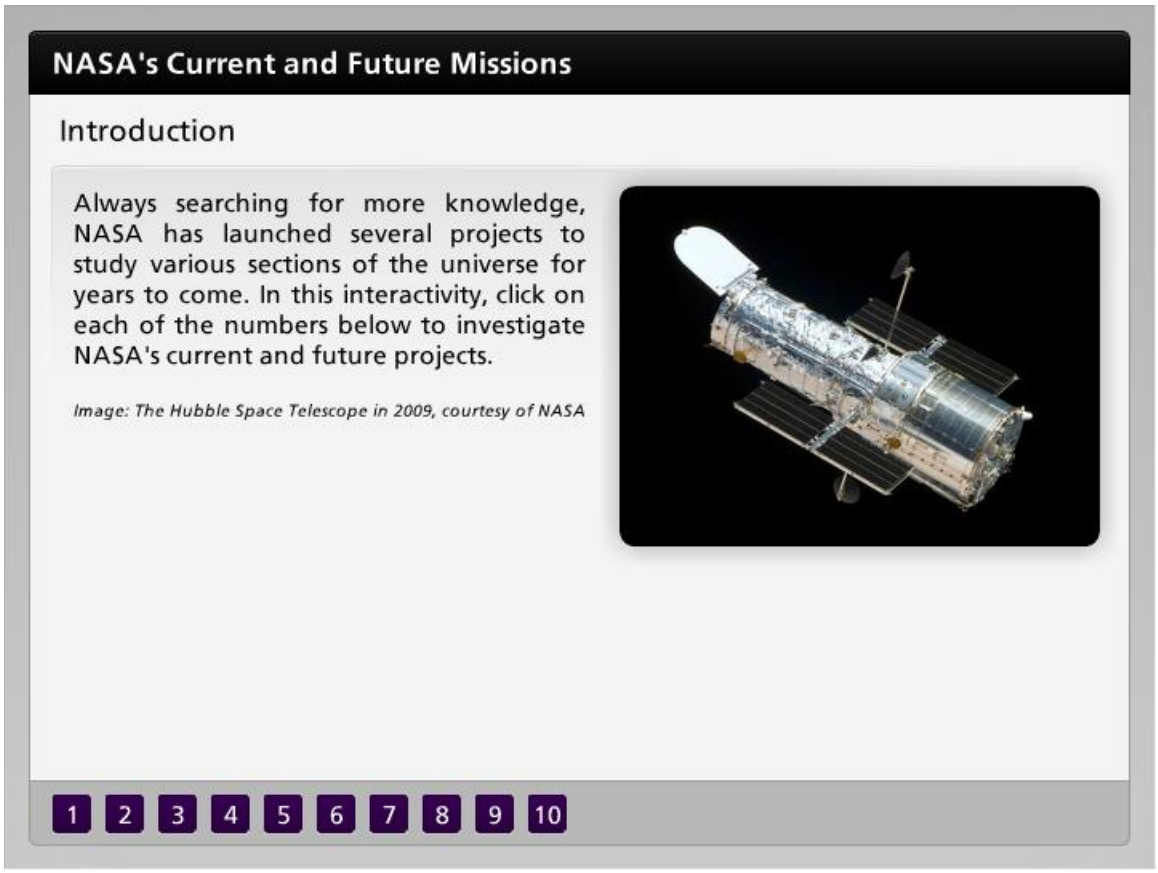
Module 10: Astronomical Organizations and Space Exploration
Topic 3 Content: NASA's Current and Future Missions Notes

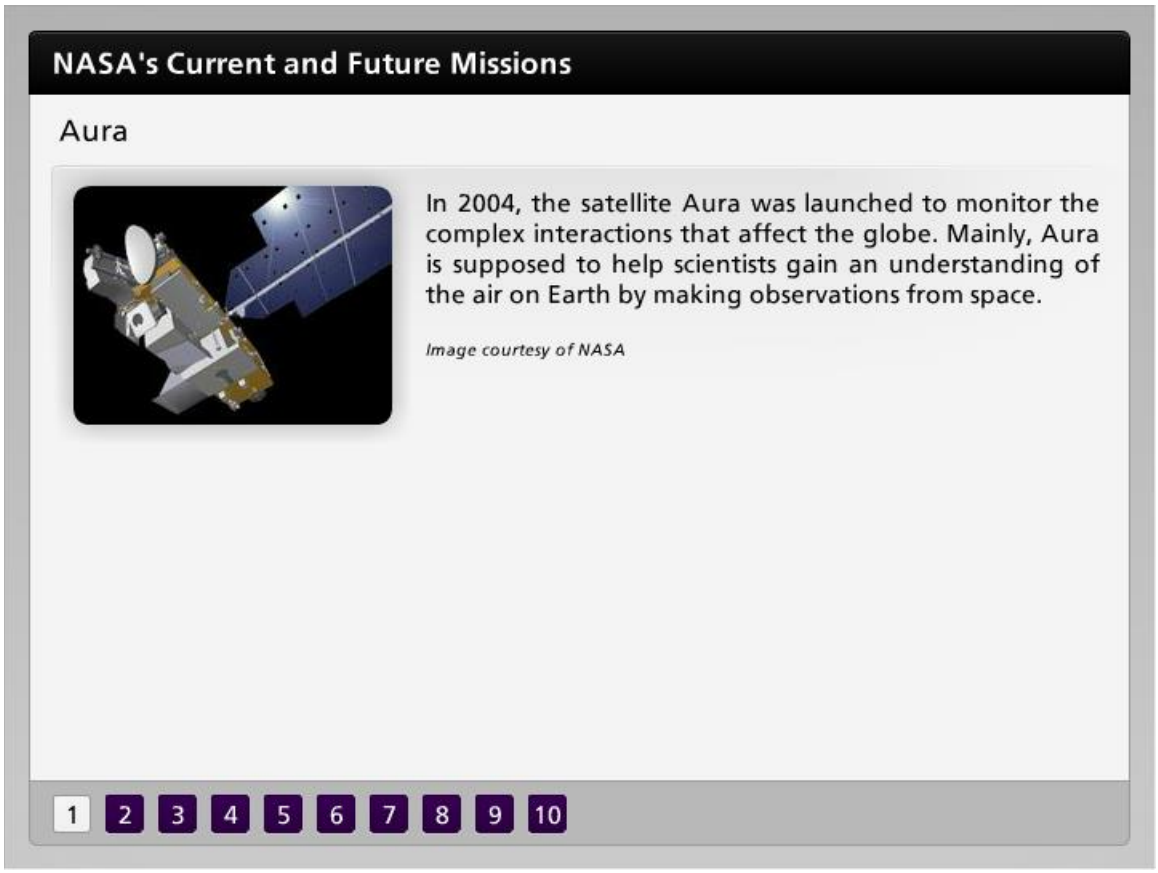
Introduction



Always searching for more knowledge, NASA has launched several projects to study various sections of the universe for years to come. In this interactivity, click on each of the numbers below to investigate NASA's current and future projects.

Image: The Hubble Space Telescope in 2009, courtesy of NASA

Aura



In 2004, the satellite Aura was launched to monitor the complex interactions that affect the globe. Mainly, Aura is supposed to help scientists gain an understanding of the air on Earth by making observations from space.

