

Grades 9-12 Scope and Sequence for Outer Planets Compendium

Topic	Lesson	Prior Knowledge and Experience	Learning Goals	NSES Stds.	AAAS Stds.	Colo. Sci. Stds.	Colo. Math Stds.
Comparing Planets	Looking Inside Planets	<ul style="list-style-type: none"> • general astronomy • understanding of scale models 	<ul style="list-style-type: none"> • comparing planetary interiors • understanding the different interior structures of inner and outer planets 	B, D	4b	4	5
	Terra Bagga	<ul style="list-style-type: none"> • magnetism • characteristics of planets 	<ul style="list-style-type: none"> • understanding the orientation of planetary magnetic fields 	B, D, E	4a, 12d	1, 4	-
Planetary Systems	The Moons of Jupiter	<ul style="list-style-type: none"> • plotting data • interpreting data 	<ul style="list-style-type: none"> • using data to compare the density, diameter, and distance of Jupiter's moons 	A, B	4d	2, 4	3
	Phases of Charon	<ul style="list-style-type: none"> • latitude and longitude • planetary and lunar orbits 	<ul style="list-style-type: none"> • understanding the rotational and orbital periods of planets and moons 	D	4a	4	4
Space Technology	The Jovian Basketball Hoop	<ul style="list-style-type: none"> • radio waves • electricity and magnetism 	<ul style="list-style-type: none"> • understanding instrumentation 	A, B, E	3a, 3b, 4e	3	-
Solar System	Are All Asteroids' Surfaces the Same Age?	<ul style="list-style-type: none"> • characteristics of asteroids 	<ul style="list-style-type: none"> • knowledge of solar system bodies 	A, D	1b, 4a	4	5