

## CHECKLIST FOR SIXTH GRADE SCIENCE *CHECKS FOR UNDERSTANDING*

✓	date	Checks for Understanding
		<b>Embedded Inquiry</b>
		0607.Inq.1 Design and conduct an open-ended scientific investigation to answer a question that includes a control and appropriate variables.
		0607.Inq.2 Identify tools and techniques needed to gather, organize, analyze, and interpret data collected from a moderately complex scientific investigation.
		0607.Inq.3 Use evidence from a dataset to determine cause and effect relationships that explain a phenomenon.
		0607.Inq.4 Review an experimental design to determine possible sources of bias or error, state alternative explanations, and identify questions for further investigation.
		0607.Inq.5 Design a method to explain the results of an investigation using descriptions, explanations, or models.
		<b>Embedded Technology &amp; Engineering</b>
		0607.T/E.1 Use appropriate tools to test for strength, hardness, and flexibility of materials.
		0607.T/E.2 Apply the engineering design process to construct a prototype that meets certain specifications.
		0607.T/E.3 Explore how the unintended consequences of new technologies can impact society.
		0607.T/E.4 Research bioengineering technologies that advance health and contribute to improvements in our daily lives.
		0607.T/E.5 Develop an adaptive design and test its effectiveness.
		<b>Standard 1 - Cells <i>Not addressed at this level</i></b>
		<b>Standard 2 - Interdependence</b>
		0607.2.1 Compare and contrast the different methods used by organisms to obtain nutrition in a biological community.
		0607.2.2 Create a graphic organizer that illustrates how biotic and abiotic elements of an environment interact.
		0607.2.3 Use a food web or energy pyramid to demonstrate the interdependence of organisms within a specific biome.
		0607.2.4 Create poster presentations to illustrate differences among the world's major biomes.
		<b>Standard 3 - Flow of Matter and Energy <i>Not addressed at this level</i></b>
		<b>Standard 4 - Heredity <i>Not addressed at this level</i></b>
		<b>Standard 5 - Biodiversity and Change <i>Not addressed at this level</i></b>
		<b>Standard 6 - The Universe</b>
		0607.6.2 Construct a model of the solar system showing accurate positional relationships and relative distances.
		0607.6.3 Investigate how the earth, sun, and moon are responsible for a day, lunar cycle, and year.
		0607.6.4 Explain why the positions of the earth, moon, and sun were used to develop calendars and clocks.
		0607.6.5 Illustrate the positions of the earth, moon, and sun during specific tidal conditions.
		0607.6.6 Diagram the relationship of the earth and sun that accounts for the seasons.
		0607.6.7 Model the positions of the earth, moon, and sun during solar and lunar eclipses.
		<b>Standard 7 – The Earth <i>Not addressed at this level</i></b>
		<b>Standard 8 - The Atmosphere</b>
		0607.8.1 Recognize how convection currents in the atmosphere produce wind.
		0607.8.2 Design an experiment to investigate differences in the amount of the sun's energy absorbed by a variety of surface materials.
		0607.8.3 Design an experiment to demonstrate how ocean currents are associated with the sun's energy.
		0607.8.4 Analyze ocean temperature data to demonstrate how these conditions affect the weather in nearby land masses.
		0607.8.5 Interpret data found on ocean current maps.
		0607.8.6 Use data collected from instruments such as a barometer, thermometer, psychrometer, and anemometer to describe local weather conditions.
		<b>Standard 9 – Matter <i>Not addressed at this level</i></b>
		<b>Standard 10 – Energy</b>
		0607.10.1 Compare potential and kinetic energy.
		0607.10.2 Create a poster that illustrates different forms of potential energy.

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	0607.10.3	Design a model that demonstrates a specific energy transformation.
	0607.10.4	Explain why a variety of energy transformations illustrate the Law of Conservation of Energy.
	<b>Standard 11 – Motion</b> <i>Not addressed at this level</i>	
	<b>Standard 12 - Forces in Nature</b>	
	0607.12.1	Prepare a poster that illustrates how electricity passes through a simple circuit to produce heat, light, or sound.
	0607.12.2	Determine a material's electrical conductivity by testing it with a simple battery/bulb circuit.
	0607.12.3	Compare and contrast the characteristics of objects and materials that conduct electricity with those that are electrical insulators.