

Grade 7- Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT:	INDICATORS:	SUGGESTED PACING:	RESOURCES:
FIRST NINE WEEKS			
CHEMICAL NATURE OF MATTER			
Lesson 1			
	<p>7-5.1 Recognize that matter is composed of extremely small particles called atoms.</p> <p>7-5.2 Classify matter as element, compound, or mixture on the basis of its composition.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	10 Days	<p>McDougal SE/ATE pgs. 448-451; 509-510; 453-457; 541-545</p> <ul style="list-style-type: none"> • Investigate p. 449 "How Do You Measure The Mass Of An Atom?" • Extreme Science p. 452 "Particles Too Small To See" • Explore The Big Idea p. 439 "Where Does The Sugar Go?" • Explore p. 453 "What Happens When Substances Are Mixed?" • Investigate p. 456 "How Well Do Oil And Water Mix?" • Explore p. 541 "How Are Compounds Different From Elements?" <p>Instructional Activities</p> <ul style="list-style-type: none"> • STC Properties of Matter Kit, Lesson 1, "Our Ideas About Matter", Inquiry 1.1-1.8 (Set-up stations) • S3 Science Module 7-5.1, Lessons A-B • STC Properties of Matter Kit, Lesson 11, "Pure Substance or Mixture?" • STC Properties of Matter Kit, Lesson 20, "Breaking Down a Compound" • S3 Science Module 7-5.2, Lessons A-D <p>Instructional Videos (ETV Streamline SC - http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • "Elements of Chemistry: Atoms: The Building Blocks of Matter" (<i>first 2 ½ minutes of the segment</i>) • "Atomic Theory" (2:02) from the series Greatest Discoveries with Bill Nye: Chemistry • "Atoms Combine into Molecules" (1:09) from the series Greatest Discoveries with Bill Nye: Chemistry • "Oxygen" (4:28) from the series Greatest Discoveries with Bill Nye: Chemistry
ADMINISTER SCHOOL-BASED COMMON ASSESSMENT			
Lesson 2			
	<p>7-5.3. Compare the physical properties of metals and nonmetals.</p> <p>7-5.4 Use the periodic table to identify the basic organization of elements and groups of elements (including metals, nonmetals, and families).</p> <p>7-5.5 Translate chemical symbols and the chemical formulas of common substances to show the component parts of the substances (including NaCl[salt], H₂O [water], C₆H₁₂O₆ [simple sugar], O₂ [oxygen gas], CO₂ [carbon dioxide], and N₂ [nitrogen gas]).Scientific Inquiry</p> <p>7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	10 Days	<p>McDougal SE/ATE pgs. 527-529; 517-523; 542-545</p> <ul style="list-style-type: none"> • South Carolina Essentials pgs. 655 "Physical Properties Of Metals And Nonmetals" • Explore The Big Idea p. 507 "Element Safari" • Explore p. 517 "How Can Different Objects Be Organized?" <p>Instructional Activities</p> <ul style="list-style-type: none"> • STC Properties Of Matter Kit, Lesson 22, Inquiry 22.1, "Splitting the Periodic Table" • S3 Science Module 7-5.3, Lesson A • STC Properties of Matter Kit, Lesson 21, Inquiry 21.1, "Investigating and Classifying Elements" • S3 Science Module 7-5.4, Lessons A-B • S3 Science Module 7-5.5, Lesson A
ADMINISTER SCHOOL-BASED COMMON ASSESSMENT			

Grade 7- Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT:	INDICATORS:	SUGGESTED PACING:	RESOURCES:
FIRST NINE WEEKS (CONTINUED)			
Lesson 3			
	<p>7-5.7 Identify the reactants and products in chemical equations.</p> <p>7-5.8 Explain how a balanced chemical equation supports the law of conservation of matter. Scientific Inquiry</p> <p>7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	10 Days	<p>McDougal SE/ATE pgs. 571; 580; 578-584</p> <ul style="list-style-type: none"> Investigate p. 579 "Why Is It Important To Measure The Masses Of Reactants And Products?" <p>Instructional Activities</p> <ul style="list-style-type: none"> STC Properties Of Matter Kit, Lesson 25, Inquiry Lesson 25.1, "Measuring the Mass of Reactants and Products" S3 Science Module 7-5.7, Lesson A STC Properties Of Matter Kit Lesson 26, Inquiry Lesson 26.1, "Performance Assessment" STC Properties Of Matter Kit Lesson 8, Inquiry Lesson 8.1, "Investigating Mass and Melting" S3 Science Module 7-5.8, Lesson A
