



Name \_\_\_\_\_

Class \_\_\_\_\_

### Launch to the Cosmos - Galaxy Shapes

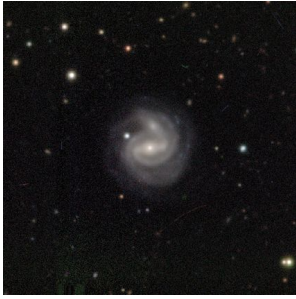
Don't forget to record your observations as you work through this activity. It might be helpful to take a picture of the galaxy cards after you have sorted them. We begin with Set 1 of the cards.

1. When you scan all of the cards at once, what are some characteristics they all have in common?
2. List some words you would use to describe the shapes you see?
3. Sort the shapes in any way you would like. Describe the rules you would have for placing pictures into your scheme.
4. If you were handed a new image, do you think you would be able to fit it into your scheme?
5. If you answered "yes" explain how you would do this? If you answered "no" make changes. Describe the changes you made.
6. Where would you place the image below in your sorting scheme? Does it fit? Describe the problems you ran into. How did you deal with them?



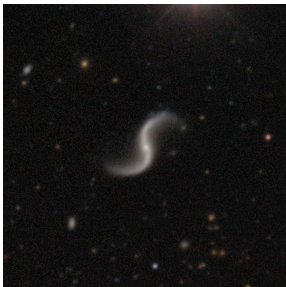
Name \_\_\_\_\_

Class \_\_\_\_\_

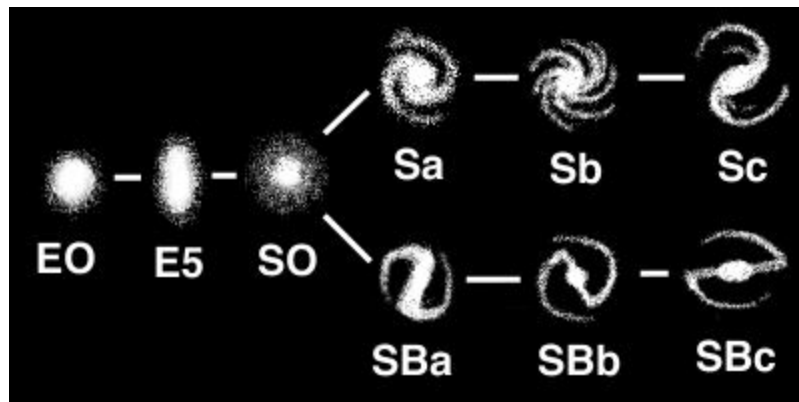


Set your sorted cards aside or take a picture of it for later. Now, do the same thing with the second set of images.

1. When you first scan all the cards, were there any characteristics that you did not see previously in the first set of cards?
2. List some words you would use to describe the shapes you see?
3. Sort the shapes in any way you would like. Describe the rules you would have for placing pictures into your scheme.
4. Where would you place the image below in your sorting scheme? Does it fit? How does this task compare to the one you did previously?



5. Now that your teacher has revealed the nature of the two sets of galaxies, what conclusions can you draw about the process of creating a classification scheme for these objects?
6. Below is an example of Hubble original tuning fork diagram. Describe some similarities and differences between your system and Hubble's.



7. If there is more than one group working on this activity, each group should independently sort the second set of galaxy cards into a Hubble Tuning Fork diagram. Compare the results between groups. Take a picture! Send it to [voyages.sdss.org](http://voyages.sdss.org)