Image courtesy of NASA

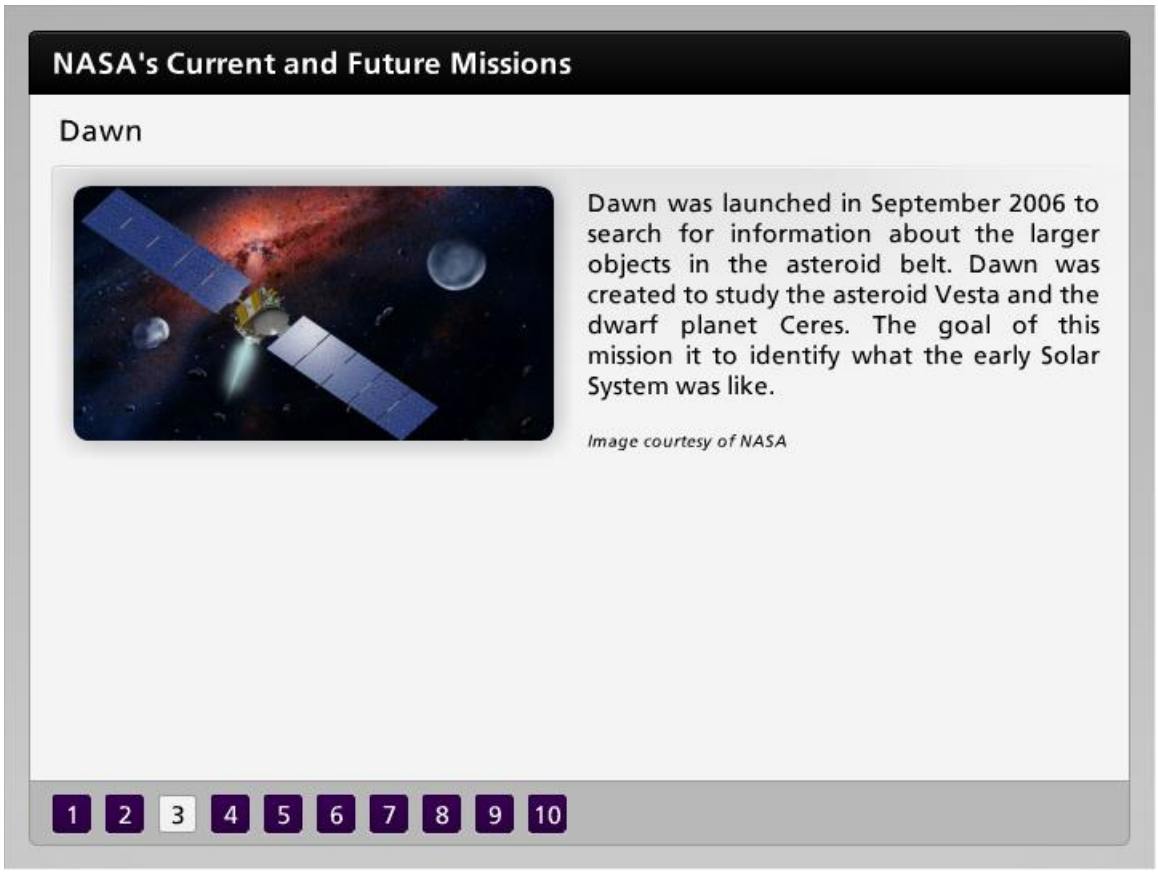
Module 10: Astronomical Organizations and Space Exploration
Topic 3 Content: NASA's Current and Future Missions Notes

Cassini-Huygens Mission

The Cassini-Huygens spacecraft is currently orbiting the planet Saturn. It is equipped with advanced cameras and has been sending back data since 2005.

Image courtesy of NASA

Dawn



Dawn was launched in September 2006 to search for information about the larger objects in the asteroid belt. Dawn was created to study the asteroid Vesta and the dwarf planet Ceres. The goal of this mission it to identify what the early Solar System was like.

