

**"Let's Learn About"  
Space  
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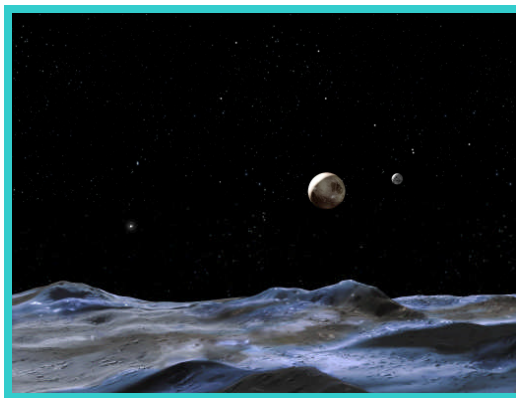
## UNIT 13 - Out Last friend - Pluto

Up until 2006, Pluto was a planet but since then it has been changed to be called a "**dwarf planet**". The reasons why are complicated, but basically it is because it is just too small in comparison to its own moon.

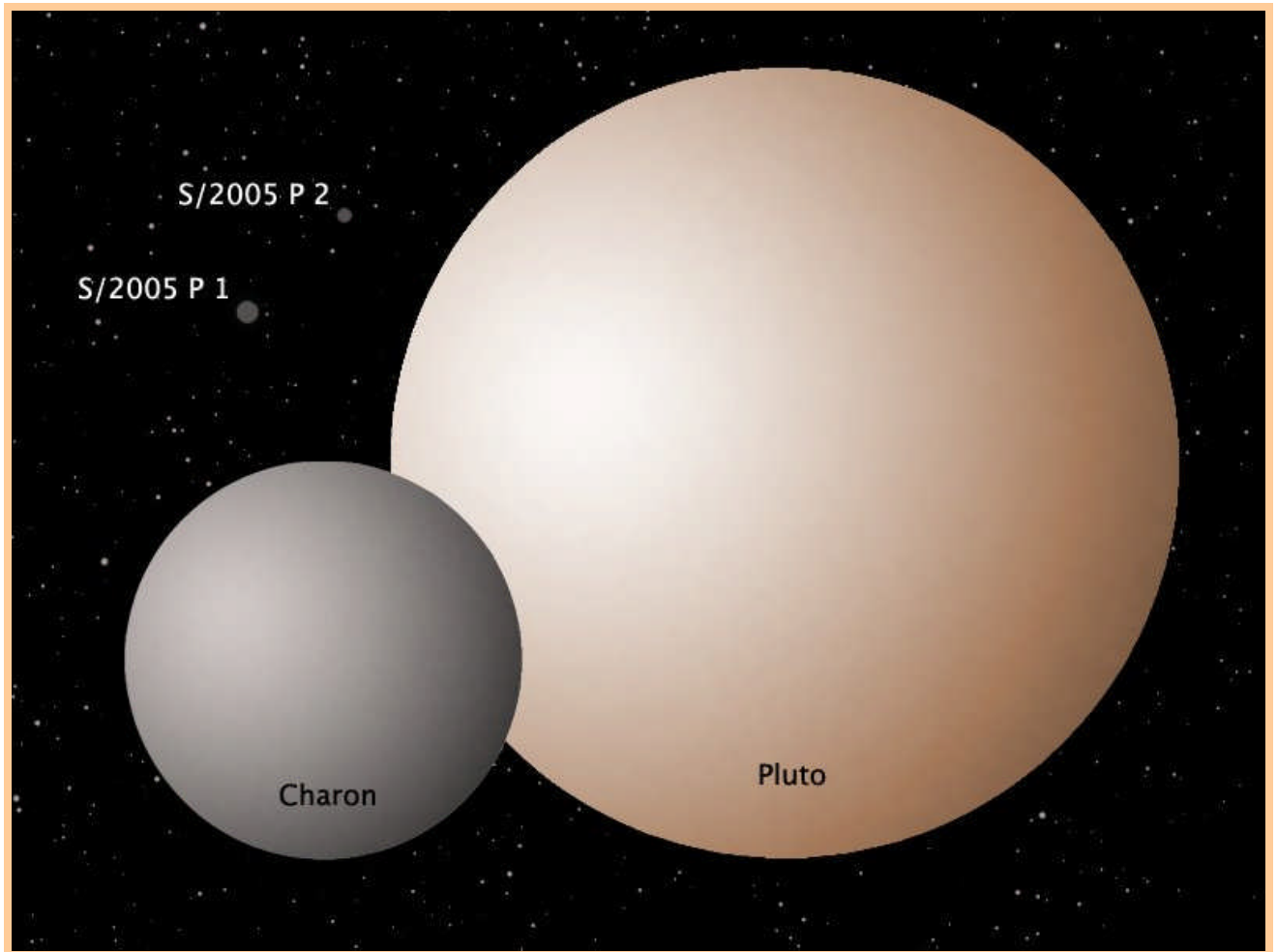
Pluto is now considered to be part of the Kuper Belt and it is the farthest "ex-planet" from the sun.

