

**First Grade Science Alignment Record Science GLCE**

v.12.07

GLCE Code	Expectation	District Resources/Alignment	Vocabulary	Additional Resources
<b>Science Processes</b>	<b>Inquiry Process</b>			
<b>Statement [P.E.1]</b>	Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.		computer behavior pattern	“About Me” Big Book “How Do We Learn” Big Book
P.01.11	Make purposeful observation of the natural world using the appropriate senses.	<b>Insects</b> Investigation 2, Parts 1-3, pp. 8-24		
P.01.12	Generate questions based on observations.	<b>Air and Weather</b> Investigation 1, Parts 1-6, pp. 8-38		
P.01.13	Plan and conduct simple investigations.	<b>Solids and Liquids</b> Investigation 4, Parts 1-3, pp. 7-27	observation prediction	
P.01.14	Manipulate simple tools (for example: hand lens, pencils, balances, non-standard objects for measurement) that aid observation and data collection.	<b>AIMS – Magnet Activities</b>	reasoning science scientist teamwork chart	unifix cubes paper clips inchworm “Where Is It? Is It Moving” Big Book
P.01.15	Make accurate measurements with appropriate (non-standard) units for the measurement tool.			
P.01.16	Construct simple charts from data and observations.			
<b>Science Processes</b>	<b>Inquiry Analysis and Communication</b>			
<b>Statement [A.E.1]</b>	Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.			
A.01.12	Share ideas about science through purposeful conversation.			
A.01.13	Communicate and present findings of observations.			
A.01.14	Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).	▼		Magic School Bus “Goes to Seed” “Gets Planted” “Kicks Up a Storm”

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<b>Science Processes</b>	<b>Reflection and Social Implications</b>			
<b>Statement RS.E.1</b>	Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision making and the application of science throughout history and within society.			Literacy Library
RS.01.11	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.			Individual presentation – poster weather/insects Weather reporter- Thermometer outside
RS.01.12	Recognize that science investigations are done more than one time.			
<b>Physical Science</b>	<b>Properties of Matter</b>			
<b>Statement PM.E.1</b>	Physical Properties- All objects and substances have physical properties that can be measured.			
PM.01.11	Demonstrate the ability to sort objects according to observable attributes such as color, shape, size, sinking or floating.	<b>Solids and Liquids</b> Investigation 1, part 2, pp. 17-21 Investigation 3, parts 2, 4, pp. 14-18, 24-27 Investigation 2, Science Extension, p. 30 Investigation 3, Science Extension, p. 31	color, dissolving, energy, freezing, gas, heat, light, liquid water, states of matter	AIMS – “Sink or Float” Center “Matter” Big Book “Sorting” Big Book
<b>Statement PM.E.2</b>	States of Matter- Matter exists in several different states: solids, liquids and gases. Each state of matter has unique physical properties. Gases are easily compressed but liquids and solids do not compress easily. Solids have their own particular shapes, but liquids and gases take the shape of the container.			
PM.01.21	Demonstrate that water as a solid keeps its own shape (ice).	<b>Solids and Liquids</b> Investigation 4, Science Extension, p. 29 Science Stories, p. 16		freeze pop, ice cube trays Properties of Matter (multiple sheets)
PM.01.22	Demonstrate that water as a liquid takes on the shape of various containers.	<b>Solids and Liquids</b> Investigation 2, Parts 1-3, pp. 10-27 Science Stories, p. 11		water center with various containers
<b>Statement</b>	Magnets- Magnets can repel or attract other		push	Magnet Center “Sorting”

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PM.E.3	magnets. Magnets can also attract certain non-magnetic objects at a distance.		pull magnet attract	
PM.01.31	Identify materials that are attracted by magnets.	AIMS – “Stick to It”, pp. 1-6 AIMS – “What Will a Magnet Attract”, pp. 7-14	repel	
PM.01.32	Observe that like poles of a magnet repel and unlike poles of a magnet attract.	AIMS – “Face to Face”, pp. 53-56	pole magnetic non-magnetic	
<b>Science</b>	<b>Organization of Living Things</b>			
<b>Content</b> OLE.1	Life Requirements- Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair.		animal feature, diversity of life, egg, death, food, growth, habitat, insect, size	Magic School Bus Video “Gets Planted” “Animals” Big Book
OL.01.13	Identify the needs of animals.	<b>Insects</b> Investigation 1, part 1, pp. 8-15 Investigation 2, part 1, pp. 8-13 Investigation 3, part 2, pp. 12-20 Investigation 4, part 2, pp. 14-18 Investigation 5, part 1, pp. 10-15 Investigation 6, parts 1-3, pp. 8-22		Class pet: sea monkeys, terrarium AIMS: “Mealworms, Mealworms on Stage”
<b>Content</b> OLE.2	Life Cycles- Plants and animals have life cycles. Both plants and animals begin life and develop into adults, reproduce, and eventually die. The details of this life cycle are different for different organisms.			Magic School Bus Video “Goes to Seed” Bill Nye – “Amphibians” video AIMS – “How Do you Do?” pp. 34-37 “Life Cycle of the Mealworm” pp. 87-90
OL.01.21	Describe the life cycle of animals including the following stages: egg, young, adult; egg, larva, pupa, adult.		animal features, parent, offspring, similarities and differences among organisms	AIMS - “I Toad You So!” pp. 91-100 Insects Supplemental Sheets: “All Kinds of Ladybugs”, “My Grouchy Day”, “Follow That Bug”, “Life Cycle 1”, “Twenty”
<b>Science</b>	<b>Heredity</b>			
<b>Content</b>	Observable Characteristics- Plants and animals			

