

**Dolton School District 148
Curriculum Mapping Grade 7
Science Assessment Frameworks**

August/September

Time Frame	Illinois Assessment Frameworks	Textbook Lessons	Vocabulary/ Posters	Resources	Links/Labs	Assessment
Week 1	<p>11.7.01 Follow the scientific method</p> <p>11.7.02 Distinguish between the phases of the scientific method.</p> <p>11.7.04 Define a variable as some factor which changes in different phases of an experiment. Define constant as something kept the same in every phase of the experiment.</p> <p>11.7.06 Analyze patterns in data from an experiment to determine whether the information gathered helps to answer a given question or hypothesis.</p> <p>13.7.01 Identify potential hazards and ways to reduce such hazards.</p> <p>13.7.03 Indicate that repeatability of results is necessary.</p> <p>13.7.04 Understand that one set of data is not sufficient evidence for making a generalization.</p> <p>13.7.05 Standard procedure for measurement and presentation of data.</p> <p>13.7.06 Important social decisions are made on the basis of risk/benefit analysis.</p>	<p><i>Physical Science Book</i> Chapter 1.1 What is Science? Tools of Science (equipment)</p>	<p>science, system, life, earth and physical science, technology</p>	<p>Chapter 1 Fast File TR 48 Reinforcement p. 29 Note-Taking Worksheets p. 37-39 Foldable p. 19</p>	<p>Mini-Lab: Classifying parts of a system p. 8</p>	
Week 2		<p><i>Physical Science Book</i> Chapter 1.2 Science in Action Safety procedures and protocol</p>	<p>hypothesis, infer, controlled experiment, independent and dependent variable, constant</p>	<p>Chapter 1 Fast File TR 49 Reinforcement p. 30</p>	<p>Mini-Lab: Mystery Box lab p. 14</p>	
Week 3		<p><i>Physical Science Book</i> Chapter 1.4 How are living things classified? Introduce Scientific Method</p>	<p>critical thinking, data Scientific Method Poster</p>	<p>Chapter 1 Fast File TR 51 Reinforcement p. 32</p>		<p>Section 4 Review p. 30 #1, 2, and 5</p>
Week 4		<p>Science Fair</p>	<p>Create and post science fair requirements and due date</p>	<p>Science Fair Activity packets (teacher made)</p>		<p>Chapter 1 Test A+ Science</p>
Week 5		<p><i>Physical Science Book</i> Chapter 2 Measurement 2.1 Description and Measurement 2.2 SI Units 2.3 Drawings, Tables & Graphs</p>	<p>Measurement foldables</p>	<p>Chapter 2 Fast File TR 40-42 Reinforcement p. 23-25</p>	<p>Mini-Lab p. 44 Mini-Lab p. 52 Mini-Lab p. 55</p>	
Week 6		<p>Complete all labs from Week 5</p>				
Week 7		<p>Review and assess</p>				