ADMINISTER SCHOOL-BASED COMMON ASSESSMENT			
Lesson 4			
	<p>7-5.9 Compare physical properties of matter (including melting or boiling point, density, and color) to the chemical property of reactivity with a certain substance (including the ability to burn or to rust).</p> <p>7-5.10 Compare physical changes (including changes in size, shape, and state) to chemical changes that are the result of chemical reactions (including changes in color or temperature and formation of a precipitate or gas).</p> <p>7-5.6 Distinguish between acids and bases and use indicators (including litmus paper, pH paper, and phenolphthalein) to determine their relative pH.</p> <p>Scientific Inquiry</p> <p>7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	10 Days	<p>McDougal SE/ATE pgs. 473-480; 483-484; 486; 476-479; 570-571; 625-631</p> <ul style="list-style-type: none"> Investigate p. 479 "What Are Some Signs Of A Chemical Change?" Explore The Big Idea p. 471 "Internet Activity: Physical and Chemical Changes" Investigate p. 479 "What Are Some Signs Of A Chemical Change?" Explore p. 625 "What Happens When An Antacid Mixes With An Acid?" Explore The Big Idea p. 609 "Acid Test" Chapter Investigation pgs. 632-633 "Acids And Bases" <p>Instructional Activities</p> <ul style="list-style-type: none"> Physical and Chemical Properties Lab http://www.nden.k12.wi.us/tlcf/elem2.htm Physical and Chemical Properties Lab http://www.davis.k12.ut.us/staff/bgnelson/files/4E00EF94C3AE4F328A5580FAE5BF2A59.pdf Physical/Chemical Change Activity http://www.middleschoolscience.com/physical-chemical-change-activity.pdf NOVA Online "Forgotten Genius" Classroom Activity (Physical/Chemical Change) http://www.pbs.org/wgbh/nova/teachers/activities/3402_julian.html Chemical and Physical Change Lab http://behschem.pbworks.com/f/Chemical+and+Physical+Change+lab.pdf STC Properties Of Matter Kit, Lesson 26, Inquiry Lab 26.1 GEMS Alien Juice Bar http://sv.berkeley.edu/showcase/flash/juicebar.html <p>Instructional Videos (ETV Streamline SC - http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> "Physical and Chemical Properties" (2:34) "Natural Acids and Bases" - Chemistry Connections: Acid-Base Technology and Society (4:14)
ADMINISTER SCHOOL-BASED UNIT ASSESSMENT			
ADMINISTER FALL COMMON ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
SECOND NINE WEEKS			
Cells and Heredity			
Lesson 1			
	<p>7-2-1 - Summarize the structures and functions of the major components of plant and animal cells (including the cell wall, the cell membrane, the nucleus, chloroplasts, mitochondria, and vacuoles).</p> <p>7-2.2 - Compare the major components of plant and animal cells.</p> <p>7-2.4 - Explain how cellular processes (including respiration, photosynthesis in plants, mitosis, and waste elimination) are essential to the survival of the organism.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	15 Days	<p>McDougal SE/ATE pgs. 20-24; 21-24; 48-52; 81</p> <ul style="list-style-type: none"> • Cells/Heredity Unit Resource Book pgs. 60-68 • Investigate p. 21 “How Do Plant And Animal Cells Compare?” • Explore The Big Idea p. 7 “Internet Activity: Cells” • Explore The Big Idea p. 39 “Internet Activity: Photosynthesis” <p>Instructional Activities</p> <ul style="list-style-type: none"> • Inside a Cell http://teach.genetics.utah.edu/content/begin/cells/print/InsideaCellWorksheet.pdf • Magnifying and Observing Cells http://www.bioedonline.org/resources/files/TSO_Mic_03_s.pdf • Cells http://www.nclark.net/Cells • Virtual Cell Tour – http://www.classzone.com/books/ml_science_share/vis_sim/chm05_pg7_cell/chm05_pg7_cell.html • Cell Biology http://www.biologycorner.com/lesson-plans/cells/ • Cell Analogies Collage http://www.accessexcellence.org/AE/ATG/data/released/0164-KatharineNoonan/ • How to Use a Microscope http://www.wisc-online.com/Objects/ViewObject.aspx?ID=BIO905 • Virtual Compound Microscope http://www.udel.edu/biology/ketcham/microscope/scope.html • Microscopes http://bio.rutgers.edu/~gb101/lab1_cell_structure/index.html • Making Candy Cells http://www.medicine.nevada.edu/dept/k_12/downloads/lp_life/ls46/Candy%20Cell%20Model.pdf • The Incredible, Edible Cell – http://www.accessexcellence.org/AE/ATG/data/released/0251-NickHoffman/ • Osmosis and Diffusion http://www.science-class.net/Biology/Osmosis.htm • S3 Science Module, 7-2.1, Lesson A • S3 Science Module, 7-2.2, Lesson A • Photosynthesis & Cellular Respiration http://www.science-class.net/Biology/Photosynthesis.htm • Water Weed Lab – Virtual Photosynthesis Inquiry http://www.cbsd.org/sites/teachers/hs/mgleicher/Class%20Documents/Labs/Lab%20-%20Water%20Weed.pdf • Photosynthesis Virtual Lab (Which Colors of the Light Spectrum are Most Important for Plant Growth) http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS12/LS12.html • Mitosis Graphic Organizer http://www.science-class.net/Graphic_Organizers/GO_ordering_mitosis.pdf • S3 Science Module, 7-2.4, Lessons A-C <p>Interactive Websites:</p> <ul style="list-style-type: none"> • Cells Alive! http://www.cellsalive.com/cells/cell_model.htm • The Cell: A Learning Tool http://www.galaxygoo.org/biochem/CellProject/the_cell.html • Inside the Cell http://publications.nigms.nih.gov/insidethecell/index.html • A Tour of the Cell http://www.nsf.gov/news/overviews/biology/interactive.jsp • The Cell and It’s Organelles http://www.nobelprize.org/educational/medicine/cell/ • Parts of a Microscope http://tle.tafevc.com.au/toolbox/file/1eb41fe4-c176-cd30-41f0-6fdf43060b1f/1/fishebusiness.zip/Pest_Predators_Disease/ARED_Packages/Microscope/default.htm • Plant Physiology: Photosynthesis, Respiration, and Transpiration http://www.ext.colostate.edu/pubs/garden/07710.html • Photosynthesis: How Life Keeps Going http://www.ftexploring.com/photosyn/photosynth.html <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “The Living Cell” 20:00 • “Life Science: Cells” 3:35
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
SECOND NINE WEEKS (CONTINUED)			
Lesson 2			
	<p>7-2.5 Summarize how genetic information is passed from parent to offspring by using the terms genes, chromosomes, inherited traits, genotype, phenotype, dominant traits, and recessive traits.</p> <p>7-2.6 Use Punnett squares to predict inherited monohybrid traits.</p> <p>7-2.7 Distinguish between inherited traits and those acquired from environmental factors.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	15 Days	<p>McDougal SE/ATE pgs. 74-75; 101-103; 106-107; 110-115; 101-102</p> <ul style="list-style-type: none"> • Chapter Investigation page 108-109 “Offspring Models” • Explore The Big Idea p. 99 “Simulation Called – Punnett Square” • Chapter Investigation page 109-109 “Offspring Models” <p>Instructional Activities</p> <ul style="list-style-type: none"> • Genetics http://www.nclark.net/Genetics • Learn Genetics: Tour of the Basics http://learn.genetics.utah.edu/content/begin/tour/ • Heredity and Traits http://learn.genetics.utah.edu/content/begin/traits/ • An Inventory of My Traits http://teach.genetics.utah.edu/content/begin/traits/traitsinventory.pdf • A Recipe for Traits http://teach.genetics.utah.edu/content/begin/traits/traitsrecipe.pdf • Traits Bingo