STRAND	STANDARD	OBJECTIVES (What it looks like in the classroom) The learner will …	# OF DAYS NEEDED FOR MASTERY	DATES TAUGHT	DATE ASSESSED	ASSESSMENT TYPE (classroom, STAR, objective, subjective, project, etc.)	RESOURCES (Materials, web sites, auto-visual, print)	LEARNING ACTIVITIES
Inquiry and Nature of Science	SC5.1.1a Ask testable scientific questions	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only	1 day	October	October	Work as a team to build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins beads	Students design, build and test a vehicle powered by air using only materials supplied
Inquiry and Nature of Science	SC5.1.1b Plan and conduct investigations and identify factors that have the potential to impact and investigation	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only	1 day	October	October	Work as a team to build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins beads	Students design, build and test a vehicle powered by air using only materials supplied
Inquiry and Nature of Science	SC5.1.1c Select and use equipment correctly and accurately	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only	1 day	October	October	Work as a team to build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins beads	Students design, build and test a vehicle powered by air using only materials supplied

Inquiry and Nature of Science	SC 5.1.1d Make relevant observations and measurements	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design.	1 day	October	October	Work as a team to build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins beads	Students design, build and test a vehicle powered by air using only materials supplied
Inquiry and Nature of Science	SC5.1.1e Collect and organize data	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it	1 day	October	October	Work as a team to build a Puff Mobile. Test vehicle and measure distance it travels. Plot distances on graph	AIMS Puff Mobile Paper Straws Straight pins Beads graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph
Inquiry and Nature of Science	SC5.1.1 f Develop a reasonable explanation based on collected data	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph

Inquiry and Nature of Science	SC5.1.1g Share information, procedures, and results with peers and/or adults	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it. Then share results	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did. Student will share information with peers.	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph. Share results with peers
Inquiry and Nature of Science	SC5.1.1h Provide feedback on scientific investigations	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it. Then share results	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did. Student will share information with peers.	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph. Share results with peers

Inquiry and Nature of Science	SC5.1.1i Use appropriate mathmematics on all aspects of scientific inquiry	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it. Then share results	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did. Student will share information with peers	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph. Share results with peers
Inquiry and Nature of Science	SC5.1.2a Recognize that scientific explanations are based on evidence and scientific knowledge	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it. Then share results	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did. Student will share information with peers	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph. Share results with peers

Inquiry and Nature of Science	SC5.1.2b Recognize that new discoveries are always being made which impact scientific knowledge	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it. Then share results	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did. Student will share information with peers	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph. Share results with peers
Inquiry and Nature of Science	SC5.1.2c Recognize many different people study science	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. They will test their design, collect data and record it. Then share results	1 day	October	October	Work as a team to build a Puff Mobile. Make a graph with results. Develop an explanation as to why vehicles went distances they did. Student will share information with peers	AIMS Puff Mobile Paper Straws Straight pins Beads Graph	Students design, build and test a vehicle powered by air using only materials supplied. Will collect data and make a graph. Share results with peers

Inquiry and Nature of Science	SC5.1.3a Identify a simple problem	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only	1 day	October	October	Work as a team to design and build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins Beads	Students design, build and test a vehicle powered by air using only materials supplied
Inquiry and Nature of Science	SC5.1.3b Propose a solution to a simple problem	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only	1 day	October	October	Work as a team to design and build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins Beads	Students design, build and test a vehicle powered by air using only materials supplied
Inquiry and Nature of Science	SC5.1.3c Implement the proposed solution	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. Using materials supplied learner will create the vehicle	1 day	October	October	Work as a team to design and build a Puff Mobile	AIMS Puff Mobile Paper Straws Straight pins Beads	Students design, build and test a vehicle powered by air using only materials supplied

Inquiry and Nature of Science	SC5.1.3d Evaluate the implementation	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. Using materials supplied learner will create the vehicle. The learner will test their vehicle.	1 day	October	October	Work as a team to design and build a Puff Mobile. Students will test run their vehicle.	AIMS Puff Mobile Paper Straws Straight pins Beads	Students design, build and test a vehicle powered by air using only materials supplied
Inquiry and Nature of Science	SC5.1.3e Communicate the problem, design and solution	The learner will be given a problem and will design a plan to create a vehicle that is powered by air only. Learner will check design to see if it works	1 day	October	October	Work as a team to design and build a Puff Mobile. Students will test run their vehicle	AIMS Puff Mobile Paper Straws Straight pins Beads	Students design, build and test a vehicle powered by air using only materials supplied

Physical Science	SC5.2.3a Recognize that sound is produced from vibrating objects; the sound can be changed by changing the vibration	The learner will demonstrate how sound is produced when objects strike and discover that changing rate of vibration will change pitch	4 weeks	January	January	Unit Test	AIMS activities Tuning forks	AIMS activity Sound is Vibration Eggs Full of Sound
Physical Science	SC5.2.3b Identify that light travels in straight lines and can be reflected or absorbed by an object	The learner will express how light will travel, is reflected or absorbed	4 weeks	January	January	Unit Test	AIMS activities	Just Passing Through Sound is Vibration
Physical Science	SC5.2.3c Recognize that light can travel through certain materials and not others (transparent, translucent, opaque)	The learner will distinguish between reflection, refraction, transparent, translucent, opaque	4 weeks	January	January	Unit Test	AIMS activity Aluminum foil Paper Mirror Water Glass Cardboard Wax paper flashlight	Just Passing Through

Physical Science	SC5.2.3e Identify materials that act as thermal conductors or insulators	The learner will create an electrical circuit through which an electrical current can pass then check for conductors and insulators	2 weeks	February	February	Unit Test	AIMS activity NPPD Battery Wires Light bulb Penny Cardboard Tin Glass wood	Build a circuit Try different materials to check to see if insulator or conductor
Physical Science	SC5.2.3f Recognize that the transfer of electricity in an electrical circuit requires a closed loop	The learner will create an electrical circuit through which an electrical current can pass.	2 weeks	February	February	Unit Test	AIMS activity Battery Wires Light bulb	Build a circuit
Life Science	SC5.3.1b Identify how parts of plants and animals function to meet basic needs	The learner will label the external anatomy of a fish and describe how the body parts help a fish swim	4 weeks	September	September	Unit Test Power Point	Web site for Nebraska Games and Fish Fish ID book	Label a drawing of a fish Power Point

Life Science	SC5.3.3a Diagram and explain a simple food chain beginning with the Sun	The learner will understand, explain and illustrate a food chain	5 weeks	April/May	April/May	Unit Test	Food chain books Games	Learning stations
Life Science	SC5.3.3b Identify the role of producers, consumers, and decomposers in an ecosystem	The learner will understand, explain and illustrate a food chain including producers, consumers and decomposers	5 weeks	April/May	April/May	Unit Test	Food chain books	Leaning stations
Life Science	SC5.3.4a Describe adaptations made by plants or animals to survive environmental changes	The learner will explain how a mammal adapts to environmental changes	5 weeks	April/May	April/May	Unit Test	United Streaming on Mammal Adaptations	Power Point Research

Physical Science	SC5.4.3b Observe, measure, and record changes in weather (temperature, wind direction and speed, air pressure, and precipatation	The learner will collect weather data using weather instruments	4 weeks	March	March	Classroom Data Graph	Barometer Thermometer Hygrometer Anenometer	Collect daily weather data using instruments
Physical Science	SC5.4.3c Recognize the difference between weather, climate and seasons	The learner will recognize the differences between weather, climate and the seasons	4 weeks	March	March	Unit Test	United Streaming Difference between climate, weather and seasons	Research, watch United Streaming