**Dolton School District 148
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October

Time Frame	Illinois Assessment Frameworks	Textbook Lessons	Vocabulary/ Posters	Resources	Links/Labs	Assessment
Week 1	<p>State Goal 11 on Scientific Inquiry and Technological Design and State Goal 13 on Safety and Practices of Science and Science, Technology and Society are integrated throughout.</p> <p>12.7.63 Force tends to accelerate an object. Force can speed up, slow down or change the direction of an object.</p> <p>12.7.64 Newton's Laws of Motion</p> <p>12.7.65 Concept of work</p> <p>12.7.66 Density is mass per volume. Less dense bodies have greater buoyancy.</p> <p>12.7.67 Gravitational force decreases as objects get farther apart and gravitational force decreases as their masses decrease.</p> <p>12.7.68 Understand and calculate average speed given the distance traveled and the time taken.</p> <p>12.7.69 Distinguish between mass and weight.</p> <p>12.7.39 Define element.</p> <p>12.7.41 Identify simple compounds</p> <p>12.7.42 Define atom as the smallest part of an element that has the properties of that element.</p> <p>12.7.43 Electron, protons and neutrons</p>	<p><i>Physical Science book</i> Chapter 10 Motion and Momentum 10.1 What is motion 10.2 Acceleration 10.3 Momentum</p> <p>Chapter 11 Force and Newton's Laws 11.1 First Law 11.2 Second Law 11.3 Third Law</p>	<p>Speed, average speed and instantaneous speed, velocity, acceleration, mass, inertia, momentum, law of conservation of momentum</p> <p>Force, net force, balanced & unbalanced forces, first, second and third laws of motion, weight, center of mass</p>	<p>Chapter 10 Fast File TR 44-46 Reinforcement p. 27-29 Note-taking Worksheets p. 33-34 Foldable p. 17</p> <p>Chapter 11 Fast File TR 44-46 Reinforcement p.29 Enrichment p. 30-32 Note-taking Resources p. 35</p>	<p>Mini-Lab p. 299</p> <p>Mini-Lab p. 314</p>	<p>Foldable SE p. 309</p> <p>Ch. 10 Standardized Test Practice p. 43-46</p> <p>Ch. 11 Standardized Test Practice p. 336-337</p>
Week 2		<p><i>Physical Science Book</i> Chapter 14 Work & Simple Machines 14.3 Simple Machines</p>	<p>Simple and compound machines, wedge, screw, inclined plane, lever, wheel & axle and pulley</p>	<p>Introduce simple machines with the concept map TE 427</p>		<p>Students will recreate the simple machine concept map SE p. 427</p>
Week 3		<p><i>Physical Science Book</i> Chapter 3 Atoms, Elements & the Periodic Table 3.1 Structure of Matter 3.2 The Simplest Matter 3.3 Compounds and Mixtures</p>	<p>matter, atom, electron, nucleus, proton, neutron, element, atomic number, isotope, mass number, atomic mass, metal, non-metal, metalloid, substance, mixture</p>	<p>Chapter 3 Fast File TR 40-42 Reinforcement p. 23-26 Note-taking Worksheets p. 29-31 Foldable p. 13</p>	<p>Vocabulary Foldable for Chapter 3 – SE p. 71</p> <p>Mini-Lab p. 88</p>	<p>Ch. 3 Standardized Test Practice p. 98-99</p>
Week 4	<p>Review and Assess force, motion and simple machines</p>					<p>Short Cycle Assessment 2 A+ Science ISAT Coach</p>

**Dolton School District 148
Curriculum Mapping Grade 7
Science Assessment Frameworks**

November/December

Time Frame	Illinois Assessment Frameworks	Textbook Lessons	Vocabulary/ Posters	Resources	Links/Labs	Assessment
Week 1	<p>State Goal 11 on Scientific Inquiry and Technological Design and State Goal 13 on Safety and Practices of Science and Science, Technology and Society are integrated throughout.</p> <p>12.7.33 Physical and Chemical change 12.7.34 Properties of matter 12.7.35 Phases of matter</p>	<p><i>Physical Science Book</i> Chapter 4 States of Matter 4.1 Matter 4.2 Changes of State</p>	<p>states of matter, solid, liquid, gas, viscosity, surface tension, thermal energy, temperature, heat, melting, freezing, vaporization, condensation, pressure, buoyant force, Archimedes' Principle, density, Pascal's principle</p>	<p>Chapter 4 Fast File TR 42-44 Reinforcement p. 25-27 Note-taking Worksheets p. 31-32 Foldable p.</p>	<p>Mini-Lab p. 112</p>	<p>Concept Map on Matter p. 127</p> <p>Ch. 4 Standardized Test Practice p.</p>
Week 2		<p><i>Physical Science Book</i> Chapter 5 Matter – Properties & Changes 5.1 Physical Properties 5.2 Chemical Properties 5.3 Physical and Chemical Changes</p>	<p>Physical property, density, state of matter, independent and dependent property, chemical property, reactivity, salts, physical and chemical change</p>	<p>Chapter 5 Fast File TR 42-44 Reinforcement p. 25-27 Note-taking Worksheets p. 31-33 Foldable p. 15</p>	<p>Mini-Lab p. 145</p>	<p>Foldable on Properties and Changes of Matter p. 133</p> <p>Ch. 5 Standardized Test Practice p.</p>
Week 3	<p>12.7.45 Moons and planets do not have their own light. 12.7.46 Solar eclipse, lunar eclipse and phases of the moon 12.7.47 Order and size of the planets 12.7.48 Earth's rotation, tilt of the earth, the seasons</p>	<p><i>Earth Science Book</i> Chapter 23 Sun, Earth and Moon System 23.1 Earth 23.2 The Moon 23.3 Explore the Moon <i>Earth Science Book</i> Chapter 24 Solar System 24.1 Solar System 24.2 Inner Planets 24.3 Outer Planets 24.4 Other objects in the solar system</p>	<p>Sphere, axis, rotation, revolution, ellipse, solstice, equinox, moon phase, new moon, waxing, full moon, waning, solar eclipse, lunar eclipse, maria, impact basin</p> <p>Solar system poster 9 planets vocabulary, comet, meteor, meteorite, asteroid</p>	<p>Chapter 23 Fast File TR 45-46 Reinforcement 25-27 Note-taking Worksheets p. 31-34 Foldable p. 15</p> <p>Chapter 24 Fast File TR 48-51 Reinforcement p. 28-30 Note-taking Worksheets p. 35-38</p>	<p>Mini-Lab p. 717</p>	<p>P. 658F Reflection of the moon</p> <p>Ch. 23 Standardized Test Practice p.</p> <p>Ch. 24 Standardized Test Practice p.</p>

