bacteria aiding digestion or fungi decomposing organic matter. 7.14(B)				

Process: Ways to Show		Notes	Check Up		
Models/Information	☐ I can develop and use models/information. 7.1(G), 7.1(H), 7.2(A), 7.4(B), 7.5(C)				
Data	☐ I can analyze and interpret data. 7.2(B), 7.2(C)				
Explanations/Solutions	☐ I can develop and communicate explanations/solutions. 7.3(A), 7.3(B), 7.3(C), 7.5(A), 7.5(B)				
Interdependence	☐ I can explain interdependence. 7.5(D), 7.5(E), 7.5(F), 7.5(G)				
Science and the Real World	☐ I can connect science with the real world. 7.4(A), 7.4(C)				