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HE.01.11	share many, but not all, characteristics of their parents.			
HE.01.11	Identify characteristics (for example: body coverings, beak shape, number of legs, body parts) that are passed on from parents to young.	↓		“Animals” Big Book
HE.01.12	Classify young animals based on characteristics that are passed on from parents (for example: dogs/puppies, cats/kittens, cows/calves, chicken/chicks).			Heritage Park field trip
<b>Earth Science</b>	<b>Earth Systems</b>			
<b>Statement ES.E.1</b>	Solar Energy- The sun warms the land, air and water and helps plants grow.		air	
ES.01.11	Identify the sun as the most important source of heat which warms the land, air, and water of the Earth.	<b>Air and Weather</b> Investigation 2, parts 1-4, pp. 8-27 Investigation 4, part 1, pp. 8-11 Science Stories, p.21		“Earth” Big Book “Plants” Big Book
ES.01.12	Demonstrate the importance of sunlight and warmth in plant growth.	<b>Plants</b> Investigation 1 and 3		“So Plants Need Sunlight?” “Lights Out”
<b>Statement ES.E.2</b>	Weather- Weather changes from day to day and over the seasons.			AIMS – “Weather or Not” pp. 28-31
ES.01.21	Compare daily changes in the weather related to temperature (cold, hot, warm, cool); cloud cover (cloudy, partly cloudy, foggy) precipitation (rain, snow, hail, freezing rain); wind (breezy, windy, calm).	<b>Air and Weather</b> Investigation 2, part 1-4, pp. 8-27 Investigation 4, part 1, pp. 8-11 Science Stories, pp. 7-13	cloud daily weather pattern day	Temperature Graph “Weather” Big Book “Sky” Big Book
ES.01.22	Describe and compare weather related to the four seasons in terms of temperature, cloud cover, precipitation, and wind.	<b>Air and Weather</b> Investigation 4, part 2, pp. 12-18 Science Stories, pp. 18-23	freezing gas heat	Seasons booklet
ES.01.23	Describe severe weather events.	<b>Air and Weather</b> Science Stories, pp. 16-17	precipitation	
ES.01.24	Describe precautions that should be taken for human safety during severe weather conditions		seasonal changes seasonal weather	Disaster Preparedness Coloring Book

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	(thunderstorms, lightning, tornadoes, high winds, blizzards, hurricanes).		pattern sky month	
<b>Statement</b> <b>ES.E.3</b>	Weather Measurement- Scientists use tools for observing, recording, and predicting weather changes.		water weather weather conditions weather patterns	
ES.01.31	Identify the tools that might be used to measure temperature, precipitation, cloud cover and wind.	<b>Air and Weather</b> Investigation 2, parts 2-4, pp. 14-27 Investigation 3, part 2, 4, pp. 12-16, 22-28 Science Stories	week wind year	AIMS – “Temperature’s Rising” pp. 32-34
ES.01.32	Observe and collect data of weather conditions over a period of time.	<b>Air and Weather</b> Investigation 2, parts 1-4, pp. 8-27 Investigation 4, parts 1-2, pp. 8-18		
<b>Earth Science</b>	<b>Solid Earth</b>			
<b>Statement</b> <b>SE.E.1</b>	Earth Materials- Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.			
SE.01.12	Describe how Earth materials contribute to the growth of plant and animal life.	<b>Insects</b> Investigation 1, part 1, pp. 8-15 Investigation 2, part 1, pp. 8-13 Investigation 3, part 2, pp. 12-20 Investigation 4, part 2, pp. 14-18		“Earth” Big Book