Science DesCartes: General Science – Earth and Space Science

Skills: Earth in the Solar System

Students:	DesCartes Skills: (Highlight the skills related to your chosen standard/concept)
	RIT 231-240: • Describes characteristics of the solar system • Describes the life cycle of a star (stellar evolution)
	RIT 221-230: • Describes how the Earth's tilt affects weather patterns • Describes characteristics of the planet Jupiter • Analyzes the formation of the solar system
	RIT 211-220: • Defines rotation of planets • Explains that the direction of Earth's rotation is west to east • Analyzes diagrams showing the effect of Earth's tilt on seasons • Recognizes the sources of geothermal energy • Describes characteristics of the planet Mercury • Recognizes that the Moon is a natural satellite of Earth • Compares size of astronomical planets • Recognizes that changes in the energy output of the Sun would cause significant changes in Earth processes that depend on the Sun's energy
	RIT 201-210: • Relates the Earth's rotation on its axis to the length of a day • Explains how Earth's tilt causes seasons • Explains how the Earth's tilt affects the intensity of sunlight in summer and winter • Analyzes diagrams showing how the relative intensity of sunlight differs in summer and winter • Recognizes that the Sun, Moon and planets are spherical in shape • Describes the relationship between the Moon and the Earth (the Moon is a satellite of the Earth, and therefore orbits around the Earth) • Recognizes that it takes about 29 days for the Moon to orbit Earth • Describes how the Moon's surface has been affected by meteorites • Defines satellite as one body which orbits around another • Orders the planets in terms of distance from the Sun
	RIT 191-200: • Recognizes that day and night are caused by the Earth's rotation on its axis • Recognizes that the Sun's light energy is transformed to heat energy upon hitting Earth's surface • Describes components of the solar system • Recognizes that the solar system includes the Sun, nine planets including Earth, the Moon and satellites orbiting other planets, asteroids, and comets
	• Describes characteristics of the planet Mars • Describes the motion of Earth around the Sun • Analyzes the motion of the Moon around Earth • Compares Earth to other planets in terms of size • Describes distance of individual planets from the Sun
	RIT 181-190: • Recognizes that day and night are caused by the Earth's rotation on its axis • Explains how the Earth's rotation on its axis causes day and night • Describes how the Earth's tilt affects seasons • Explains how Earth's tilt affects the length of daylight during the year • Explains how Earth's tilt affects the heating of Earth's surface • Recognizes that the Sun's energy can be stored in objects as heat • Describes components of the solar system • Identifies the location of planets relative to the sun • Describes the order of planets and the asteroid belt in the solar system

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Lesson Title:

Standard/Concept for All:

Introduction: (Get Attention; Connect to Prior Knowledge)

For Students Ready for a Challenge:

Lesson/Activity:

Resources:

Means of Assessment:

For Most Students:

Lesson/Activity:

Resources:

Means of Assessment:

For Students Needing Extra Support:

Lesson/Activity:

Resources:

Means of Assessment:

Closure/Summary for All: