Primary Thematic Project-Based Curriculum

School-Wide Theme: Connections

<u>Investigations</u>

<u>Guiding Questions</u>

Project-Based	Classification	Human Body	Weather	Simple Machines
- What is a team? - What is a leader? - Characteristics of a leader? - What does it mean to be a part of a community? - How do you lead a group? Should everyone lead? - What are effective forms of communication? - What is your part in a team? - How do individual behaviors affect others? - What is effective time management? - How do I know if I am producing quality work? - What is a question? - How can you show your learning? - How can you teach about what you've learned?	- How do scientists figure things out? - What tools do scientists use? - What is a home? - What are you connected to? - What is a plant? - What is an animal? - What do they need to survive? - What ways do animals depend on other animals and plants? - Where do plants get the food and water they need to survive? - What plants and animals live in Prescott? - How are plants and animals affected by humans?	- What do you need to survive? - How do systems work together? - What is a system? - What is digestion? - What do we use our brain for? - Where does our food go, why do we have to eat? - What does our heart do?	- What is weather? - How does weather change? - What is the weather like in Prescott? - What types of weather have you experienced? - How does weather affect you? How do I describe what the weather is like today? - How do I use patterns and information to make predictions about the weather?	- What is a simple machine? - How do they work? - What is force and movement? - How do simple machines make work easier? - Where do you find simple machines in your environment? - How does friction affect motion? - What is work?

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<u>Learning Targets</u>

Project-Based	Classification	Human Body	Weather	Simple Machines
<u>Enduring Understandings:</u> • Independently gather and use materials in the classroom. • Communicate effectively with a group. • Be an active member of a team. • Mange time effectively. • Be able to self-assess work habits. <u>Key Learning Experiences:</u> • Crossing the river of lava. • Getting multiple balls to the center of a parachute simultaneously. • Transfer of balls from parachute to container. • Keeping multiple balls in the air without touching the ground.	<u>Enduring Understandings:</u> • Animals can be classified into groups. • How animals have adapted to their environment. • How to document nature through observation <u>Key Learning Experiences:</u> • Nature observations • Keeping a journal Highlands Center for Natural History • Butterfly Wonderland	<u>Enduring Understandings:</u> • Identify components of familiar systems. • Identify that a system consists of multiple parts or subsystems. • Understand that parts of the body work independently. • Identify the major parts of the digestive, respiratory and circulatory system. • Describe the basic functions of the digestive, respiratory and circulatory systems. • Understand muscles and bones help the body move. <u>Key Learning Experiences:</u> • Arizona Science Museum	<u>Enduring Understandings:</u> • Identify layers of atmosphere including where weather takes place. • Demonstrate sun's energy effects on weather. • Identify different kinds of clouds & types of weather. • Assemble water cycle book • Discuss water cycle including water vapor, clouds, condensation and evaporation. • Compare a cold front with a warm front. • Assemble variety of weather instruments to measure and record? <u>Key Learning Experiences:</u> • Weather Observations • Creating visuals to understand key concepts. • Using a weather station to track weather	<u>Enduring Understandings:</u> • Understand how force is used to get work done. • Summarize why machines make work easier. • Use a wheel and axle to get work done. • Design and create an inclined plane. • Demonstrate how a pulley is used to carry a load. • Operate a screw and screwdriver to connect 2 boards. <u>Key Learning Experiences:</u> • Create a derby car

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Topics

Project-Based	Classification	Human Body	Weather	Simple Machines
• Active Listening • How to ask questions • Place-based learning • Collaborative group work • Material management • Time management • Quality of Craftsmanship • Presentation of knowledge • Communication	• Taxonomy • Habitat • Ecosystems • Niches • Interdependence • Changes and adaptations • Animal Movement • Monarch life cycle	• Digestive system • Skeletal system • Muscular system • Nervous system • Respiratory system • Circulatory System	• Clouds • Wind • Water cycle • Pressure systems • Natural disasters • How weather affects people • Weather patterns • Local weather • Sun	• axle • pulley • lever • gears • force • fulcrum • wheel • movement

Projects

Project-Based	Classification	Human Body	Weather	Simple Machines
Animal Antics group project • Team building games • Parachute • Lava River • Undercover Activity • Hide and Seek Activity	• Animal Kingdom Game; classify animals based upon their characteristics. • Documentation of nature based observation, using the 5 senses. • Scientific drawings of caterpillar, pupae and butterfly. • Monarch calendar • Who ate my food? • Monarch habitat wall mural. • Make a caterpillar book	• Create own layered human body. • Collaborative group project based upon inquiry questions. • Science Fair Project	• Independent inquiry based projects. • Record weather daily • Cloud journal	• Rubber band derby cars

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Assessment

Project-Based	Classification	Human Body	Weather	Simple Machines
- Completion of game as an effective team - Completion of activities	- Design and create a habitat for local species - Compare, analyze, and classify animals	Present a project that clearly answers the groups' "I wonder…." question	Present a project that clearly answers the groups' "I wonder…." question	Rubber Band Derby

Multiple Intelligences

Project-Based	Classification	Human Body	Weather	Simple Machines
- Interpersonal - Intrapersonal - Bodily Kinesthetic - Naturalist - Verbal Linguistic	- Interpersonal - Intrapersonal - Bodily Kinesthetic - Naturalist - Verbal Linguistic - Visual Spatial	- Interpersonal - Intrapersonal - Bodily Kinesthetic - Verbal Linguistic - Visual Spatial	- Intrapersonal - Interpersonal - Naturalist - Visual/Spatial - Kinesthetic - Logical/Mathematical	- Intrapersonal - Interpersonal - Visual/Spatial - Kinesthetic - Logical/Mathematical

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<u>Dance & Visual Arts</u>

First & Second Quarters:	Third Quarter:	Fourth Quarter:
<u>Animal Discovery</u> • Create a costume for an animal to wear • Design and animal habitat • Act out the animal within the habitat	<u>Magic School Bus</u> • Learn songs, movement and dance that connects to Human Body and Weather standards • Present human body and weather projects to audience	<u>Simple Machine Derby</u> • Create and present a derby car