Week 4	<p>12.7.70 Earthquakes, volcanic eruptions and mountain building result from plate motions in the Earth.</p> <p>12.7.71 Landforms result from constructive and destructive forces.</p> <p>12.7.72 Soil consists of weathered rocks and decomposed organic matter.</p> <p>12.7.77 Layers of the Earth</p> <p>12.7.78 Rock Cycle</p> <p>12.7.79 Plate Tectonics</p>	<p><i>Earth Science Book</i> Chapter 7 Weathering and Soil</p> <p>7.1 Weathering 7.2 The Nature of Soil 7.3 Soil Erosion</p> <p><i>Earth Science Book</i> Chapter 8 Erosional Forces</p> <p>8.1 Erosion by Gravity 8.2 Glaciers 8.3 Wind</p>	<p>weathering, leaching, litter, humus, soil, mechanical weathering, ice wedging, chemical weathering, oxidation, horizon, soil profile</p> <p>Erosion, deposition, mass movement, slump, creep, glacier, plucking, till, moraine, outwash, deflation, abrasion, loess, dune</p>	<p>Foldable p. 17</p> <p>Chapter 7 Fast File TR 40-42 Reinforcement p. 23-25 Note-Taking Worksheets p. 29-31 Foldable p. 13</p> <p>Chapter 8 Fast File TR 40-42 Reinforcement p. 23-25 Note-taking Worksheets p. 29-31 Foldable p. 13</p>		<p>Concept map on weathering p. 203 Mini Lab p. 195</p> <p>Ch. 7 Standardized Test Practice p.</p> <p>Concept map on erosional forces on p. 231</p> <p>Ch. 8 Standardized Test Practice p.</p>
Week 5		<p><i>Earth Science Book</i> Chapter 10 Plate Tectonics</p> <p>10.1 Continental Drift 10.2 Sea Floor Spreading 10.3 Theory of Plate Tectonics</p>	<p>Continental drift, Pangaea, sea floor spreading, plate tectonics, plate, lithosphere, asthenosphere, convection current</p>	<p>Chapter 10 Fast File TR 44-46 Reinforcement 27-29 Note-taking Worksheets p. 33-35 Foldable p. 17</p> <p>Make globe with tennis ball and template of earth</p>		<p>Earth foldable Layers of the Earth foldable</p> <p>Ch. 10 Standardized Test Practice p.</p>
Week 6	Review and assess					<p>Short Cycle Assessment 3 A+ Science ISAT Coach</p>

