AMERICAN SCHOOL MED SCIENCE SCOPE & SEQUENCE-THIRD GRADE

This document outlines the academic goals, the activities and materials used in the Third Grade class in order to achieve high academic success. There is a great deal of overlap in the standards within the activities and within the core areas, thus, standards addressed repeatedly throughout the year.

Time period	Standard	Resources (unit in textbook, learning center, recurring activity, other)	Internet/Media/ other resource
Weeks 1 to 36	(1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following school and home safety procedures and environmentally appropriate practices. The student is expected to:		
Week 1	(A) demonstrate safe practices as described in the Texas Safety Standards during classroom and outdoor investigations, including observing a schoolyard habitat; and	Teach throughout the year. Page xvi in Harcourt.	PowerPoint
Week 1	(B) make informed choices in the use and conservation of natural resources by recycling or reusing materials such as paper, aluminum cans, and plastics.	Teach at the beginning of the year and set up your classroom to facilitate the implementation throughout the year.	BrainPopJr.com
Weeks 1 to 36	(2) Scientific investigation and reasoning. The student uses scientific inquiry methods during laboratory and outdoor investigations. The student is expected to:		
	(A) plan and implement descriptive investigations, including asking and answering questions, making inferences, and selecting and using equipment or technology needed, to solve a specific problem in the natural world;	Teach the scientific method and throughout the school in all of the Harcourt units. Science Fair Spring of each year.	PowerPoint BrainPopJr.com
	(B) collect data by observing and measuring using the metric system and recognize differences between observed and measured data;		
[Type text	(C) construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and		

	evaluate measured data;		
	(D) analyze and interpret		
	patterns in data to construct		
	reasonable explanations		
	based on evidence from		
	investigations;		
	(E) demonstrate that		
	repeated investigations may		
	increase the reliability of		
	results; and		
	(F) communicate valid		
	conclusions supported by		
	data in writing, by drawing		
	pictures, and through verbal		
	discussion.		
Weeks	(3) Scientific investigation		
1 to 36	and reasoning. The student		
2 30 00	knows that information,		
	critical thinking, scientific		
	problem solving, and the		
	contributions of scientists are		
	used in making decisions. The		
	student is expected to:		
	(A) in all fields of science,	Teach throughout the school in all of	
		_	
	analyze, evaluate, and critique	the Harcourt units.	
	scientific explanations by	Colones Folia Carring of such and	
	using empirical evidence,	Science Fair Spring of each year.	
	logical reasoning, and		
	experimental and		
	observational testing,		
	including examining all sides		
	of scientific evidence of those		
	scientific explanations, so as		
	to encourage critical thinking		
	by the student;		
	(B) draw inferences and		
	evaluate accuracy of product		
	claims found in		
	advertisements and labels		
	such as for toys and food;		
	(C) represent the natural		Sun, Earth and
	world using models such as		Moon Models
	volcanoes or Sun, Earth, and		
	Moon system and identify		
	their limitations, including		
	size, properties, and		
	materials; and		
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	(D) connect grade-level appropriate science concepts		

YA7 1 4	with the history of science, science careers, and contributions of scientists.		
Weeks 1 to 36	(4) Scientific investigation and reasoning. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:		
	(A) collect, record, and analyze information using tools, including microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, wind vanes, rain gauges, pan balances, graduated cylinders, beakers, spring scales, hot plates, meter sticks, compasses, magnets, collecting nets, notebooks, sound recorders, and Sun, Earth, and Moon system models; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums; and	Teach throughout the school in all of the Harcourt units. Science Fair Spring of each year.	
	(B) use safety equipment as appropriate, including safety goggles and gloves.	Teach throughout the school in all of the Harcourt units. Page xvi in Harcourt. Preparation for Science Fair Spring of each year.	PowerPoint
Weeks 5 to 8	(5) Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to:		
	(A) measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float;	Sc_3rdGr_1st_9Wks_ Matter_Energy_Portf_1112.pdf Pages E2-E56 in Harcourt.	BrainPopJr.com
	(B) describe and classify samples of matter as solids, liquids, and gases and	Sc_3rdGr_1st_9Wks_ Matter_Energy_Portf_1112.pdf	BrainPopJr.com

