Science Indicators Fourth Marking Period 2009-10

Grade	Indicator	Standard Indicator
Kindergarten	K.2.2	Draw pictures and write words to describe objects and experiences.
Kindergarten	K.4.1	Give examples of plants and animals.
		Observe plants and animals, describing how they are alike and how they are
Kindergarten	K.4.2	different in the way they look and the things they do.
		Investigate and make observations to seek answers to questions about the world,
Grade 1	1.1.2	such as "In what ways do animals move?"
		Recognize that and demonstrate how people can learn much about plants and
		animals by observing then closely over a period of time. Recognize also that care
Grade 1	1.1.3	must be taken to know the needs of living things and how to provide for them.
Grade 1	1.1.4 b	Use tools, such as rulers, to investigate the world and make observations.
		Measure the length of objects having straight edges in inches, centimeters, or non-
Grade 1	1.2.4	standard units.
		Investigate by observing, and then describe how things move in many different
Grade 1	1.3.4	ways, such as straight, zigzag, round-and-round, and back-and-forth.
Grade 1	1.4.4	Explain that most living things need water, food, and air.
		Observe that and describe how certain things change in some ways and stay the
Grade 1	1.6.2	same in others, such as in their color, size, and weight.
Grade 2	2.2.3	Estimate and measure capacity using cups and pints.
		Investigate by observing and then describe how animals and plants cause changes
Grade 2	2.3.4	in surroundings.
		Observe and identify different external features of plants and animals and describe
Grade 2	2.4.1	how those features help them in different environments.
		Observe that and describe how animals may use plants or other animals for
Grade 2	2.4.2	shelter.
		Observe and explain that plants and animals both need to take in water, animals
Grade 2	2.4.3	need to take in food, and plants need light.
		Recognize and explain that living things are found almost everywhere in the world
Grade 2	2.4.4	and that there are somewhat different kinds in different places.
		Explain that sometimes a person can find a lot (but not everything) about a group of
Grade 2	2.5.6	things such as insects, rocks, and plants by studying a few of them.
		Participate in different types of guide scientific investigations, such as observing
Grade 3	3.1.2	objects and events and collecting specimens for analysis.
		Keep and record records of investigations and observations using tools, such as
Grade 3	3.1.3	journals, charts, graphs, and computers.
Grade 3	3.1.4	Discuss the results of investigations and consider the explorations of others.
Grade 3	3.2.1	Add or subtract whole numbers mentally, on paper, and with a calculator.
		Keep a notebook that describes observations and is understandable weeks or
Grade 3	3.2.3	months later.
		Demonstrate that a great variety of living things can be sorted into groups in many
		ways using various features, such as how they look, where they live, and how they
Grade 3	3.4.1	act, to decide which things belong to which group.
Grade 3	3.4.2	Explain that features used for grouping depend on the purpose of the grouping.
		Observe that and describe how offspring are very much, but not exactly, like their
Grade 3	3.4.3	parents and like one another.
Grade 3	3.4.4	Describe that almost all kinds of animals' food can be traced back to plants.
1		
		Give examples of some kinds of organisms that have completely disappeared and
Grade 3	3.4.5	explain how these organisms were similar to some organisms living today.
		Construct tables and graphs to show how values of one quantity are related to
Grade 3	3.5.3	values of another.

Science Indicators Fourth Marking Period 2009-10

Grade	Indicator	Standard Indicator
		Take, record, and display counts and simple measurements of things over time,
Grade 3	3.6.4	such as plant or student growth.
		Observe that and describe how some changes are very slow and some are very
Grade 3	3.6.5	fast and that some of these changes may be hard to see and/or record.
		Discuss and give examples of how technology, such as computers and medicines,
		has improved the lives of many people, although the benefits are not equally
Grade 4	4.1.7	available to all.
Grade 4	4.1.8	Recognize and explain that any invention may lead to other inventions.
Grade 4	4.1.9	Explain how some products and materials are easier to recycle than others.
Grade 4	4.2.2	State the purpose, orally or in writing, of each step in a computation.
		Demonstrate that in an object consisting of many parts, the parts usually influence
Grade 4	4.6.1	or interact with one another.
		Show that something may not work as well, or at all, if a part of it is missing,
Grade 4	4.6.2	borken, worn out, mismatched, or incorrectly connected.
		Recognize that and describe how changes made to a model can help predict how
Grade 4	4.6.3	the real thing can be altered.
Grade 5	5.2.6	Write instructions that others can follow in carrying out a problem.
Grade 5	5.2.7	Read and follow step-by-step instructions when learning new procedures.
		Explain that telescopes are used to magnify distant objects in the sky including the
Grade 5	5.3.1	moon and the planets.
		Observe and describe that stars are like the sun, some being smaller and some
Grade 5	5.3.2	being larger, but they are so far away that they look like points of light.
		Observe the stars and identify stars that are unusually bright and those that have
Grade 5	5.3.3	unusual colors, such as reddish or bluish.
		Describe that, like all planets and stars, the Earth is approximately spherical in
Grade 5	5.3.7	shape.
		Show that mathematical statements using symbols may be true only when the
Grade 5	5.5.2	symbols are replaced by certain numbers.
		Explain that predictions can be based on what is known about the past, assuming
Grade 5	5.5.7	that conditions are similar.
		Explain the danger in using only a portion of the data collected to describe the
Grade 5	5.5.10	whole.
		Recognize and describe that systems contain objects as well as processes that
Grade 5	5.6.1	interact with each other.
		Demonstrate how geometric figures, number sequences, graphs, diagrams,
		sketches, number lines, maps, and stories can be used to represent objects,
		events, and processes in the real world, although such representation can never be
Grade 5	5.6.2	exact in every detail.