http://teach.genetics.utah.edu/content/begin/traits/traitsbingo.pdf • A Tree of Genetic Traits http://teach.genetics.utah.edu/content/begin/traits/traitstree.pdf • Family Traits and Traditions http://teach.genetics.utah.edu/content/begin/traits/familytraitsandtraditions.pdf • Handy Family Tree http://teach.genetics.utah.edu/content/begin/traits/handyfamilytree.pdf • Genetics with a Smile http://sciencespot.net/Media/gen_smilewkst1.pdf and http://sciencespot.net/Media/gen_smilewkst2.pdf • Sponge Bob Genetics http://sciencespot.net/Media/gen_spbobgenetics.pdf • Bikini Bottom Genetics 2 http://sciencespot.net/Media/gen_spbobgenetics2.pdf • S3 Science Module, 7-2.5, Lessons A-C • S3 Science Module, 7-2.6, Lesson A • S3 Science Module, 7-2.7, Lesson A • Pass the Genes Please http://nature.ca/genome/04/041/0414_e.cfm • Mix Those Genes http://nature.ca/genome/04/041/mxgnes-e.html <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “Greatest Discoveries with Bill Nye: Genetics: The Basics Of Genes” 10:30 • “Genes, Genetics, and DNA: Practice Makes Perfect: Maximizing Your Inherited Traits” 1:32
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			
Lesson 3			
	<p>7-2.3 Compare the body shapes of bacteria (spiral, coccus, and bacillus) and the body structures that protists (euglena, paramecium, amoeba) use for food gathering and locomotion.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>	10 Days	<p>McDougal SE/ATE pgs. 47-52; 56-59; 76-78; 82;</p> <p>South Carolina Essentials p. 645-646 “Bacteria and Protists”</p> <p>Instructional Activities</p> <ul style="list-style-type: none"> • S3 Science Module 7-2.3, Lesson A • S3 Science Module 7-2.3, Lesson B • Using a Classification Key (Protists) http://www.biologyjunction.com/2.2ClassificationKey.pdf • Virtual Pond Dip http://www.microscopy-uk.org.uk/index.html?http://www.microscopy-uk.org.uk/ponddip/index.html <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “Introduction to Bacteria” 2:44 • Bacteria: Friends or Enemies: “Form and Function: Bacteria are the Simplest Organisms” • World of Protozoa: “Feeding Styles of Protozoa” 4:26 • “Movement of Protozoa” 1:31
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			
ADMINISTER DISTRICT WINTER ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
THIRD NINE WEEKS			
Human Body Systems and Diseases(Skeletal, Muscular, and Nervous Systems)			
Lesson 1			
	<p>7-3.1 Summarize the levels of structural organization within the human body (including cells, tissues, organs, and systems).</p> <p>7-3.2 Recall the major organs of the human body and their function within their particular body system.</p> <p>7-3.3 Summarize the relationships of the major body systems (including the circulatory, respiratory, digestive, excretory, nervous, muscular, and skeletal systems).</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 29-31; 169-172; 264-267</p> <ul style="list-style-type: none"> • Investigate p. 170 “How Do The Systems In Your Body Interact?” • Explore p. 182 “How Do Muscles Change As You Move” <p>Instructional Activities</p> <ul style="list-style-type: none"> • STC Human Body Systems Kit, Lesson 1 “Human Body Systems-A Preassessment”, Inquiry 1.1 Human Body Mapping • STC Human Body Systems Kit, Lesson 18, Inquiry 18.1” Winging It” • STC Human Body Systems Kit, Lesson 19, Inquiry 19.1 “Exploring Joints” • STC Human Body Systems Kit, Lesson 20, Inquiry 20.1 “Muscle Size and Strength” • STC Human Body Systems Kit, Lesson 21, Inquiry 21.1 “Working Against Fatigue” • S3 Science, 7-3.1, Lesson A • S3 Science 7-3.2 Lesson A • S3 Science 7-3.3, Lesson A • Bone Density Lab <p>http://www2.mbusd.org/staff/pware/labs/BoneDensitylab.pdf</p> <ul style="list-style-type: none"> • Neuroscience For Kids - http://faculty.washington.edu/chudler/introb.html • Reaction Time 1: How Fast Are you? http://sciencenetlinks.com/lessons/reaction-time-1-how-fast-are-you/ <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “Basics of Biology, The Human Body: Organ Systems Working Together” 14:39 • “The Ultimate Guide: Human Body” Part I 24:30, Part II 23:40 • “The Musculoskeletal System” 24:30 • “The Nervous System” 14:39