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	demonstrate that solids have	Sc_3rdGr_1st_9wks_	
	a definite shape and that	3.5B_L1_1112_StatesofMatter	
	liquids and gases take the	Pages E2-E56 in Harcourt.	
	shape of their container;		
	(C) predict, observe, and	Sc_3rdGr_1st_9Wks_	
	record changes in the state of	Matter_Energy_Portf_1112.pdf	
	matter caused by heating or	Pages E2-E56 in Harcourt.	
	cooling; and	ruges 12 250 in nurcourt.	
	3	Co 2ndCn 1ot OWIng	
	(D) explore and recognize	Sc_3rdGr_1st_9Wks_	
	that a mixture is created	Matter_Energy_Portf_1112.pdf	
	when two materials are	Pages E2-E56 in Harcourt.	
	combined such as gravel and		
	sand and metal and plastic		
	paper clips.		
Weeks	(6) Force, motion, and energy.		
9 to 12	The student knows that forces		
	cause change and that energy		
	exists in many forms. The		
	student is expected to:		
	(A) explore different forms of	Sc_3rdGr_1st_2nd_9Wks_	BrainPopJr.com
	energy, including mechanical,	ForceMotionEnergy_Portf_1112.pdf	Druini opjileoni
	light, sound, and	Pages F2-F80 in Harcourt.	
	_	rages r2-room marcourt.	
	heat/thermal in everyday life;	C 0 10 4 · 0 1 0 vv	
	(B) demonstrate and observe	Sc_3rdGr_1st_2nd_9Wks_	YouTube Videos
	how position and motion can	ForceMotionEnergy_Portf_1112.pdf	
	be changed by pushing and	Pages F2-F80 in Harcourt.	
	pulling objects to show work		
	being done such as swings,		
	balls, pulleys, and wagons;		
	and		
	(C) observe forces such as	Sc_3rdGr_1st_2nd_9Wks_	
	magnetism and gravity acting	ForceMotionEnergy_Portf_1112.pdf	
	on objects.	Pages F2-F80 in Harcourt.	
Weeks	(7) Earth and space. The	1 ugos 2 1 00 m m m v	
19 to 24	student knows that Earth		
17 to 21	consists of natural resources		
	and its surface is constantly		
	changing. The student is		
	expected to:	C- 2ndCn 2nd OVAVI	Danie Dan In ann
	(A) explore and record how	Sc_3rdGr_3rd_9Wks	BrainPopJr. com
	soils are formed by	Dynamic_Earth_Portf_1112.pdf	
	weathering of rock and the	Pages C2-C112 in Harcourt.	
	decomposition of plant and		
	animal remains;		
	(B) investigate rapid changes	Sc_3rdGr_3rd_9Wks	
	in Earth's surface such as	Dynamic_Earth_Portf_1112.pdf	
	volcanic eruptions,	Pages C2-C112 in Harcourt.	
	earthquakes, and landslides;		
	(C) identify and compare	Sc_3rdGr_3rd_9Wks	
	(=) including and compare		