Image courtesy of NASA

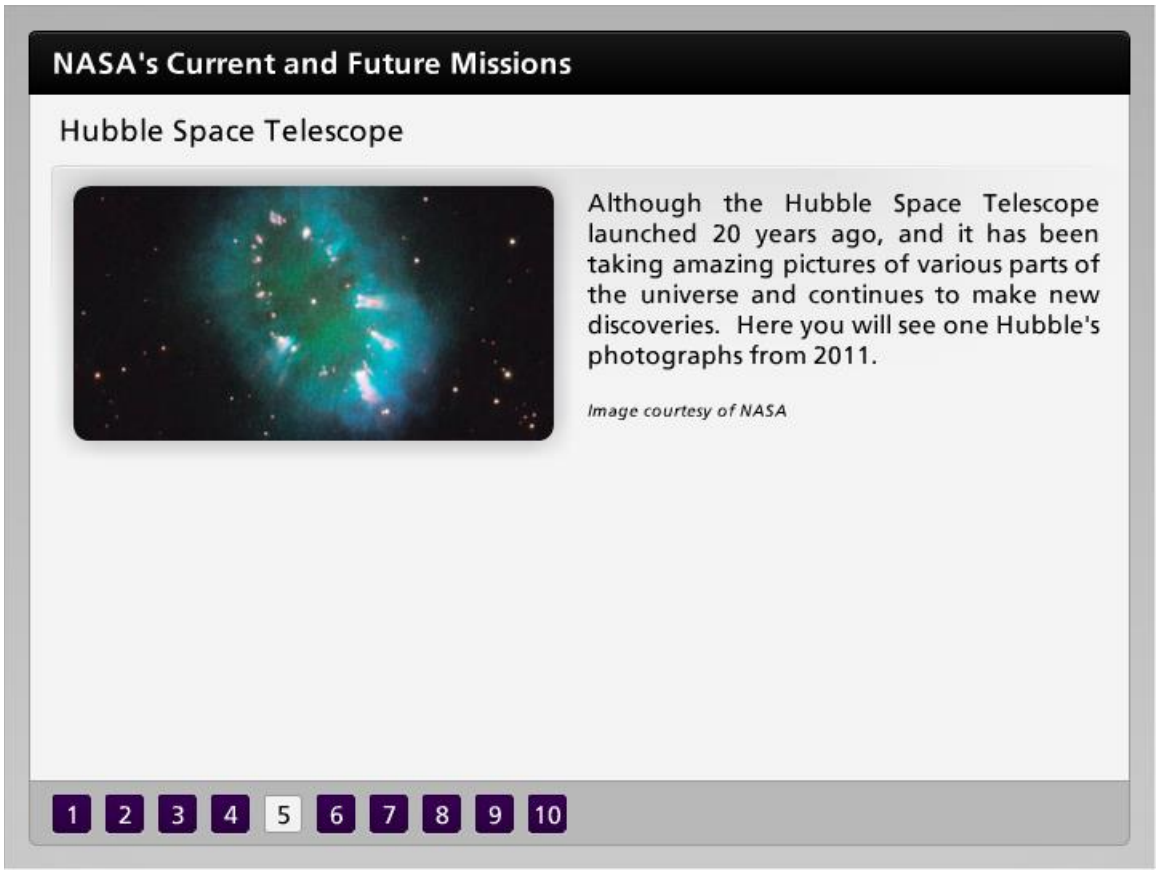
Fermi Gamma-Ray Space Telescope

Launched in 2008, the Fermi Gamma-ray Space Telescope, but it is still in working order. It is attempting to study how black holes pull in matter, and ultimately accelerate jets of gas at astonishing speeds. This telescope is also looking for more information on dark matter, possibly discovering new laws of physics, and to understand gamma-ray bursts.

Image courtesy of NASA

Module 10: Astronomical Organizations and Space Exploration
Topic 3 Content: NASA's Current and Future Missions Notes

