

WLS Grade 5 I CAN Science Statements

Quarter 1	Quarter 2
<ul style="list-style-type: none"> • I can interpret the roles and interactions of producer, consumer, and decomposer in a real-world context. • I can describe the interaction of predator and prey. • I can explain that producers transform energy from the sun and make food through a process called photosynthesis. • I can investigate and classify the type of symbiotic relationship including mutualism, commensalism, and parasitism. • I can analyze the impact on the ecosystem as species are introduced or removed (endangered or threatened species, invasive species). • I can explain that ALL living things require energy. • I can explain that all energy in an ecosystem originates from the sun. • I can trace the flow of energy in a food chain or web. • I can compare/contrast the roles and relationships of producers, consumers (herbivores, carnivores, and omnivores) and decomposers in a food chain or food web. 	<ul style="list-style-type: none"> • I can compare/contrast and describe celestial bodies: planets, comets, asteroids, star, meteors, meteorites, dwarf planets, moons, sun, meteoroids, solar system, universe & orbit. • I can recognize that each planet has unique characteristics. • I can compare/contrast inner and outer planets based on their composition and distance from the sun. • I can use data about the compositions of planets to indicate distance from the sun. • I can evaluate the appropriateness of different tools to collect data in a given scenario. • I can compare/contrast tools for collecting information about the solar system. • I can plan an investigation to study a component of the solar system using appropriate tools and scientific practices. • I can identify the sun as a medium size star and the only star in our solar system. • I can compare/contrast the sizes, distance, and composition (made of gas) of stars as compared to the sun. • I can research current/new events/discoveries related to stars & the sun. • I can find the relationship between the distance of a star and its apparent size in the sky. • I can create a model showing distance or size of the sun/Earth or sun/other stars. • I can compare/contrast rotation and revolution. • I can create a model/graphic to demonstrate that Earth's rotation on its axis causes day/night & the stars to change position every 24 hrs. • I can relate using charts and tables with data of average temperature and seasons in relationship to the sun and angle of sunlight. • I can recognize that it takes Earth 24 hours to make one complete rotation on its axis. • I can explain how Earth's revolution around the sun causes yearly changes. • I can predict the position of the Earth and the sun at various stages in the yearly cycle using diagrams and models. • I can explain that seasons are caused by the tilt (23.5 degrees) of the Earth and the amount of direct sunlight during its revolution around the sun. • I can state that the moon has phases due to its position & the sun's reflection on it (phase names not taught). • I can investigate the positions of the sun, moon, and Earth to identify reasons why the sun & moon appear to change position in the sky. • I can use data and evidence to make a conclusion about how the position of Earth and the sun relates to seasons and explain how the evidence supports this conclusion.
Quarter 3	Quarter 4
<ul style="list-style-type: none"> • I can recognize that forces can cause change in motion. • I can recognize that objects with greater weight (mass) take more force to move. • I can explain the relationship between the change in speed, the amount of force and the mass of an object. • I can explain that movement is measured by speed (s=distance/time) • I can identify three ways the motion of an object can be changed (speed up, slow down, change direction). • I can predict what will happen to an object depending on the force, speed and direction of the motion. • I can design an investigation that determines how the mass/weight of an object (or amount of force acting on an object) affects how the motion of an object changes. • I can recognize that light is a form of energy. • I can compare/contrast the way light travels. (reflect, refract, absorb) • I can design an engineering solution to a real-world scenario involving light absorption, reflection and heat. • I can determine that light travels faster than sound. • I can demonstrate and provide evidence that light travels in a straight line until it interacts with another object/material. • I can observe that light can travel through solids, liquids, gases and empty space. • I can recognize that when light cannot pass through an object it forms a shadow. • I can infer that light can be absorbed by objects causing them to warm. (darker objects absorb more light=warmer) • I can explain that the color of an object is the reflected color of light. (red apple reflects red light) • I can plan and implement scientific investigations to investigate how light travels. • I can recognize that white light is the combination of all colors of light. • I can plan an investigation to determine relationships between the surface properties, color, intensity, duration, or angle of incidence of absorbed light and change in temperature. 	<ul style="list-style-type: none"> • I can recognize that sound is forms of energy. • I can determine that sound is produced by vibration. • I can describe the relationship between the speed of vibration and the pitch of the sound (e.g. in stringed instruments). • I can recognize that sound must travel through a medium. (solid, liquid, gas) • I can plan an investigation to support the hypothesis that sound travels in all directions. • I can compare light and sound behaviors.