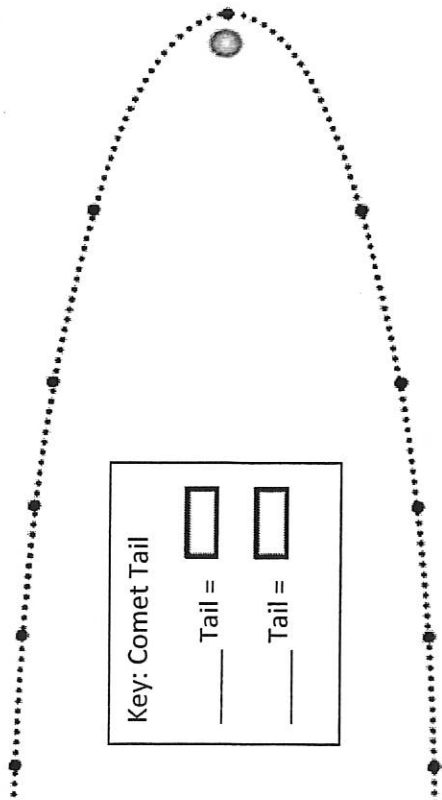


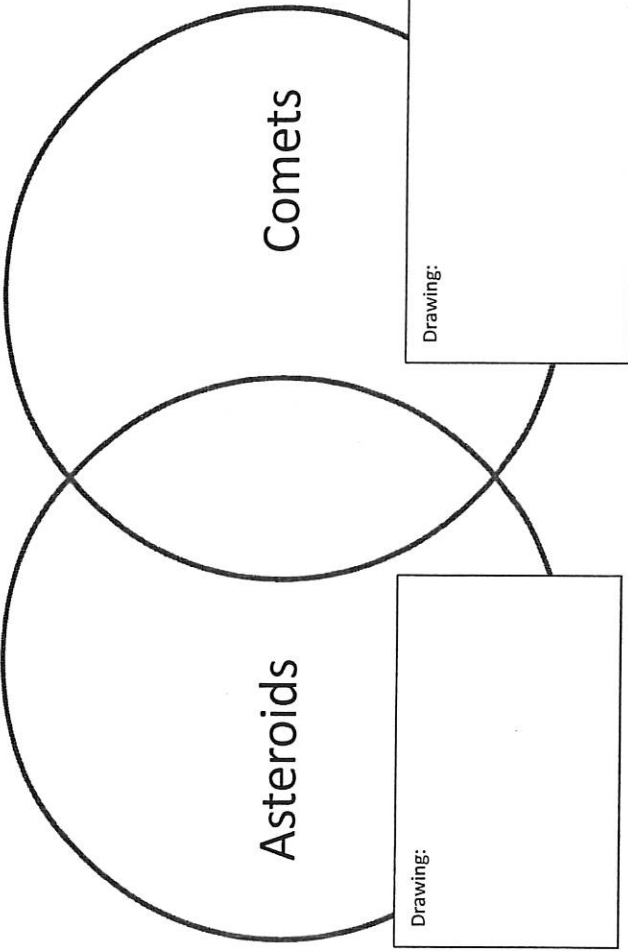
Fill in the tails of Halley's comet at the various points in its orbit around the sun. Then, circle the position at which the tail would be the longest! (Draw the 2 tails – see pg. 472)



Key: Comet Tail

___ Tail = []
 ___ Tail = []

View the "Asteroids" and "Comets" Brain Pop videos. Compare/contrast both objects.