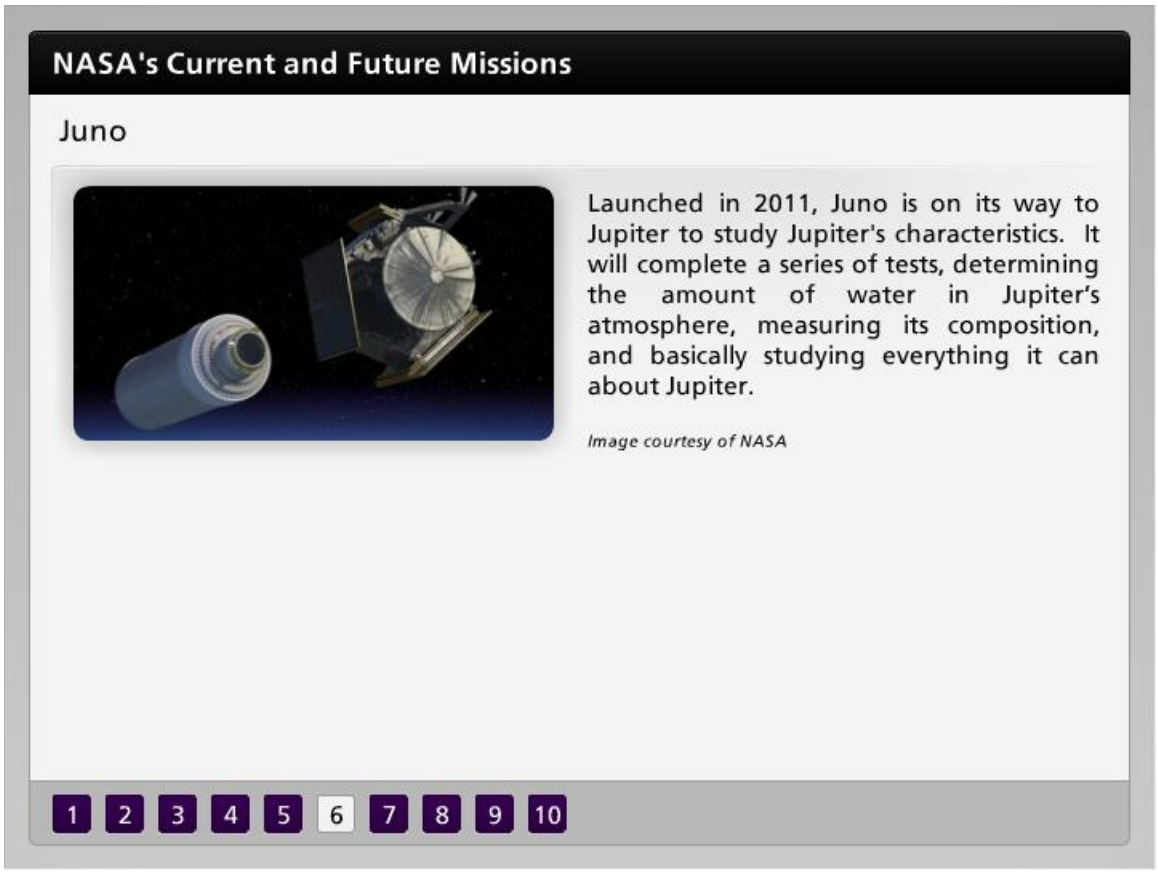
Hubble Space Telescope



Although the Hubble Space Telescope launched 20 years ago, and it has been taking amazing pictures of various parts of the universe and continues to make new discoveries. Here you will see one Hubble's photographs from 2011.

Image courtesy of NASA

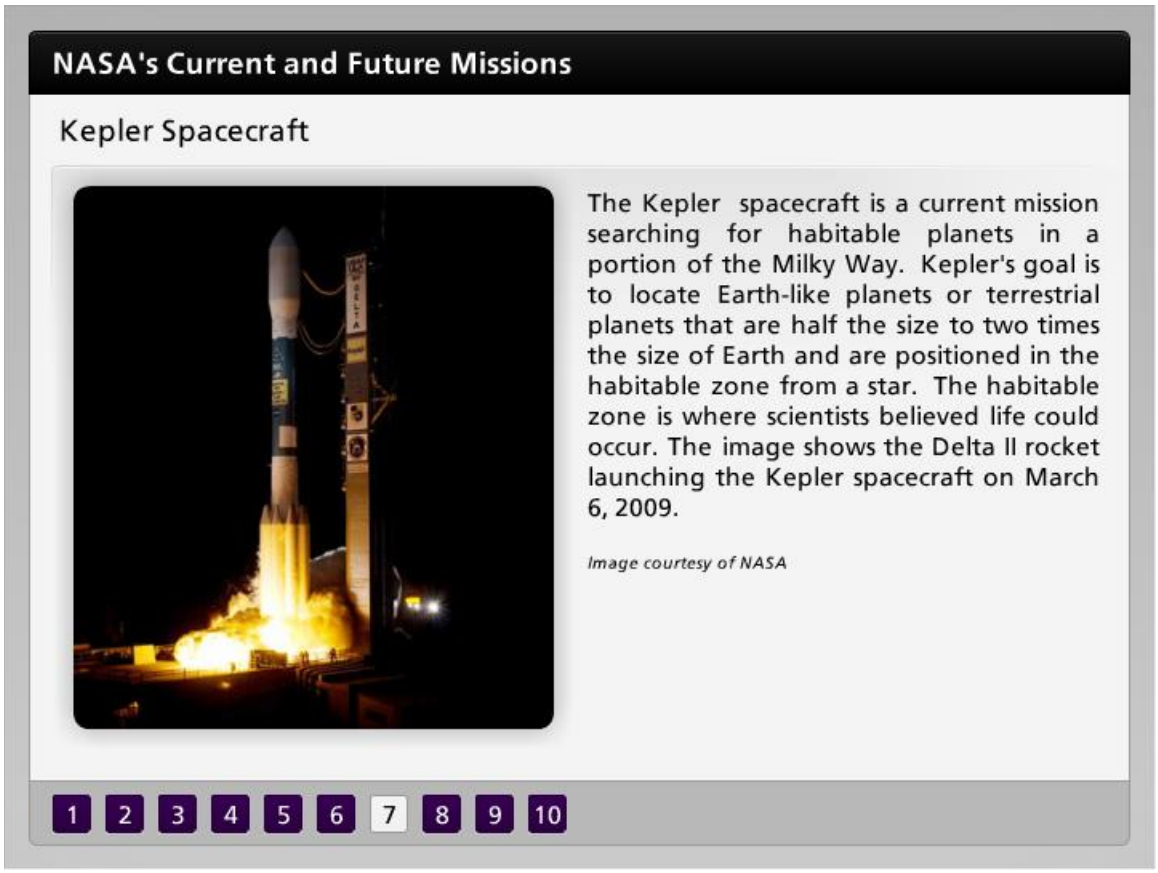
Juno



Launched in 2011, Juno is on its way to Jupiter to study Jupiter's characteristics. It will complete a series of tests, determining the amount of water in Jupiter's atmosphere, measuring its composition, and basically studying everything it can about Jupiter.

