Name: _____ Homeroom : _____

Star Dollars

Materials: 3 sea star specimens, 3 sand dollar specimen, meter stick, triple beam balance

Procedure:

1. Measure the mass of each sea star.

2. Measure the mass of each of the sand dollars.

3. Measure the length of the radial arm of the sea stars. (From the mouth to the tip of the arm.)

4. Measure the radius of the sand dollars. (From the mouth to the outer edge.)

5. Draw a detailed diagram of the Aboral side (top) of one of the sea stars. Label spines, radial arm, and eyespot.

6. Draw a detailed diagram of the Oral side (bottom) of one of the sea stars. Label mouth, tube feet, and Ambulaceral groove.

7. Draw a diagram of the Aboral side (top) of the sand dollar. Label the patalloids and the lunules.

8. Draw a detailed diagram of the Oral side (bottom) of one of the sand dollars. Label food grooves, mouth, and lunules.

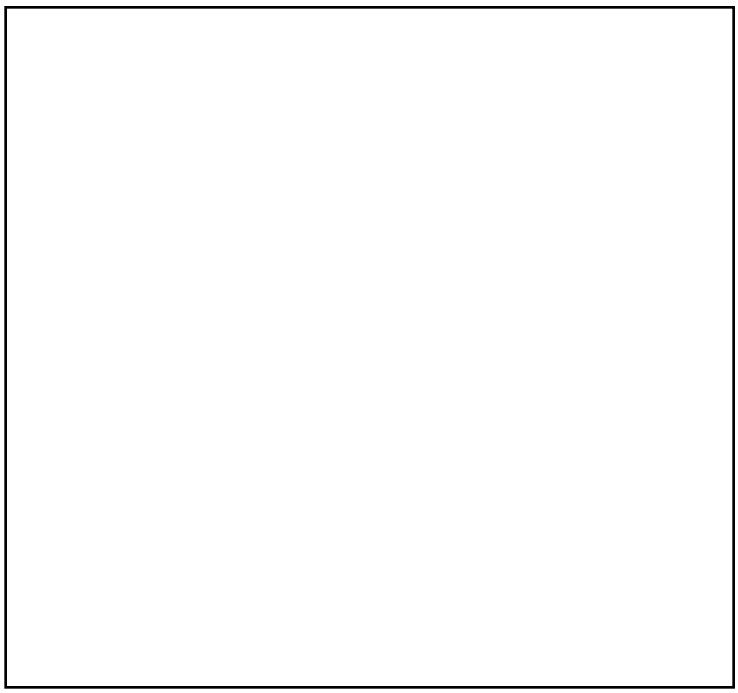
Name: _____ Homeroom : _____

Observations:

Type of Sea Star	Mass of Sea Star (grams)	Length of radial arm (cm)

Type of Sand Dollar	Mass of Sand Dollar (grams)	Radius of Sand Dollar (cm)

Diagram of Aboral side of Sea Star:



Name: _____ Homeroom : _____

Diagram of Oral side of Sea Star:

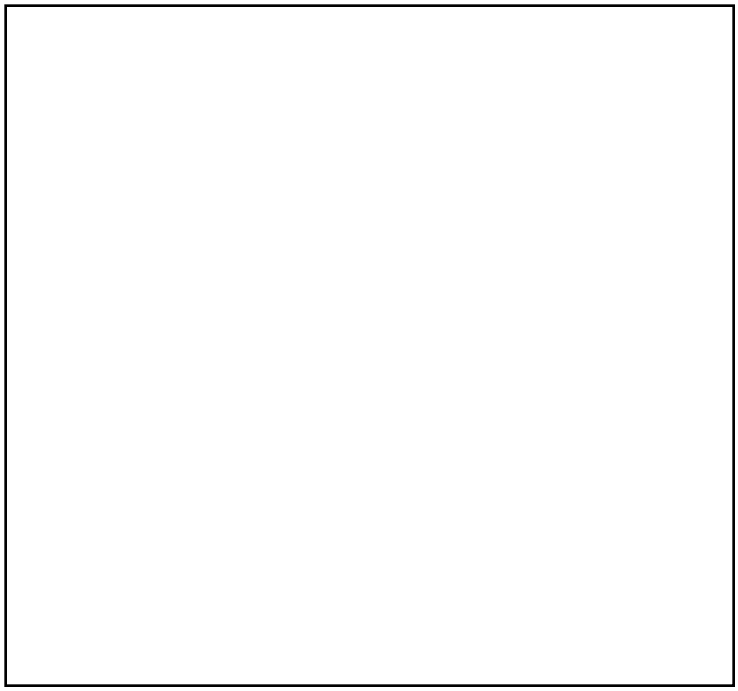
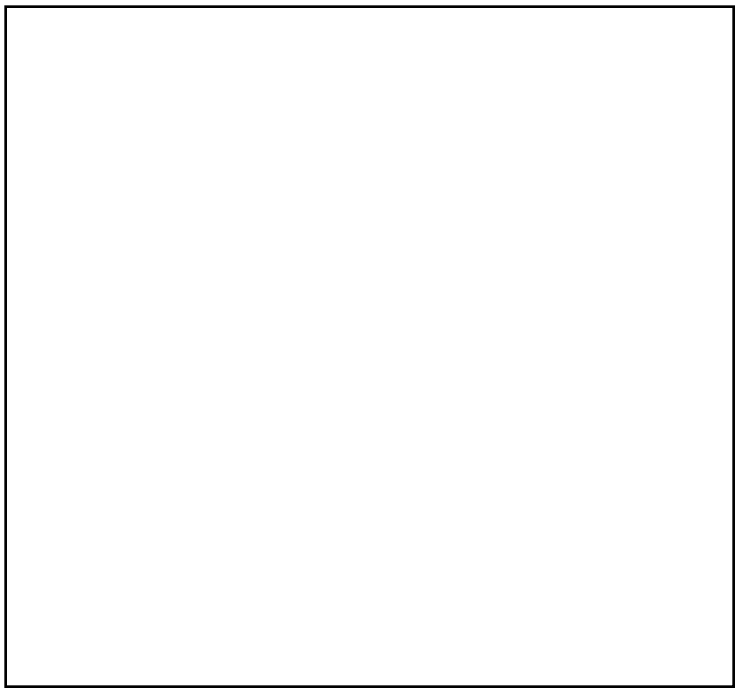


Diagram of Aboral side of Sand Dollar:



Name: _____ Homeroom : _____

Diagram of Oral side of Sand Dollar:

Conclusion:

1. Based on your observations, how are sea stars and sand dollars similar?

2. Based on your observations, how are sea stars and sand dollars different?

3. For your sea stars, did the most massive sea star have the longest arm? Why do you think so?

3. For your sand dollars, did the least massive sand dollar have the smallest radius?