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			
Lesson 2 (Digestive and Excretory Systems)			
	<p>7-3.2 Recall the major organs of the human body and their function within their particular body system.</p> <p>7-3.3 Summarize the relationships of the major body systems (including the circulatory, respiratory, digestive, excretory, nervous, muscular, and skeletal systems).</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 205-210</p> <ul style="list-style-type: none"> • Explore pg. 205 “How Does the Digestive System Break Down Fat?” • Explore p. 212 “How Does the Skin Get Rid of Body Waste” <p>Chapter Investigation p. 216 “Modeling a Kidney</p> <p>Instructional Activities</p> <ul style="list-style-type: none"> • Why Do We Digest Food? - http://sftt.terc.edu/organs/index.cfm • STC Human Body Systems Kit, Lesson 2, Inquiry 2.1 “Moving Right Along” • STC Human Body Systems Kit, Lesson 4, Inquiry 4.1 “Exploring Chemical Digestion In the Mouth” • STC Human Body Systems Kit, Lesson 5, Inquiry 5.1 “Exploring Chemical Digestion In the Stomach” <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “The Digestive System” 20:00 • “The Excretory System” 17:00
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
THIRD NINE WEEKS			
Lesson 3 (Circulatory and Respiratory Systems)			
	<p>7-3.2 Recall the major organs of the human body and their function within their particular body system.</p> <p>7-3.3 Summarize the relationships of the major body systems (including the circulatory, respiratory, digestive, excretory, nervous, muscular, and skeletal systems).</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 197-201; 223-229</p> <ul style="list-style-type: none"> • Explore p. 197 “How Do Your Ribs Move When You Breathe?” • Explore p. 225 “How Fast Does Your Heart Beat?” • Chapter Investigation p. 232 “Heart Rate and Exercise” <p>Instructional Activities</p> <ul style="list-style-type: none"> • How Do We Get Oxygen? - http://sftt.terc.edu/organs/index.cfm • How Do the Parts of the Respiratory System Work Together? - http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS24/LS24.html • STC Human Body Systems Kit, Lesson 10, Assessing the Syringe Model of Breathing • STC Human Body Systems Kit, Lesson 11, How Much Air Can You Exhale? • STC Human Body Systems Kit, Lesson 14, Inquiry 14.1 Analyzing the Siphon-Pump Heart Model • STC Human Body Systems Kit, Lesson 15, Inquiry 15.1 Exploring Factors that Affect Heart Rate <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “The Circulatory System” 23:00 • “The Respiratory System” 21:00
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			
Lesson 4 (Effects of Disease)			
	<p>7-3.4 Explain the effects of disease on the major organs and body systems (including infectious diseases such as colds and flu, AIDS, and athlete’s foot and noninfectious diseases such as diabetes, Parkinson’s, and skin cancer).