Image courtesy of NASA

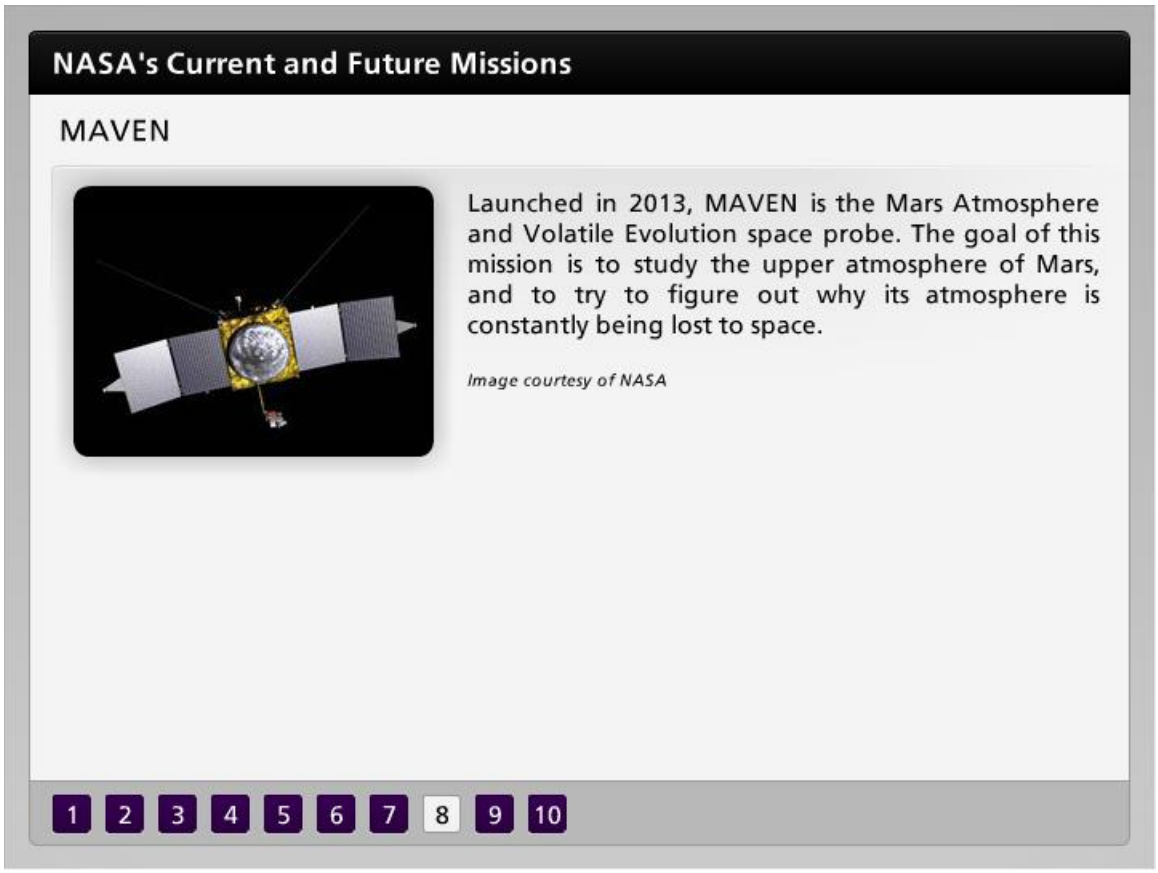
Kepler Spacecraft



The Kepler spacecraft is a current mission searching for habitable planets in a portion of the Milky Way. Kepler's goal is to locate Earth-like planets or terrestrial planets that are half the size to two times the size of Earth and are positioned in the habitable zone from a star. The habitable zone is where scientists believed life could occur. The image shows the Delta II rocket launching the Kepler spacecraft on March 6, 2009.

Image courtesy of NASA

MAVEN



Launched in 2013, MAVEN is the Mars Atmosphere and Volatile Evolution space probe. The goal of this mission is to study the upper atmosphere of Mars, and to try to figure out why its atmosphere is constantly being lost to space.

Image courtesy of NASA

New Horizons

Launched in 2006, New Horizons is currently on its way to study Pluto, its moons, and the Kuiper Belt. It should reach Pluto by 2015 to begin examining the dwarf planet.

Image courtesy of NASA

Voyager

Voyager 1 and Voyager 2 were launched in 1977. They are the only objects created by humans to ever reach the edge of the Solar System. In 2012, Voyager 1 was the first object to reach interstellar space. These objects continued to function beyond their original goal and are still traveling away from the Sun today.

Image courtesy of NASA