**Dolton School District 148
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January

Time Frame	Illinois Assessment Frameworks	Textbook Lessons	Vocabulary/ Posters	Resources	Links/Labs	Assessment
Week 1	<p>State Goal 11 on Scientific Inquiry and Technological Design and State Goal 13 on Safety and Practices of Science and Science, Technology and Society are integrated throughout.</p> <p>12.7.02 All living things are composed of cells, different tissues have different cells with specific functions, and levels of organization – Cells – Tissues – Organs – Organ Systems</p> <p>12.7.03 Identify differences between plant and animal cells</p>	<p><i>Life Science Book</i> Chapter 1 – Exploring and Classifying Life 1.4 How are living things classified?</p> <p>Chapter 25 – The Nonliving Environment 25.2 Cycles in Nature</p>	<p>Phylogeny, kingdom, genus, binomial nomenclature,</p> <p>Evaporation, condensation, water cycle, nitrogen fixation, nitrogen cycle, carbon cycle</p>	<p>Chapter 1 Fast File TR 47 Reinforcement 28</p> <p>Chapter 25 Fast File TR 45 Reinforcement 28</p>		<p>Mini lab p. 25</p> <p>p.725 1-4</p>
Week 2	<p>12.7.04 Organisms are unicellular and multi-cellular organisms</p> <p>12.7.05 The nucleus of the cell contains the genetic information for the plant or animal.</p> <p>12.7.07 Process of meiosis.</p>	<p><i>Life Science Book</i> Chapter 2 – Cells 2.1 Cell Structure 2.2 Viewing Cells 2.3 Viruses</p> <p><i>Life Science Book</i> Chapter 3 – Cell Processes 3.1 Chemistry of Life 3.2 Moving Cellular Materials 3.3 Energy of Life</p>	<p>Cell membrane, cytoplasm, cell wall, organelle, nucleus, chloroplast, mitochondrion, ribosome, endoplasmic reticulum, Gorge Body, tissue, organ, cell theory, virus, host cell</p> <p>Mixture, organic & inorganic compound, enzyme, passive transport, diffusion, equilibrium, osmosis, active transport, endocytosis, exocytosis, metabolism, photosynthesis,</p>	<p>Chapter 2 Fast File TR 44-46 Reinforcement 25-30 Note-taking Resources p. 33-35 Foldable p. 17</p> <p>Chapter 3 Fast File TR 42-44 Reinforcement 25-27 Note-taking Resources p. 31-33 Foldable p. 15</p>		<p>Concept Map p. 59 Mini Lab p. 50</p> <p>Ch. 2 Standardized Test Practice p.</p> <p>Ch. 3 Standardized Test Practice p.</p>

			respiration, fermentation			
Week 3		<p><i>Life Science Book</i> Chapter 7 – Bacteria 7.1 What are bacteria? 7.2 Bacteria in your life</p> <p><i>Life Science Book</i> Chapter 8 –Protists & Fungi 8.1 Protists 8.2 Fungi</p>	<p>Flagella, fission, aerobe, anaerobe, antibiotic, saprophyte, nitrogen-fixing bacteria, pathogen, toxin, endospore, vaccine</p> <p>Protist, algae, flagellum, protozoan, cilia, pseudopod, hyphae, saprophyte, spore, basidium, ascus, budding, sporangium, lichen, mycorrhizae</p>	<p>Chapter 7 Fast File Chapter 7 Fast File TR 38, 39 Reinforcement 23, 24 Note-taking Resources p. 27-28 Foldable p. 13</p> <p>Chapter 8 Fast File TR 40, 41 Reinforcement 25,26 Note-taking Resources p. 29-30 Foldable p. 15</p>		<p>Foldable p. 185 Ch. 7 Standardized Test Practice p.</p> <p>Ch. 8 Standardized Test Practice p.</p>
Week 4		<p><i>Life Science Book</i> Chapter 9 – Plant Processes 9.1 Overview of Plants 9.2 Seedless Plants 9.3 Seed Plants</p>	<p>Cuticle, cellulose, vascular plant, nonvascular plant, rhizoid, pioneer species, stomata, guard cell, xylem, phloem, campium, gymnosperm, angiosperm, monocot, dicot</p>	<p>Chapter 9 Fast File TR 40-42 Reinforcement 23-25 Note-taking Resources p. 29-31 Foldable p. 13</p>	<p>Concept Map p. 265</p>	<p>Ch. 9 Standardized Test Practice p.</p> <p>Short Cycle Assessment 4 A+ Science ISAT Coach</p>