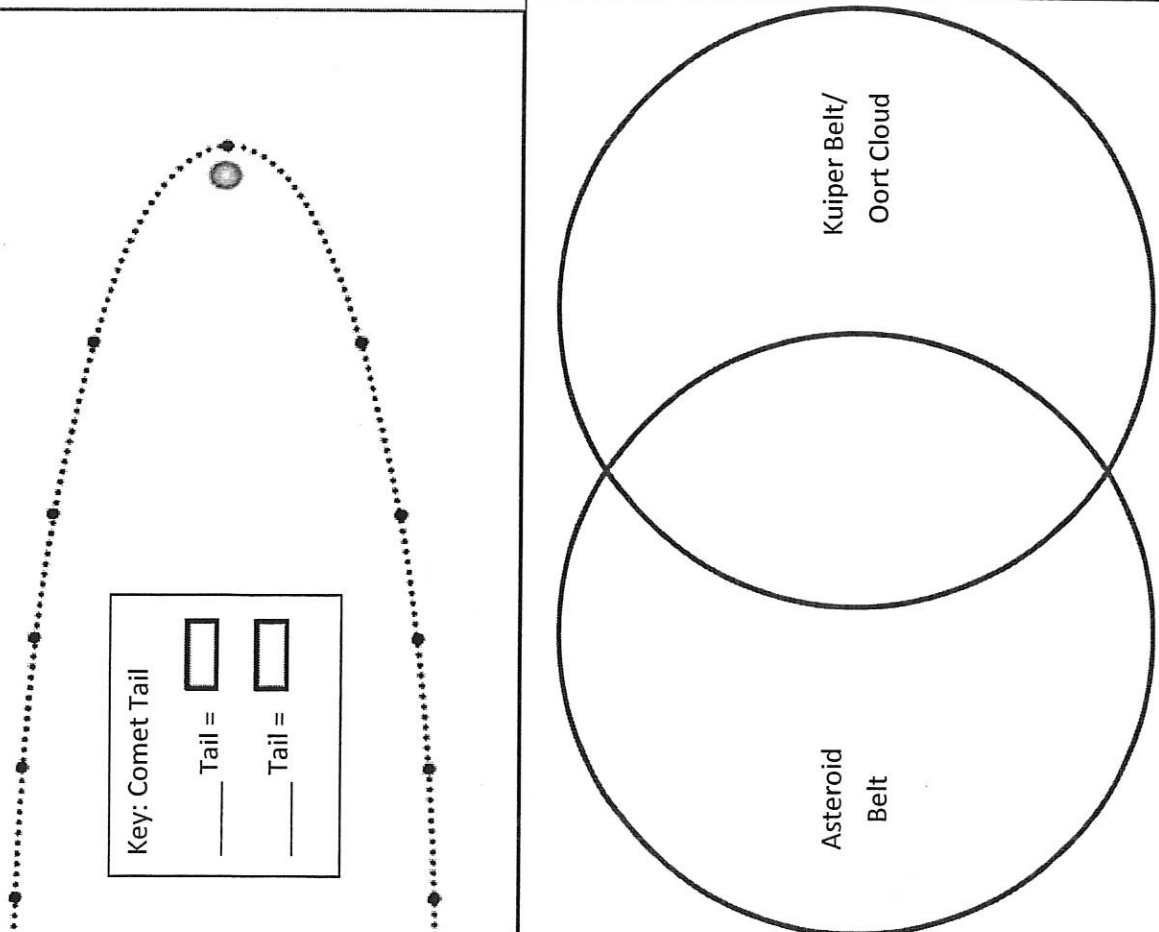
Read and annotate the provided article: "Should Pluto Be a ...". Directions: Write a "Claim, Evidence, Reasoning" to identify what you think our beloved Pluto should be classified as. Be sure to use evidence from the article (source) to support your claim. Did you change your mind from last time?

Claim: _____

Evidence: _____

Reasoning: _____

Compare/contrast: Location in Solar System, Composition, Origin, Orbit around Sun, etc..



Compare/contrast: Location in Solar System, Composition, Origin, Orbit around Sun, etc..

Quiz!

Outer Solar System

- How is Pluto different from Planet X?
 - Planet X was never discovered; Pluto was
 - Planet X is a gas giant; Pluto is a dwarf planet
 - Planet X has several moons; Pluto has no moons
 - Planet X contains single-celled life forms; Pluto does not
- Why is Pluto no longer considered a planet?
 - Its orbit is too irregular
 - Its orbit is too far away from the sun
 - It isn't large enough
 - It orbits Neptune, not the sun
- Place the following in order, from closest to furthest away: A) The scattered disk; B) The Kuiper Belt; C) The Oort cloud
 - A,B,C
 - C,B,A
 - B,A,C
 - C,A,B
- What can you infer about the Kuiper Belt from the objects that orbit within it?
 - It's very small
 - It's very cold
 - It's very dense
 - It's very close to Neptune
- How is Orcus different from Charon?
 - Orcus orbits the sun; Charon orbits Pluto
 - Orcus is a dwarf planet; Charon is a Kuiper Belt object
 - Orcus is a comet; Charon is a trans-Neptunian object
 - Orcus is very large; Charon is very small
- Place the following objects in order, according to size: A) Earth; B) Pluto; C) Eris
 - A,C,B
 - B,A,C
 - C,A,B
 - A,B,C
- Which of the following objects most likely originated in the Oort cloud?
 - Eris
 - Pluto
 - Comet Hale-Bopp
 - Varuna
- What is the difference between the termination shock and the heliopause?
 - The termination shock slows the solar wind and the heliopause stops it
 - The heliopause slows the solar wind and the termination shock stops it
 - Sunlight is not visible from the heliopause; it is visible from the termination shock
 - Sunlight is not visible from the termination shock; it is visible from the heliopause

Name: _____ Date: _____ Period: _____

9. What do the Voyager and Pioneer probes have in common?

- They've both passed the heliopause
- They were all launched during the 1980's
- They've all been very easy to track
- They're all unmanned spacecraft

10. If you has a spaceship that could travel at the speed of light, how long would it take you to reach the Oort cloud?

- About a year
- About six months
- About a month
- About a week

Total Score: ___/10

True or False

Determine if the statement is true or false. If false, replace the underlined word(s) with the correct word(s) on the line. If true, write "true" on the line.

..... Trans-Neptunian objects orbit Neptune.

..... Since it was reclassified as a dwarf planet, Pluto is no longer considered a planet.

..... Solar wind moves in the opposite direction of the sun's gravity.




..... Objects in the Kuiper belt are as old as the solar system itself.

..... The place where Solar wind collides with interstellar wind is called the Oort cloud.

Identify It

List terms from the word bank that apply to each solar system object.

dwarf planet reddish scattered disc unclassified former planet Kuiper belt trans-Neptunian

 <p>Pluto</p>	 <p>Eris</p>	 <p>Sedna</p>
<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>