</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 149; 310-312; South Carolina Essentials p. 647 “Infectious and Noninfectious Disease”</p> <p>Instructional Activities</p> <ul style="list-style-type: none"> • STC Human Body Systems Kit, Lesson 9, Anchor Activity-Diseases and Health Careers • S3 Science Module 7-3.4, Lesson A • Viruses/Infectious Diseases: What’s Really Bugging You? http://sciencenetlinks.com/lessons/virusesinfectious-diseases-whats-really-bugging-you/ • Virtual Lab – How Does the Body Protect Itself Against Foreign Substances http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS27/LS27.html • Fact Sheet HIV/AIDS Statistics http://www.niaid.nih.gov/factsheets/aidsstat.htm • Penicillin Today http://www.tallpoppies.net.au/florey/explorer/penicillin/64ex.html#anchor1245453 <p>Instructional Videos (ETV Streamline SC -http://etv.streamlinesc.org)</p> <ul style="list-style-type: none"> • “Greatest Discoveries With Bill Nye: Medicine: Germ Theory” 4:38 • “Greatest Discoveries With Bill Nye: Medicine: Vaccination” 3:01 • “Greatest Discoveries With Bill Nye: Medicine: Genetic Basis Of Cancer” 4:52 • “Greatest Discoveries With Bill Nye: Medicine: HIV” 5:37 • What Happens During A Asthma Flare Up 2:26 - http://kidshealth.org/kid/videos/flare_up_vd.html#cat20580 <p>What Happens In Diabetes - http://kidshealth.org/kid/closet/movies/diabetes_movie.html#cat20580</p>
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			
ADMINISTER DISTRICT WINTER ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
FOURTH NINE WEEKS			
Ecology: The Biotic and Abiotic Environment			
Lesson 1			
	<p>7-4.1 Summarize the characteristics of the levels of organization within ecosystems (including populations, communities, habitats, niches, and biomes).</p> <p>7-4.2 Illustrate energy flow in food chains, food webs, and energy pyramids.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 365-369; 342-348</p> <ul style="list-style-type: none"> • Explore The Big Idea p. 367 “How Many Roles Can A Living Thing Have In An Ecosystem” • 3 Minute Warm Up p. 365 (<i>Transparency Book</i> p. T12 “Interactions Within Ecosystems”) <p>Instructional Activities</p> <ul style="list-style-type: none"> • Virtual Ecosphere http://www.open2.net/diyscience/ecosphere/virtual_ecosphere.swf • Virtual Labs – Energy Transfer: How Is Energy Transferred Through A Community of Organism? http://www.glencoe.com/sites/common_assets/science/virtual_labs/CT06/CT06.html • The Food Chain Game http://www.sheppardsoftware.com/content/animals/kidscorner/games/foodchaingame.htm • Chain Reaction: Build a Food Chain http://www.ecokids.ca/pub/eco_info/topics/frogs/chain_reaction/ • Create a Food Web http://www.vtaide.com/png/foodweb.htm • Build a Food Web http://teacher.scholastic.com/activities/explorer/ecosystems/be_an_explorer/map/line_experiment14.swf • Food Chains http://www.mysciencebox.org/foodchain • Food Chain Checkers http://www.windows2universe.org/teacher_resources/checkers_20march.pdf • Ecological Pyramids http://www.nacee.org/pdfs/educators/ecological_pyramids.pdf • Virtual Owl Pellet Dissection http://www.kidwings.com/owlpellets/flash/v4/index.htm • S3 Science Module, 7-4.1, Lesson A • S3 Science Module, 7-4.2, Lesson A • Experiment with Ecosystems http://concord.org/activities/experiment-ecosystems • Ecosystem Organization http://www.mysciencebox.org/ecoorg • Principles of Ecology http://www.nclark.net/Ecology <p>Instructional Videos: ETV Streamline SC -http://etv.streamlinesc.org</p> <ul style="list-style-type: none"> • “The Biology Of Water: The Ocean Realm (Saltwater Ecology)” 21:11 • “Biology: The Science Of Life: Ecology: Organisms In Their Environment: Food Chains and Food Webs” 7:39 • “Biology: The Science Of Life: Ecology: Organisms In Their Environment: Food Chains and Food Webs” 12:00
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
FOURTH NINE WEEKS (CONTINUED)			
Lesson 2			
