Science Curriculum Guide
Grade 5

State Standards	St. Louis Park Outcomes	District-Wide, Common Assessments	Units/Topics/ Activities	Materials and Resources

5th

I. HISTORY & NATURE OF SCIENCE **A. Scientific World View** **Standard:** The student will understand that communication is essential to science.	**Conduct systematic observations of controlled experiments by manipulating variables that affect the outcome and communicate predictions and results	FOSS Variables Unit: End-of-Module Assessment (choose one)	The communication part of each FOSS unit; see FOSS books about science history Project – change one variable to determine outcome Do at least two of the Investigations in FOSS Variables kit
I. HISTORY & NATURE OF SCIENCE **B. Scientific Inquiry** **Standard:** The student will understand the process of scientific investigations.	**Conduct systematic observations of controlled experiments by manipulating variables that affect the outcome and communicate predictions and results	FOSS Variables Unit: End-of-Module Assessment (choose one)	FOSS Variables kit – Do at least two of the Investigations Embedded in all FOSS units
II. PHYSICALSCIENCE **D. Motion** **Standard:** The student will understand that changes in speed or direction of motion are caused by forces.	**Demonstrate an understanding of the application of work (force) in lever and pulley systems	FOSS Variables Unit: End-of-Module Assessment (choose one)	FOSS kit: Levers and Pulleys: Investigations 1-3 (Pulleys and all three types of levers)
IV. LIFE SCIENCE **E. Biological Populations Change Over Time** **Standard:** The student will know that biological populations change over time.	Demonstrate an understanding of how biological populations adapt to their changing surroundings/environment	Assessment to be developed	Adaptations: http://www.usoe.k12.ut.us/curr/science/sciber00/7th/genetics/sciber/adapt.htm Animal adaptations: http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=5&DocID=232 Etosha, Africa – animal adaptation: http://www.pbs.org/edens/etosha/cr_lesson_bighideout.htm#1
III. EARTH & SPACE SCIENCE **A. The Universe** **Standard:** The student will identify the patterns and movements of celestial objects.	Demonstrate an understanding of the characteristics and relationships of objects in the solar system.	Assessment to be developed	Solar System Video from Kids Discover Solar System booklets from Kids Discover –unavailable in Spanish
IV. LIFE SCIENCE **F. Flow of Matter and Energy** **Standard:** The student will know that	Describe the relationships among producers, consumers, and decomposers in an ecosystem in	Assessment to be developed	Westwood field trip about producers, consumers, and decomposers (optional) Staff at Westwood is willing to come to the school before the

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matter and energy flow into, out of, and within a biological system.	Minnesota		trip to prepare students for the trip, to provide pre-trip materials, and/or training for teachers	
I. HISTORY & NATURE OF SCIENCE **C. Scientific Enterprise** **Standard:** The student will recognize that science and technology involve different kinds of work and engages men and women of all backgrounds.	No isolated outcome (embedded in curriculum)	No assessment	History of scientists and mathematicians FOSS kit readings/books TrailBlazers Mathematics introductions to scientists and mathematicians	

FOSS kit Food and Nutrition is included as part of the 5th grade Health curriculum.