Grade 5 Focus Calendar / Units of Study
2012 - 2013

Science – **Grade 5**	**Unit 1:** **Scientific Inquiry**	**Unit 2:** **Classification**	**Unit 3:** **Forces & Motion**	**Unit 4:** **Solar System**	**Unit 5:** **Weather & Water Cycle**	**Unit 6:** **New Technologies & Measurement Tools**
Key Skills	➢ Identify and write testable questions and hypothesis. ➢ Recognize a fair test ➢ Identify variables ➢ Interpret and create a bar and line graph	➢ Classify animals as vertebrates and invertebrates ➢ Classify vertebrates according to traits ➢ Determine differences between plants and animals ➢ Use a dichotomous key	➢ Identify simple machines ➢ Explain how simple machines change the amount of effort needed to complete work ➢ Explain how some simple machines change the direction of force needed to complete work	. ➢ Make observations that show the Moon orbits the Earth in a month. ➢ Observe that the Earth and other planets orbit the Sun. ➢ Identify that planets look like and move like stars. ➢ Identify that the Earth rotates once every 24 hours.	➢ Classify matter as a solid, liquid, or gas. ➢ Predict the effect that heat has on water. ➢ Describe and trace the path of water as it goes through the water cycle. ➢ Identify the different forms water can take as it moves through the water cycle.	➢ Identify how the effects of inventions or technological advances may be helpful, harmful, or both. ➢ Use a spring scale to measure weight. ➢ Measure temperature to the nearest degree Celsius.
Academic Vocabulary	testable question hypothesis variables fair and unbiased test bar graph line graph	vertebrate invertebrate photosynthesis	simple machine force work lever inclined plane wheel & axle screw wedge	rotation revolution gravity motion	water cycle atmosphere precipitation run off evaporation condensation	meter centimeter millimeter gram milligram liter milliliter Celsius
Reading/Writing Skills *TE (Scott	Making Predictions-Read “Starry Messenger” by Peter	Compare and Contrast TE p. 5; Read aloud “A House for Hermit	Cause and Effect Graphic Organizer TE p. 405	Read a Biography Isaac Newton TE p. 440; Summarize TE p.	Sequence TE p. 197; Draw Conclusions TE p. 229	Everyday Uses of NASA Technology TE p. 598-599;

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2012 - 2013

Foresman 5th Grade Science Teacher's Edition)	Sis about Galileo Galilei.	Crab" by Eric Carle. Have students classify each animal presented in the story as a vertebrate or invertebrate.		509; Making Inferences with a Science Article TE p. 541		Sequencing with a Graphic Organizer TE p. 573
Math Skills *TE (Scott Foresman 5th Grade Science Teacher's Edition)	Choosing appropriate graphs; making and using line and bar graphs, finding averages; Make a Bar Graph TE p. 17	Classifying Figures TE p. 28; Classifying Solid Figures p. 292		Shrinking the Universe Down to Size TE p. 532; Weight on Planets TE p. 564	Analyzing Tornado Data with a bar graph TE p. 252-253	Students use rulers, meter sticks, and yard sticks in various math activities throughout the year.
Power Standards/GLEs Assessed	GLES COVERED: 7.1Aa Formulate testable questions and explanations (hypotheses) 7.1Ab Recognize the characteristics of a fair and unbiased test 7.1Da Communicate the procedures and results of investigations and explanations through: oral presentations, drawings and maps, data tables, graphs (bar, single line, pictograph), writings	GLES COVERED: 3.1.Ea Explain how similarities are the basis for classification 3.1Eb Distinguish between plants and animals. 3.1Ec Classify animals as vertebrates or invertebrates	GLES COVERED: 2.2Fb Identify the simple machines in common tools and household items. 2.2Fd Observe and explain that simple machines change the amount of effort force and/or direction of force.	GLES COVERED: 6.2Ca Identify the Earth rotates once every 24 hours 6.2Cc Relate the apparent motion of the Sun, Moon, and stars in the sky to the rotation of the Earth.	GLES COVERED: 5.2Ea Describe and trace the path of water as it cycles through the hydrosphere, geosphere, and atmosphere. 5.2Eb Identify the different forms water can take as it moves through the water cycle.	GLES COVERED: 8.1Ba Describe how new technologies have helped scientists make better observations and measurements for investigations.
Labs	-Galileo's Experiment	-Jelly Belly	-Marshmallow	-Oreo Cookie Lunar	-Make and use	-Toy cars lab (use

Grade 5 Focus Calendar / Units of Study
2012 - 2013

	-The Great Marble Roll	dichotomous key	Catapult -Levers Lab	Phases -Shadows Lab	weather instruments	spring scales)
Approximate Instruction Dates	**6 weeks (Aug.-Sept.) Scientific Inquiry is used throughout the year in science lab work.**	**5 weeks (Oct.-Nov.)**	**5 weeks (Nov.-Dec.)**	**5 weeks (Jan.-Feb.)**	**5 weeks (Feb.-March)**	**4 weeks (April) Measurement tools are used continuously throughout the school year in science lab work.**

Science – **Grade ____**	**Unit 7:**	**Unit 8:**	**Unit 9:**	**Unit 10:**	**Unit 11:**	**Unit 12:**
Key Skills						
Academic Vocabulary						
Reading/Writing Skills						
Math Skills						
Power						

Grade 5 Focus Calendar / Units of Study
2012 - 2013

Standards/GLEs Assessed						
Labs						
Approximate Instruction Dates						