Grade 4 Curriculum map					
Life Science: Animal Studies - Carolina Biological					
Key concepts	**Standards**	**Assessments**	**Content**	**Skills**	**Lessons**
Students will understand …		Students will demonstrate their learning by ….	Students will know …	Students will be able to …	
ts	**S4.B.1.1 - Identify and describe similarities and differences between living things and their life processes.** **S4.B.2.1 - Identify and explain how adaptations help organisms to survive.** **S4.B.3.1 - Identify and describe living and nonliving things in the environment and their interaction.** **S4.B.3.2 - Describe, explain, and predict change in natural or**	*Record Sheets *Notebook entries/Drawings *Discussion	**that organisms have characteristics necessary for survival.**	*describe the connection between an organisms' characteristics, their needs, and the environment they live in.	Lessons 2 - 6 Lesson 8 Lesson 9
	S4.B.1.1 **S4.B.2.1** **S4.B.3.2**	*Record Sheets *Notebook entries/Drawings *Teacher observation *Discussion		*explain animal adaptations/ characteristics necessary for survival.	Lesson 4 Lesson 6 Lesson 9 Lesson 15

that organisms interact with their environmen

S4.A.3.1 - Identify systems and describe relationships among parts of a familiar system. **S4.B.1.1** **S4.B.2.1** **S4.B.3.1**	*Record Sheets *Notebook entries *Teacher observation *Discussion	**an organism's interactions with non-living components of their habitat.**	*describe how living things depend on non-living things for survival.	Lesson 2 Lesson 10 Lesson 11 Lesson 13
S4.A.2.1 -Apply skills necessary to conduct an experiement or design a solution to solve a problem. **S4.A.3.2** **S4.B.1.1** **S4.B.2.1** **S4.B.3.1**	*Record Sheets *Teacher observation *Discussion *Notebook entries		*investigate a particular organism's habitat.	Lessons 1 - 17
S4.B.1.1 **S4.B.2.1** **S4.B.3.1**	*Creating habitat *Notebook entries *Discussion *Animal Log Checklist	**the relationship of organisms within a habitat.**	*describe how animals and plants interact to meet their needs.	Lesson 2 Lesson 3 Lesson 5 Lesson 8
S4.A.1.3 - Recognize and describe change in natural or human-made systems and the possible effects of those changes. **S4.B.3.2**	*Record Sheets *Discussion *Teacher observations *Notebook entries	**fect plant and animal survival in their habitat.**	*describe changes in habitat that result from natural occurances (weather, fire, flood, drought).	Lesson 10 Lesson 11

	S4.A.1.3 **S4.B.3.2**	*Notebook entries *Discussion	**factors that af**	*describe changes in habitats that result from man-made occurances (urban sprawl, pesticides, etc.)	Lesson 10 Lesson 11
Physical Science: Electric Circuits - Carolina Biological					
Key concepts	**Standards**	**Assessments**	**Content**	**Skills**	**Lessons**
Students will understand…		Students will demonstrate their learning by ….	Students will know …	Students will be able to …	
	S4.A.2.1 - Apply skills necessary to conduct and experiment or design a solution to solve a problem. **S4.C.3.1 - Identify and describe different types of force and motion, or the effect of the interaction between force and motion.**	*Activity Sheet 1 *Notebook entries *Discussion	**about magnets and magnetism.**	*explain the connection between a compass and a magnet.	Lesson 2 Lesson 5
	S4.A.2.1 **S4.C.1.1 - Describe observable physical properties of matter.** **S4.C.3.1**	*Demonstration *Notebook entries *Teacher observation *Discussion		*observe magnetic fields.	Lesson 2 Lesson 5

S4.A.2.1 **S4.C.3.1** **S4.C.2.1.3 - Recognize or illustrate simple direct current series and parallel circuits composed of batteries, light bulbs, wire, and on/off switches.**	*Demonstration *Notebook entries *Teacher observation *Discussion		*recognize the difference between open and closed circuits.	Lesson 5 Lesson 12
S4.A.2.1 **S4.C.2.1.2 -Describe the flow of energy through an object or system.** **S4.C.3.1**	*Demonstration *Notebook entries *Discussion		*conduct experiments with electricity to understand energy flow.	Lessons 1 - 17
S4.A.2.1 **S4.C.2.1 -Recognize basic energy types and sources, or describe how energy can be changed from one form to another.**	*Demonstration *Notebook entries *Teacher observation *Discussion		*sort and identify examples of conductors and insulators.	Lesson 7
S4.A.2.1 **S4.C.2.1**	*Activity Sheet 3 *Notebook entries *Teacher observation *Discussion		*know that batteries convert chemical energy into electrical energy.	Lesson 5

