

Science DesCartes: General Science – Earth and Space Science

Skills: The Universe

Students:	DesCartes Skills: (Highlight the skills related to your chosen standard/concept)
	<p>RIT 231-240:</p> <ul style="list-style-type: none"> Classifies comets and asteroids by the shape of their orbits Compares composition of planets Determines how the Earth moves in relation to the Moon Recognizes that the planets are kept in orbit around the Sun due to gravity and inertia Describes the effects of gravity on Earth's motion Infers that a spacecraft or object attempting to leave a larger planet will require more force than when leaving a smaller planet, due to differences in gravity between the two planets
	<p>RIT 221-230:</p> <ul style="list-style-type: none"> Names the characteristics used to classify stars Explains that part of the Milky Way galaxy can be seen as a bright band of light in the night sky Explains that during a solar eclipse, the Moon's shadow falls on the Earth Identifies the phases of the Moon Calculates the weight of an object on various planets, when given the acceleration due to gravity for each planet
	<p>RIT 211-220:</p> <ul style="list-style-type: none"> Describes chemical and physical characteristics of stars Compares characteristics of stars and star systems (e.g., temperature, color, size, elements, energy, number of stars in system) Identifies arrangement of bodies within our galaxy Describes characteristics of meteors Classifies asteroids, comets, and meteors, meteoroids and meteorites by location Recognizes characteristics of meteorites Explains the concept of seasons in terms of Earth's motion Relates the regular predictable motion of the Earth to the regular length of a year Identifies the phase of the moon during which a lunar eclipse may occur Explains the effect of gravity on orbital shape and speed Analyzes the effect of gravity on tides
	<p>RIT 201-210:</p> <ul style="list-style-type: none"> Explains that astronomical objects are separated by great distances Describes characteristics of comets Compares characteristics of meteors and meteorites Describes formation of meteors Recognizes how meteor showers are produced Explains that Earth is the only planet in our solar system that contains water in liquid form Explains that the Moon and planets

	<p>shine by reflected sunlight, not their own light</p> <ul style="list-style-type: none"> Explains the concept of a year in terms of a planet's motion Explains the concept of a full day and night in terms of Earth's motion Explains the phases of the Moon Infers that an object thrown up from a planet will not travel as far as an object thrown with the same force from a planet with less gravity
	<p>RIT 191-200:</p> <ul style="list-style-type: none"> Explains that a small object that is close to Earth may appear larger than a bigger object that is more distant from Earth Recognizes that the Sun is a medium-sized star Compares the Sun to other stars and star systems Identifies characteristics of planets Recognizes that Earth is somewhat unique in its characteristics Explains that the Moon and planets shine by reflected sunlight, not their own light Identifies daily patterns caused by Earth's rotation Explains that gravity is a force producing attraction between matter
	<p>RIT 181-190:</p> <ul style="list-style-type: none"> Recognizes that stars (like the Sun) are the source of light for all bright objects in space
	<p>RIT 171-180:</p> <ul style="list-style-type: none"> Recognizes that the Sun is not a planet Describes the Sun, Moon, stars, and Earth
	<p>RIT Below 171:</p> <ul style="list-style-type: none"> Recognizes that the Sun can only be seen in the daytime

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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: