The Solar System

Overview Sheet

Essential Question

How is the solar system structured?

Vocabulary

solar system	weight	nebula	terrestrial planets
atmosphere	gas planets/giants	ring	tectonics
volcanism	impact crater	weathering	Erosion
rotation	revolution	orbit	Ellipse
Mercury	Venus	Earth	Mars
Jupiter	Saturn	Uranus	Neptune
Pluto	Sun	moon	Greenhouse Effect

Objectives

1. Describe the solar system and its major components
2. List and explain the sequence of events related to the formation of the solar system
3. Explain an orbit recognize its impact on a celestial body's "year"
4. Differentiate between a rotation and a revolution
5. Describe the different processes that affect a planet's physical characteristics
6. Explain an atmosphere and describe its relationship to the "Greenhouse Effect"
7. Describe the impact of gravity on weight
8. Recognize the vast distances between the members of our solar system
9. Compare and contrast the terrestrial and gas planets

Helpful Websites

- http://www.kidsastronomy.com/ (astronomy overview)
- http://www.kidsastronomy.com/academy/index.htm (astronomy overview + interactive)
- http://nssdc.gsfc.nasa.gov/planetary/planetfact.html (planets)
- http://pds.jpl.nasa.gov/planets/welcome/earth.htm (planets)
- http://www.nineplanets.org/ (planets overview + interactive)
- http://www.enchantedlearning.com/subjects/astronomy/tutor/solarsystem/1/ (solar system + tutorial + interactive)

More on back ➡

- http://www.solarviews.com/eng/homepage.htm (solar system overview)
- http://www.windows.ucar.edu/cgi-bin/tour.cgi?link=/our_solar_system/solar_system.html&sn=0&cd=false&cdp=/windows3.html&art=ok&frp=/windows3.html&fr=f&tour=&sw=false&edu=elem (solar system overview)
- http://www.harcourtschool.com/activity/blast/index.html (solar system + overview + interactive)
- http://www.solarviews.com/eng/ (solar system overview)
- http://www.astronomytoday.com/astronomy/solarsystem.html (solar system overview)
- http://www.seasky.org/solarsystem/sky3.html (solar system overview + interactive)
- http://space.jpl.nasa.gov/ (solar system + simulator)
- http://www.jpl.nasa.gov/solar_system/ (solar system)
- http://www.exploratorium.edu/ronh/solar_system/ (solar system + interactive + scale model)
- http://www.nineplanets.org/ (planets overview)
- http://nssdc.gsfc.nasa.gov/planetary/planetfact.html (planet fact-sheets)
- http://www.kidsastronomy.com/the_planets.htm (planet fact-sheet)
- http://www.exploratorium.edu/ronh/weight/index.html (planets + weight)
- http://www.ioncmaste.ca/homepage/resources/web_resources/CSA_Astro9/files/multimedia/unit4/planetary_orbits/planetary_obits.html (planetary orbits + interactive)
- http://galileoandeinstein.physics.virginia.edu/more_stuff/flashlets/kepler6.htm (planetary orbits + interactive + try to create your own orbit)
- http://mistupid.com/astronomy/orbits.htm (planetary orbits + interactive)
- http://astro.unl.edu/naap/pos/animations/kepler.swf (planetary orbits + interactive)
- http://csep10.phys.utk.edu/guidry/java/kepler/kepler.html (planetary orbits + interactive)
- http://sunshine.chpc.utah.edu/labs/atmosphere/atm_compare4.html (atmosphere + interactive)
- http://sunshine.chpc.utah.edu/labs/ozone/ozone_main.html (atmosphere + layers + interactive)
- http://earthguide.ucsd.edu/earthguide/diagrams/atmosphere/index.html (atmosphere + layers + interactive)
- http://www.epa.gov/climatechange/kids/greenhouse.html (greenhouse effect overview)
- http://www.windows.ucar.edu/tour/link=/earth/interior/greenhouse_effect.html (greenhouse effect overview)
- http://www.geography4kids.com/files/atm_greenhouse.html (greenhouse effect overview)
- http://www.spaceday.org/conmgmt/index.php?option=displaypage&Itemid=60&op=page&SubMenu= (games)
- http://www.seasky.org/sky_games.html (space + games)
- http://curious.astro.cornell.edu/index.php (astronomy + Q & A)
- http://www.virginiasol.com/test/space.htm (solar system + quiz + interactive)
- http://www.marsquestonline.org/ (Mars overview)
- http://www.driveonmars.com/ (Mars + virtual/interactive activity)
- http://www.quia.com/quiz/236496.html (solar system + quiz + interactive)
- http://www.kidsastronomy.com/fun/index.htm (astronomy + games + interactive)
- http://amazing-space.stsci.edu/resources/explorations/trading/directions.html (solar system + game + interactive)
- http://www.quia.com/quiz/245402.html (revolution + rotation + game)
- http://quest.arc.nasa.gov/projects/astrobiology/astroventure/ (tutorial + interactive + design your own planet)
- http://www.acme.com/jef/singing_science/ (space + songs)
- http://www.windows.ucar.edu/tour/link=/games/space_sense_intro.html&edu=elem (space + quiz + interactive)
- http://www.songsforteaching.com/sciencesongs.htm (space + songs)