	different landforms, including mountains, hills, valleys, and plains; and	Dynamic_Earth_Portf_1112.pdf Pages C2-C112 in Harcourt.	
	(D) explore the characteristics of natural resources that make them useful in products and materials such as clothing and furniture and how resources may be conserved.	Sc_3rdGr_3rd_9Wks Dynamic_Earth_Portf_1112.pdf Pages C2-C112 in Harcourt.	
Weeks 13 to 18	(8) Earth and space. The student knows there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:		
	(A) observe, measure, record, and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction, and precipitation;	Sc_3rdGr_2nd_9Wks_ Weather_and_Space_Sun_Earth_Moon_ Portf_1112.pdf Pages D2-D96 in Harcourt.	BrainPopJr.com
	(B) describe and illustrate the Sun as a star composed of gases that provides light and heat energy for the water cycle;	Sc_3rdGr_2nd_9Wks_ Weather_and_Space_Sun_Earth_Moon_ Portf_1112.pdf Pages D2-D96 in Harcourt.	BrainPopJr.com
	(C) construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions; and	Sc_3rdGr_2nd_9Wks_ Weather_and_Space_Sun_Earth_Moon_ Portf_1112.pdf Pages D2-D96 in Harcourt.	BrainPopJr.com
	(D) identify the planets in Earth's solar system and their position in relation to the Sun.	Sc_3rdGr_2nd_9Wks_ Weather_and_Space_Sun_Earth_Moon_ Portf_1112.pdf Pages D2-D96 in Harcourt.	
Weeks 25 to 27	(9) Organisms and environments. The student knows that organisms have characteristics that help them survive and can describe patterns, cycles, systems, and relationships within the environments. The student is expected to:		
	(A) observe and describe the physical characteristics of environments and how they	S_3rdGr_3rd- 4th_9Wks_Life_portf.1112.pdf Pages B2-B64 in Harcourt.	BrainPopJr.com

	support populations and		
	communities within an		
	ecosystem;		
	(B) identify and describe the	S_3rdGr_3rd-	BrainPopJr.com
	flow of energy in a food chain	4th_9Wks_Life_portf.1112.pdf	
	and predict how changes in a	Pages B2-B64 in Harcourt.	
	food chain affect the		
	ecosystem such as removal of		
	frogs from a pond or bees		
	from a field; and	0.2.10.2.1	D ' D I
	(C) describe environmental	S_3rdGr_3rd-	BrainPopJr.com
	changes such as floods and	4th_9Wks_Life_portf.1112.pdf	
	droughts where some	Pages B2-B64 in Harcourt.	
	organisms thrive and others		
	perish or move to new locations.		
Weeks	(10) Organisms and		
28 to 30	environments. The student		
20 10 30	knows that organisms		
	undergo similar life processes		
	and have structures that help		
	them survive within their		
	environments. The student is		
	expected to:		
	(A) explore how structures	S_3rdGr_3rd-	BrainPopJr.com
	and functions of plants and	4th_9Wks_FOSS_StructuresofLife_1112.pdf	
	animals allow them to survive		
	in a particular environment;	S_3rdGr_3rd-	
		4th_9Wks_Life_portf.1112.pdf	
	Y	Pages A2-A64 in Harcourt.	
	(B) explore that some	S_3rdGr_3rd-	BrainPopJr.com
	characteristics of organisms	4th_9Wks_FOSS_StructuresofLife_1112.pdf	
	are inherited such as the		
	number of limbs on an animal	S_3rdGr_3rd-	
	or flower color and recognize	4th_9Wks_Life_portf.1112.pdf	
	that some behaviors are	Pages A2-A64 in Harcourt.	
	learned in response to living		
	in a certain environment such		
	as animals using tools to get food; and		
	(C) investigate and compare	S_3rdGr_3rd-	BrainPopJr.com
	how animals and plants	4th_9Wks_FOSS_StructuresofLife_1112.pdf	Diami opji.com
	undergo a series of orderly	ren_> wks_r obs_bu detaresorbne_1112.pur	
	changes in their diverse life	S_3rdGr_3rd-	
	_	4th_9Wks_Life_portf.1112.pdf	
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	cycles such as tomato plants, frogs, and lady bugs.	Pages A2-A64 in Harcourt.	

Note to reader: Some of the units of study my take longer than the weeks assigned.

Week 31-34 will be working on their science fair projects. ScienceFairGuide12.pdf

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