**Dolton School District 148
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February

Time Frame	Illinois Assessment Frameworks	Textbook Lessons	Vocabulary/ Posters	Resources	Links/Labs	Assessment
Week 1	<p>State Goal 11 on Scientific Inquiry and Technological Design and State Goal 13 on Safety and Practices of Science and Science, Technology and Society are integrated throughout.</p> <p>12.7.01 Scientists classify plants and animals using a dichotomous key</p>	<p><i>Life Science Book</i> Chapter 14 – Fish, Amphibians, and Reptiles 14.1 Chordates & Vertebrates 14.2 Fish 14.3 Amphibians 14.4 Reptiles</p>	<p>Cordate, notochord, postanal tail, nerve cord, pharyngeal pouch, endoskeleton, cartilage, vertebrate, ectotherm, endotherm, fin, scale, hibernation, estivation, amniotic egg</p>	<p>Chapter 14 Fast File TR 48-51 Reinforcement p. 27-30 Note-taking Worksheets p. 35-38 Foldable p. 17</p>		<p>Concept Map p.421</p> <p>Ch. 14 Standardized Test Practice p.</p>
Week 2		<p><i>Life Science Book</i> Chapter 15 – Birds and Mammals 15.1 Birds 15.2 Mammals</p>	<p>Contour & down feather, preening, mammal, mammary gland, omnivore, carnivore, herbivore, monotreme, marsupial, placental, gestation period, placenta, umbilical cord</p>			<p>Ch. 15 Standardized Test Practice p.</p>
Week 3		<p><i>Life Science Book</i> Chapter 26 – Ecosystems 26.1 How Ecosystems Change 26.2 Biomes 26.3 Aquatic Ecosystems</p>	<p>Succession, pioneer species, climax community, biome, tundra, taiga, temperate deciduous forest, temperate rain forest, tropical rain forest, desert, grassland, wetland, coral reef, intertidal zone, estuary</p>	<p>Chapter 26 Fast File TR 42-44 Reinforcement p. 25-27 Note-taking Worksheets p. 31-33 Foldable p. 15</p>		<p>Mini lab p. 748</p> <p>Concept Map p. 763</p> <p>Ch. 26 Standardized Test Practice p.</p>
Week 4			<p><i>Life Science Book</i> Chapter 27 – Conserving Resources 27.1 27.2</p>	<p>Natural, Renewable & Nonrenewable resource, petroleum, fossil fuel, hydroelectric power, nuclear energy,</p>	<p>Chapter 27 Fast File TR 44-46 Reinforcement p. 27-29 Note-taking Resources p. 33-35 Foldable p. 17</p>	

		27.3	geothermal energy, pollutant, acid precipitation, greenhouse effect, ozone depletion, erosion, hazardous waste, recycling			
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**Dolton School District 148
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March

Time Frame	Illinois Assessment Frameworks	Textbook Lessons	Vocabulary/ Posters	Resources	Links	Assessment
Week 1		<i>Earth Science Book</i> Chapter 25 – Stars and Galaxies 25.1 Stars 25.2 The Sun	Constellation, absolute & apparent magnitude, light year, photosphere, corona, chromosphere, sunspot	Chapter 25 Fast File TR 48-49 Reinforcement p.27-28 Note-taking Resources p. Foldable p.		Mini lab p. 725
Week 2		<i>Earth Science Book</i> 25.3 Evolution of the Stars	Nebula, giant, white dwarf, supergiant, neutron star, black hole	Chapter 25 Fast File TR 50 Reinforcement p.29		p. 739 1-5
Week 3		<i>Earth Science Book</i> 25.4 Galaxies and the Universe	Galaxy, big bang theory	Chapter 25 Fast File TR 51 Reinforcement p.30	http://www.ebsinstitute.com/OtherActivities/VoyagerBackground.doc http://www.spacetoday.org/SolSys/ThePioneers.html	Journal tracking of Voyager 1 & 2 and Pioneer 10 & 11
Week 4	Review and assess					Short Cycle Assessment 1