[redacted]

# Star Dollars

*Procedure*

There were 3 sand dollars and 5 sea stars to pick from. We had to pick three of each of them. We picked both Indian sea stars and the large Philippine sea star. We did all 3 sand dollars. We measured the mass of either the star or the sand dollar. We recorded that. We measured the length of the radial arm of the sea star and the radius of the sand dollar. We recorded that. We drew diagrams of the Aboral and Oral sides of the sea star and the sand dollar. We labeled them.

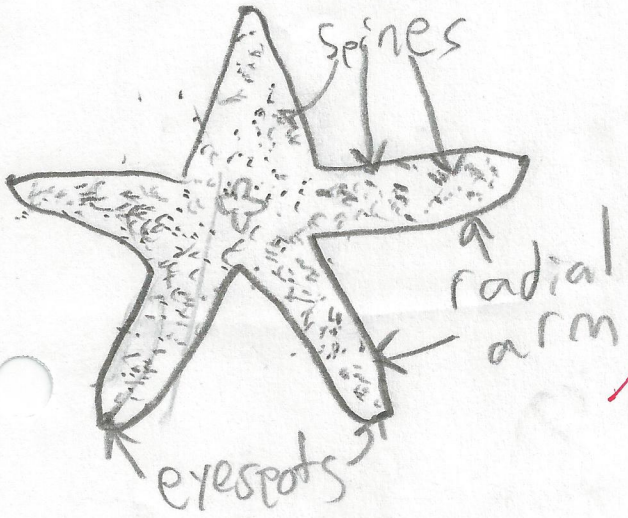
*Observations*

| Type of Sea Star | Mass of Sea Star (grams) | Length of Radial Arm (cm) |
|---|---|---|
| Indian (stomach) | 100.6 g | 7 cm |
| Indian (broken arm) | 51.1 g | 6.5 cm |
| Large Philippine Star | 359.5 g | 10 cm |

| Type of Sand Dollar | Mass of Sand Dollar (g) | Radius of Sand Dollar (cm) |
|---|---|---|
| Small Sand Dollar #1 | 7.7 g | 3 cm |
| Small Sand Dollar #2 | 6.5 g | 3 cm |
| Large Sand Dollar | 83 g | 7 cm |

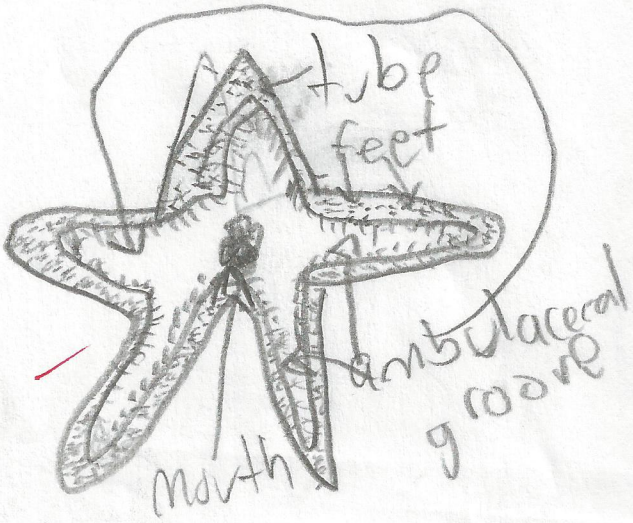
## Diagrams

Aboral Side Sea Star

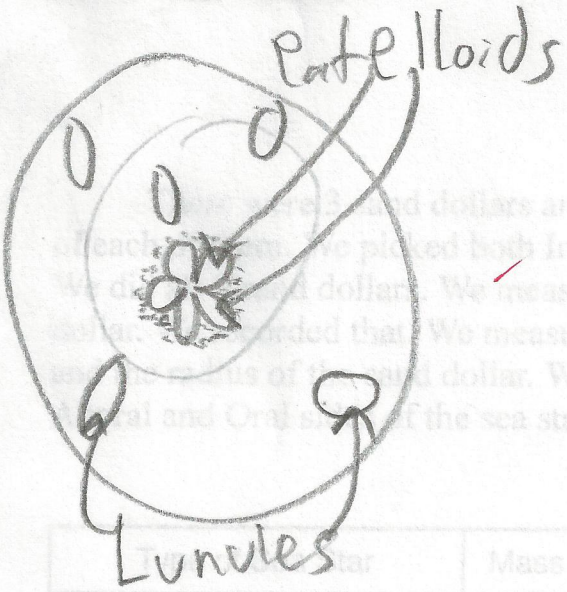


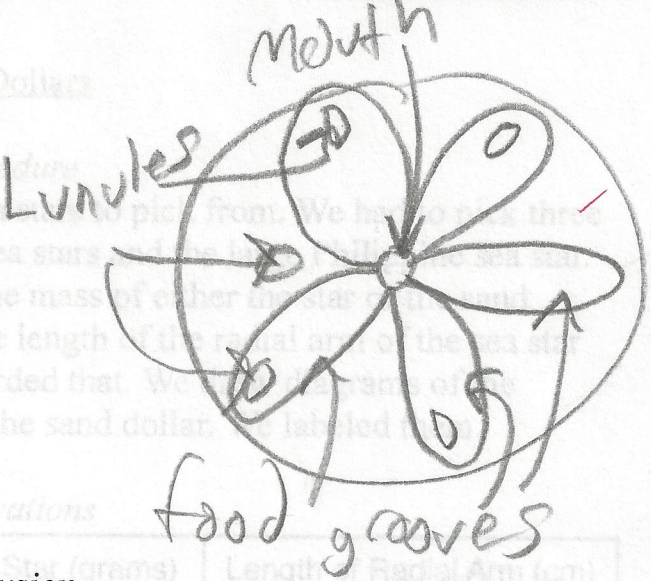

Indian (Stomach)

Oral Side Sea Star



Aboral Side Sand Dollar Small #2 Oral Side Sand Dollar




*Conclusion*

Both sea stars and sand dollars have mouths and food grooves. Sea stars are different from sand dollars because they have arms and spines. Sand dollars are different from sea stars because they have patalloids and lunules. The most massive sea star had the longest arm because if it is bigger then it will have the biggest anything. The least massive sand dollar did not have the smallest radius. Its radius is the same as Small Sand Dollar #2.

The drawings are not to scale. ✓