

CASSINI-HUYGENS MISSION

Explore More! 8th Grade Expanded Interactive Lesson

The Cassini Equinox Mission was created to explore Saturn, its rings and its moon system. Let's take a closer look at the mission and the wonderful discoveries that have been made to date!

Start by going online to www.QQtheMovie.com Click the Quantum Quest Space Missions button. Now, select the Cassini Mission button:



Be sure to bookmark this page on your computer as this will be the starting point for all of your Cassini-Huygens activities. [http://www.qqthemovie.com/cassini-mission/] Click the LAUNCH MISSION to learn about the Cassini-Huygens Mission

Now Let's Explore More About the Mission

Let's learn more about why the mission was developed, and what has happened up to now. In the left navigation, click on EXPANDED LESSON: STEP 2. This will take you to the official NASA Cassini Internet site.

 On the QQ left navigation menu, select "EXPANDED LESSON: STEP 2" This will automatically load NASA'S "Introduction" to the Cassini Mission

Scroll down the page and take some time at this site to learn about the goals and history of the Cassini mission.



Present Position

This mission is currently ongoing. The spacecraft is still beaming pictures and data back to earth Let's discover its present position in the Saturn system.

- Select the next left navigation link "Present Position."
 [http://saturn.jpl.nasa.gov/mission/presentposition/]
- Click on the 1st picture to get an enlarged view of Cassini's location in relation to Saturn.

Where do you think the spacecraft is headed next? Why? Saturn is one of the most fascinating planets in our solar system. Its rings are an unusual phenomena that has been studied by astronomers for centuries.







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Saturn & Its Moons

Cassini has already discovered that Saturn has over 60 moons! Let's explore this unique and beautiful system.

Select the link to "About Saturn and its Moons"
 [http://saturn.jpl.nasa.gov/science/index.cfm]
 In the next left hand menu, select each of the links in this category and look at the information. Each of the following sections contain their own "Image Gallery" of actual photos:

Saturn Rings Titan Moons Magnetosphere

Each category has an "Image Gallery" — click on any of the thumbnail photos to enlarge the picture and you'll be provided with a short explanation of what you are studying.



The Cassini Spacecraft

Now let's look at the actual Cassini spacecraft itself.

In the left menu, select the link to "Inside the Spacecraft."
 [http://saturn.jpl.nasa.gov/spacecraft/overview/]

Be sure that you especially notice Cassini's "Almost Human" features by rolling your mouse over the icons on the bottom of the picture shown in the "**Overview**" link.



Cassini Virtual Tour

Now that you've studied many of the aspects of the Cassini mission, would you like to take a virtual tour of Saturn?

- Scroll down and select the "Cassini Virtual Tour" box. [http://saturn.jpl.nasa.gov/video/cassinivirtualtour/]
- Click on the button "Launch CASSIE" (if you do not yet have this program, this will install a safe plug-in to yourbrowser that will allow you to take the 3D tour)—be patient, it may take a couple of minutes to launch.
- Click on "Further Description" for information on the three modes of viewing available for use during the tour

Take the tour by moving your mouse over the screen. If you want to rotate or move the objects in the picture, hold down the mouse button and watch how you can move the image in any direction or position you want.





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Current Missions

Now that you've studied the Cassini mission, you may be interested in other current or future NASA missions around the solar system.

Here's how you can explore those missions:

- Go to the main NASA site [www.nasa.gov]
- At the top of the page, use the pull-down menu titled "Missions."
 [http://www.nasa.gov/missions/index.html]
- In the left menu, select "Current Missions" to explore those spacecraft currently in space, or select "Future Missions" to explore what NASA is planning in the future.



Contact NASA

Have fun exploring the various NASA missions. As you look through the list, can you think of any locations or phenomenon in our solar system that NASA is not currently exploring or planning to explore? Would you like to discover why? You can find out!

- On the very bottom of the page, locate the link titled "Contact NASA"
 [http://www.nasa.gov/about/contact/index.html]
- Go to that page and select the link on the right titled "Ask NASA" —
- Use the e-mail form to contact NASA about your questions concerning current or future missions to the locations or phenomenon that you think NASA should explore—be sure to state your reasoning for your ideas.



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