Because Pluto is so very far away it is hard to get a good look at the tiny little ball of ice. The Hubble telescope, a giant telescope out in space has been able to tell us a few new things though.

For one - Pluto has more than just one moon like we thought. The picture below shows the two (smaller objects) new moons from the "surface" of Pluto.



And here is another cartoon of Pluto and its known moon **Charon**, along with the two new moons and their scientific numbers.



Because a "year" is the length of time that a planet takes to go around the sun **ONE** time; and because Pluto is the farthest orbiting object from the sun - it takes almost 250 Earth years for **ONE** Pluto year! Imagine living your whole life and never having a birthday!

## Activity 13.1

### Short Answer

Why did scientists want to stop calling Pluto a planet?

How many earth years does it take for one Pluto year?

What is the name of Pluto's known moon?

What are the numbers we use for the other new moons?

## Activity 13.2

### Matching Vocabulary

**Directions:** Match the vocabulary word on the left with the proper definition on the right. Put the correct letter on the blank.

#### Vocabulary Words

#### Definitions

1. \_\_\_\_\_ Charon

A. Pluto is part of this

2. \_\_\_\_\_ Pluto

B. A very small planet

3. \_\_\_\_\_ Dwarf Planet

C. No longer called a planet

4. \_\_\_\_\_ Kuper Belt

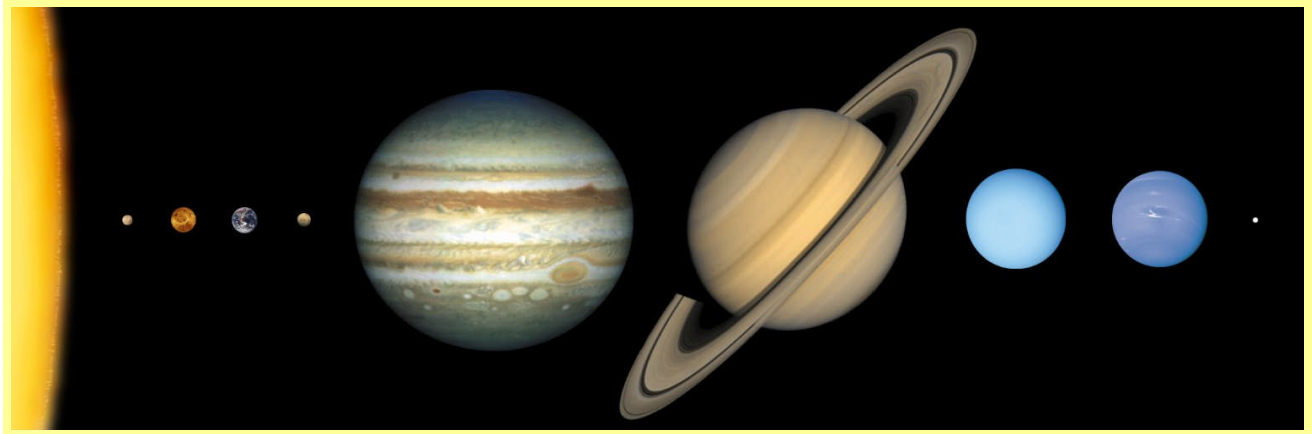
D. The largest moon of Pluto



## Activity 13.3

### Label the Planets

Going from the left (the sun) to right, name all the planets you've learned about. These are the real size differences between the nine (or 8) planets.



Sun

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## UNIT 18 - Astronauts in Space!

What is it like to live in space? What do you have to do to become an astronaut? How long does it take?