	<p>7-4.3 Explain the interaction among changes in the environment due to natural hazards (including landslides, wildfires, and floods), changes in populations, and limiting factors (including climate and the availability of food and water, space, and shelter).</p> <p>7-4.6 Classify resources as renewable or nonrenewable and explain the implications of their depletion and the importance of conservation.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 384</p> <ul style="list-style-type: none"> • Frontiers in Science pgs. 322-325 “Ecosystems On Fire” • Investigate p. 385 “What Effect Does Spacing Have Upon A Population Of Plants?” • Explore The Big Idea p. 363 “Carrying Capacity” • Unit Project p. 325 “Build An Ecosystem” <p>Instructional Activities</p> <ul style="list-style-type: none"> • S3 Science Module 7-4.3, Lesson A-B • S3 Science Module 7-4.6, Lessons A-B • Natural Hazard Risks in the United States http://www.nationalgeographic.com/xpeditions/lessons/15/g68/hazard.html • The Impact of Natural Hazards Around the World http://www.nationalgeographic.com/xpeditions/lessons/15/g68/hazards.html • Natural Hazards: Same Forces, Different Impacts http://www.nationalgeographic.com/xpeditions/lessons/15/g68/fonhazards.html • Oh Deer! http://myfwc.com/media/150016/OhDeer.pdf • How Many Bears Can Live in This Forest? http://www.dfg.ca.gov/projectwild/bear/19-23.pdf • Limiting Factors of the Cedar Glade http://frank.mtsu.edu/~gladectr/teaching/21_Limiting%20Factors%20in%20the%20Glades.pdf • Population Biology http://www.nclark.net/Populations • The Lesson of the Kaibab http://www.biologycorner.com/worksheets/kaibab.html • Renewable Resources http://uncw.edu/smec/gk_fellows/Documents/RenewableResourcesActivity.pdf • Renewable or Nonrenewable? http://www.stopwaste.org/docs/schools/Lesson01.pdf • Renewable and Nonrenewable Energy Sources http://www.curriculumbits.com/prodimages/details/physics/renewable-and-non-renewable-energy.html <p>Instructional Videos: ETV Streamline SC -http://etv.streamlinesc.org</p> <ul style="list-style-type: none"> • “Nonrenewable Resources” 5:47 • “Renewable Resources” 5:52 • “Problems Associated With Our Dependence On Fossil Fuels” 3:52 • “Conserving Energy” 11:35
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			

Grade 7 Science
INSTRUCTIONAL PACING GUIDE
(DAYS BASED ON 90 MINUTE BLOCK)

DATES TAUGHT	INDICATORS	SUGGESTED PACING	RESOURCES
FOURTH NINE WEEKS (CONTINUED)			
Lesson 3			
	<p>7-4.4 Explain the effects of soil quality on the characteristics of an ecosystem.</p> <p>7-4.5 Summarize how the location and movement of water on Earth’s surface through groundwater zones and surface-water drainage basins, called watersheds, are important to ecosystems and to human activities.</p> <p>Scientific Inquiry 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.</p>		<p>McDougal SE/ATE pgs. 332-333</p> <ul style="list-style-type: none"> • Chapter Investigation pgs. 334-335 “Soil Samples” • South Carolina Essentials pgs. 648-650 “Characteristics Of Soil” • Chapter 13-1 pgs. 402-405 South Carolina Essentials pgs. 651-654 “Location And Movement Of Water On Earth” <p>Instructional Activities</p> <ul style="list-style-type: none"> • S3 Science Module 7-4.4, Lesson A • S3 Science Module 7-4.5, Lessons A-B • A Walk in the Forest: Dirt Detectives: Trees and Soils http://nationalzoo.si.edu/Education/ConservationCentral/walk/walk1_broadband.html • Soil Analysis http://www.mysciencebox.org/soilanalysis • Edible Soil http://www.mt.nrcs.usda.gov/about/lessons/edible.html <p>Instructional Videos/Resources: ETV Streamline SC -http://etv.streamlinesc.org</p> <ul style="list-style-type: none"> • “Ecosystems: Watersheds, Estuaries, and Wetlands” 2:25 • “What is Ground Water?” - http://pubs.usgs.gov/of/1993/ofr93-643/ • “The Story of Groundwater” 3:43 http://www.groundwater.org/kc/groundwater_animation.html
ADMINISTER SCHOOL-BASED INTERIM ASSESSMENT			
REVIEW ALL STANDARDS FOR PASS TESTING			