

Sea Scallop Lab

**Standards: Math 6.N.2, 6.N.4, 6.N.9, 6.P.4, 6.M.1, 6.M.5, 6.D.1
Science 1.1 (possible contour map of floor), 2.1, 2.12, 2.13**

Objective:

Students will work with Brad Harris/SMAST to collect data about each shell. Data will include height, width, number of rings and any physical abnormalities. This information will allow the students to predict the area and age of the scallop. The area measurement will be used to predict the weight of the meat (what we eat) of the scallop.

Materials:

- Pencils
- Rulers
- Sea Scallop Lab Handout
- Thinking Caps
- 20 to 30 Scallop Shells

Procedure:

1. Students should be ideally in groups of four, five at most.
2. Handout the shells. Have students inspect the shells.
3. Ask the questions...
 - i. "How do you think you might measure the age of the shells?"(The rings).
 - ii. "What other species age is measured by rings?"
 - iii. "What shape does the shell resemble?"
 - iv. "Imagine all of the shells on the ocean floor... How would we measure how much space they are taking up?"
 - v. How would we calculate the area of the shells?
4. Handout the Sea Scallop Shell Lab. read through the lab with class.
5. Demonstrate the measurements that need to be done.
6. Have students take measurements of at least 3 different shells.
7. We then were required to forward measurements of shells for evaluation by Brad's team.

Breakout:

Students are asked to find the mean (average) of measurements.

Students are asked to create a spreadsheet of results.

Research George's Bank and how local fisheries affect the scallops.

Scallop industry in New Bedford.