

# Inner vs. Outer Planet WebQuest



## Introduction

- The planets of the solar system are divided into two groups: the inner and outer planets. These 2 groups have different characteristics.

## Task

- It is your task to identify the general characteristics of the inner & outer planets in our solar system.

## The Process

- You will search the Internet to complete the worksheet. Here are a few websites to get you started.

[seds.lpl.arizona.edu/nineplanets/nineplanets/nineplanets.html](http://seds.lpl.arizona.edu/nineplanets/nineplanets/nineplanets.html)

[http://www.windows.ucar.edu/tour/link=/our\\_solar\\_system/solar\\_system.html](http://www.windows.ucar.edu/tour/link=/our_solar_system/solar_system.html)

[starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html](http://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html)

<http://www.enchantedlearning.com/subjects/astronomy/planets/>

[space.jpl.nasa.gov](http://space.jpl.nasa.gov)

## Evaluation

- You will be evaluated on your completed worksheet.

## Conclusion

- You should have a good understanding of the characteristics of the inner, outer and dwarf planets in our solar system

## Credits and References

- list the Web site(s) you used to find the information about your planet.

## *Inner vs. Outer Planets*

**Goto my website to find the directions and links to good websites for this activity:** <http://teachers.sduhsd.k12.ca.us/jhonsberger/>

1. List the 9 planets in order from the sun.

2. List the 4 inner (terrestrial) planets \_\_\_\_\_

3. List the 3 outer (jovian) planets \_\_\_\_\_

4. What lies in between Mars and Jupiter? \_\_\_\_\_

**5. Collect data about the planets:**

Planet (fill in-with planets closest to sun & go out)	Distance from the Sun? <b>USE astronomical units (AU's)</b>	Revolution period (time to go around the sun)	Rotation Period (time to spin on axis-1 day)	Is it an <b>inner</b> or <b>outer</b> planet?	Does it have rings?	# of moons ? (If none put 0)	What is the temperature? (high & low temp.)	Is it made of <b>rock</b> or <b>gas</b>	Does it have a <b>THICK</b> or <i>thin</i> atmosphere?
Mercury									
Earth									
Neptune									

**Analyze your planet data:**

6. Which planets are closest to the sun? **inner or outer** (circle the answer)

7. Which planets have a short Revolution period? **inner or outer** Which planets have a long Revolution period? **inner or outer**

8. Which planets have a short Rotation period? **inner or outer** Which planets have a long Rotation period? **inner or outer**

9. How many planets have rings? \_\_\_\_ List them \_\_\_\_\_

10. Are these planets with rings **inner or outer planets?**

11. List the planets with more than 3 moons \_\_\_\_\_

Are these **inner or outer planets?**

12. Which planets are made of rock? **inner or outer** Which planets are made of gas? **inner or outer**

13. Which planets have a thin atmosphere? **inner or outer** Which planets have a thick? **inner or outer**

**Conclusion**

14. List 4 characteristics that all of the Outer Planets share \_\_\_\_\_

15. List 4 characteristics that all of the Inner Planets share \_\_\_\_\_

**Pluto –no longer a planet??**

1. Pluto is no longer considered a planet. What is its new category? \_\_\_\_\_
2. Describe Pluto's size as compared to the other planets. \_\_\_\_\_
3. Pluto's orbit around the sun is very different than the other planets. Describe how it is different.  
\_\_\_\_\_
4. Pluto is in an area of space called the \_\_\_\_\_ Belt and astronomers believe that Pluto is a \_\_\_\_\_ belt object (KBO). Is Pluto the largest of the KBO objects? \_\_\_\_\_ (use windows to the universe website)
5. What is Pluto made of? \_\_\_\_\_
6. Does Pluto have an atmosphere? \_\_\_\_\_ If so what is it made of? \_\_\_\_\_  
\_\_\_\_\_ Is it thick or thin? \_\_\_\_\_
7. How many moons does Pluto have? \_\_\_\_\_
8. Does Pluto have rings? \_\_\_\_\_

9. Pluto is no longer considered a planet because it is very different than the other outer planets. Write a paragraph describing 5 ways Pluto is different that the outer planets ( compare size, what it is made of, # of moons, rings, atmosphere, orbit, etc..) Use the data on the other side of your paper.