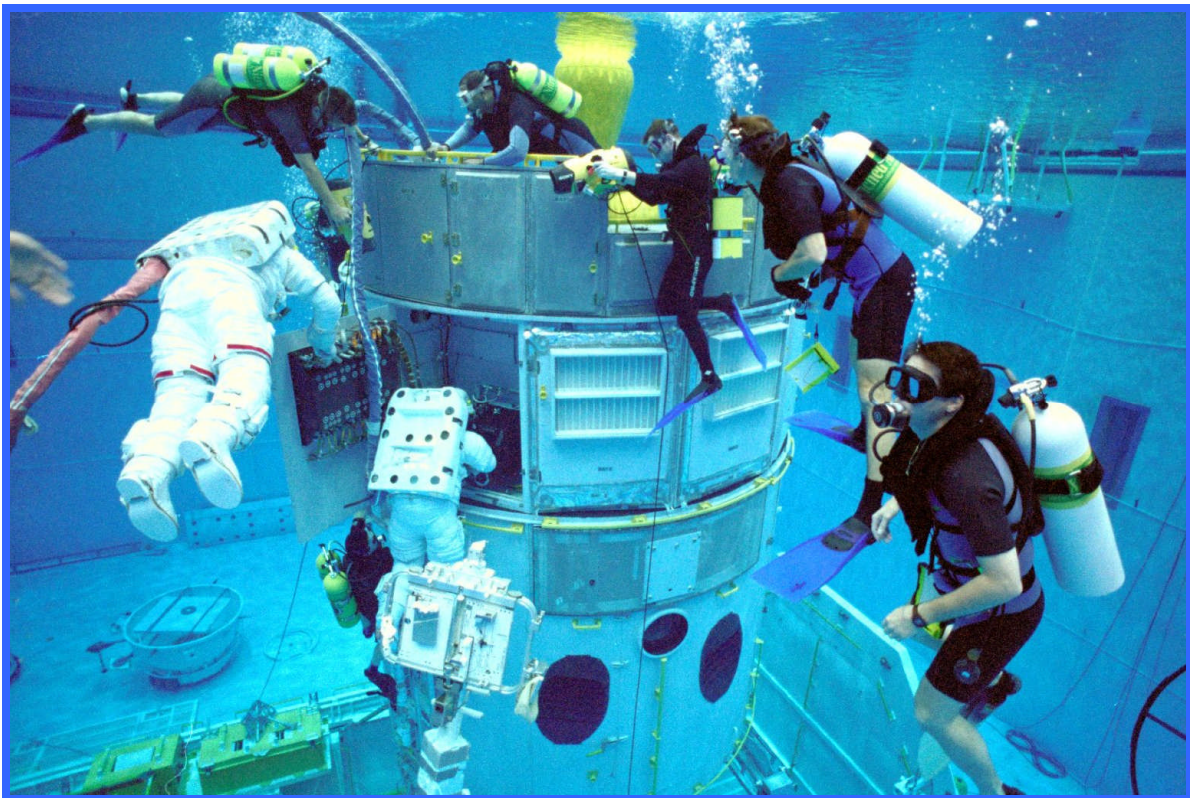
Not everyone is made to go up to the stars and work, but a few people have what it takes. Astronauts must be very good at math and science, be in excellent health and in top condition, and be willing to risk their lives and work long hours.

Why would anyone do that? Well, imagine you are but one of the few people who have had the chance to look down upon your own planet from outer space or feel what it is like to float in zero-gravity. You would feel quite special.



Astronauts train for many years, even after they finish college. In fact, many children start preparing to be an astronaut very early in their lives by going to NASA sponsored **space camps** in the summer or over a holiday.

Most training is done on earth, or in this case, in the water! They train in the water to get used to working in heavy spacesuits and in lower gravity.



## Activity 18.1

### Fill in the Blank

Find the correct word from the text above to complete the sentences. Use the words from the word bank.

Astronauts train for \_\_\_\_\_ years. Most of the time this training happens on \_\_\_\_\_. They must be very good in \_\_\_\_\_ and \_\_\_\_\_. Some kids know very early that they want to be an astronaut and they go to \_\_\_\_\_ \_\_\_\_\_ to help them get ready when they are young. If an astronaut is not in excellent \_\_\_\_\_ and willing to risk their \_\_\_\_\_, then being an astronaut is not the job for them.

math

life

science

health

space camp

many

Earth

## Activity 18.2

### True or False?

Put a T for true or a F for false in the blank next to the question.

1. \_\_\_\_\_ Anyone can be an astronaut.
2. \_\_\_\_\_ Math and science are not important.
3. \_\_\_\_\_ Astronauts must get used to working in big spacesuits.
4. \_\_\_\_\_ Much of the training time is spent on earth preparing for your mission.
5. \_\_\_\_\_ Space camp is not a good way to prepare to be an astronaut.
6. \_\_\_\_\_ You don't have to be in excellent condition to be an astronaut.
7. \_\_\_\_\_ It will take many, many years of training to be an astronaut.