	S4.A.2.1 **S4.C.2.1**	*Demonstration *Discussion		*observe magnetism that is produced by electricity flowing through a wire (electromagnetism).	Lesson 2 Lesson 8
Earth Science: Land and Water - Carolina					
Key concepts	**Standards**	**Assessments**	**Content**	**Skills**	**Lessons**
Students will understand…		Students will demonstrate their learning by ….	Students will know …	Students will be able to …	
	S4.D.1.1 - Describe basic landforms in Pennsylvania. **S4.D.1.3 - Describe Earth's different sources of water** **S4.A.3.2.1 - Identify what different models represent.** **S4.A.3.2.2 - Use models to make observations to explain how systems work.** **S4.A.3.2.3 -Use approproiate, simple modeling tools and techniques to describe or illustrate a system.**		**es.**	*identify Earth's terrestrial features (e.g. mountain, hill, plateau, plains).	Lesson 1 Lesson 7 Lesson 8 Lesson 11 Lesson 15

Earth's surface changes over time.	**S4.D.1.1 - Describe basic land forms in Pennsylvania.** **S4.D.1.3 - Describe Earth's different sources of water or describe changes in the form of water.** **S4.A.3.2 -Use models to illustrate simple concepts and compare the model to what it represents.**		**the formation of the Earth's feature**	*identify Earth's water features (e.g. oceans, seas, lakes, rivers, streams).	Lesson 1 Lesson 2 Lesson 4 Lesson 8 Lesson 9 Lesson 10 States and Regions p. 47
	S4.D.1.3.2: Explain how water goes through phase changes. **S4.D.1.3.3: Describe or compare lotic systems (ponds, lakes, bays) and lentic systems (streams, creeks, rivers).** **S4.D.1.3.4: Explain the role and relationship or a watershed or a wetland on water sources.**			*identify causes for terrestrial change (e.g. erosion, weathering).	Lesson 1 Lesson 3 Lesson 4 Lessons 7 - 17 States and Regions Chapter 1 Core lesson 2

	S4.D.1.1 **S4.D.1.3**		**the impact of water on terrestrial Earth.**	*explain the role and relationship between global, national, and local water sheds/ drainage basins.	States and Regions Chapter 1 Core lesson 2
	S4.D.1.1 **S4.A.3.2**			*identify shoreline features (e.g. bay, inlet, marsh).	States and Regions Chapter 3 Core lesson 1
	S4.D.1.3			*research the impact that various water systems have on shorelines.	States and Regions Chapter 3 Core lesson 1
urces.	**S4.D.1.2 -Identify the types and uses of Earth's resources.**		**types of resources**	*contrast new and renewable resources.	States and Regions Chapter 1 Core lesson 3
	S4.D.1.2 **S4.A.3.1 - Identify systems and describe realtionships among parts of a familiar system.** **S4.A.3.1.1 - Catagorize systems as either natural or human-made.**			*distinguish between man made and natural resources.	States and Regions Chapter 1 Core lesson 3

Earth's reso	**S4.D.1.2** **S4.A.1.1 - Identify and explain the pros and cons of applying scientific, environmental or technological knowledge to possible solutions to problems.** **S4.A.3.1**		**the value and uses of the Earth's resources**	*identify, describe, and locate types of important world, national and local resources.	States and Regions Chapter 1 Core lesson 3
	S4.A.1.1 **S4.D.1.2**			*research conservation methods for Earth's resources.	States and Regions Chapter 10
	S4.D.1.2 **S4.A.1.1** **S4.A.3.1**			*list several uses of important resources.	States and Regions Chapter 1 Core lesson 3
Grade 4 Earth & Space Science					
Key concepts	**Standards**	**Assessments**	**Content**	**Skills**	**Lessons**
Students will understand…		Students will demonstrate their learning by ….	Students will know …	Students will be able to …	
	S4.A.3.2 - Use models to illustrate simple concepts and compare the models to what it represents. **S4.D.3.1 - Describe Earth's relationship to the sun and the moon.**		**'acteristics of planets.**	*describe planets using two or more characteristics.	Lesson 1

characteristics and motions of objects in the sky.

S4.A.3.2 **S4.D.3.1**		**char**	*compare and contrast Earth's surface with other planets.	Lesson 5
S4.A.3.2 **S4.D.3.1** **S4.D.3.1.1**			*describe positions of planets in relationship to the sun.	Lesson 1
S4.A.3.2 **S4.D.3.1** **S4.D.3.1.1 - Describe motions of the sun-Earth-Moon system.** **S4.D.3.1.2 -Explain how the motion of the sun, Earth**		**solar system motions.**	*investigate planetary orbits including period, rotation, and distance.	Lesson 2 Lesson 5
S4.A.3.2 **S4.A.3.3 - Identify and make observations about patterns that regularly occur and reoccur in nature.** **S4.D.3.1** **S4.D.3.1.2** **S4.D.3.1.3 - Describe the causes of seasonal change as it relates to the rotation of the Earth and the tile of the Earth's axis.**			*recognize that the Earth's tilt and revolution around the sun creates the seasons.	Lesson 2 Lesson 5
S4.A.3.2 **S4.A.3.3** **S4.D.3.1**			*observe and identify phases and eclipses of the moon.	Lesson 15

	S4.A.3.2			*create a model to show the relationships in the Earth-Sun-Moon system.	Lesson 1 Lesson 2 Lesson 5