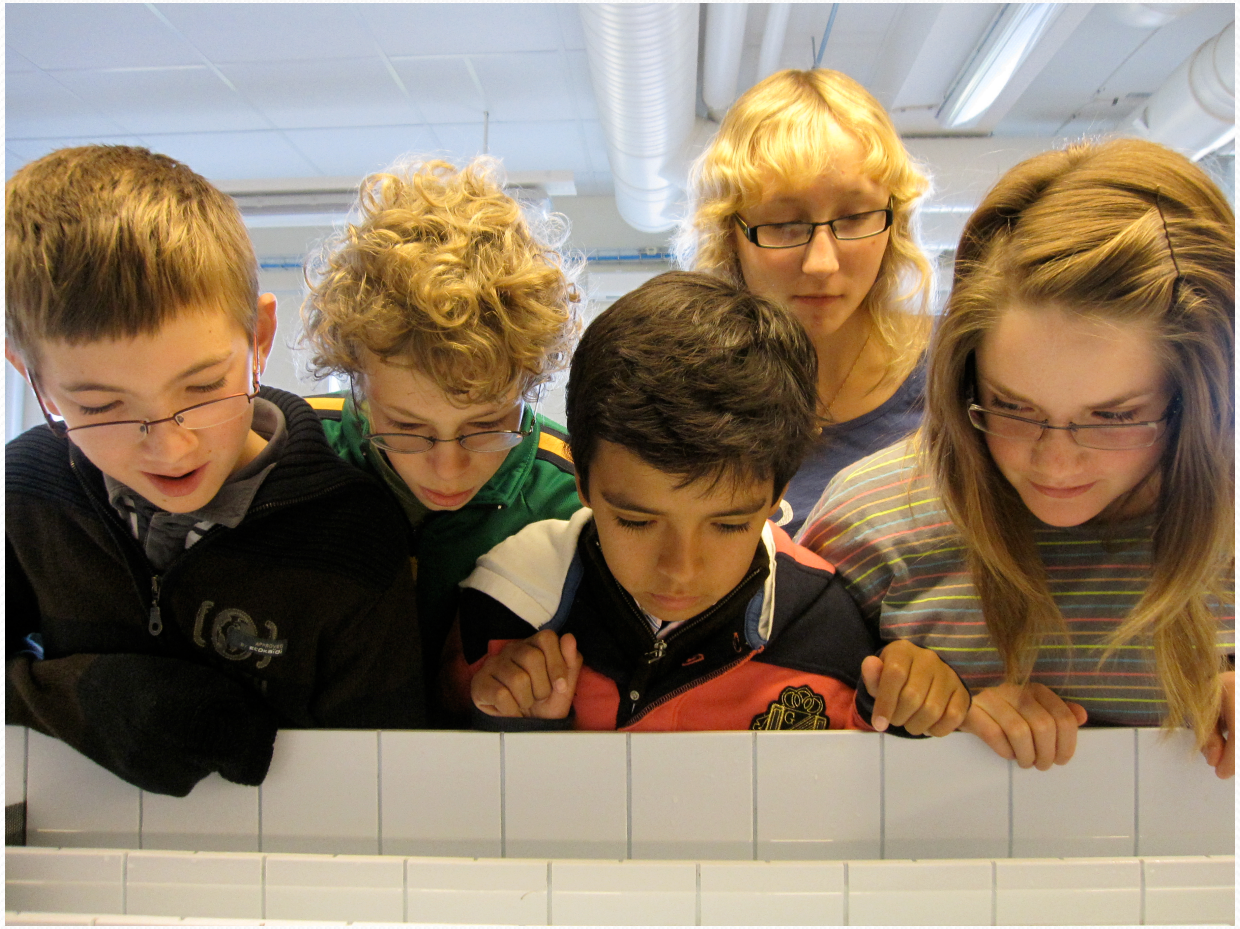
Which starfish species affect the great scallop?

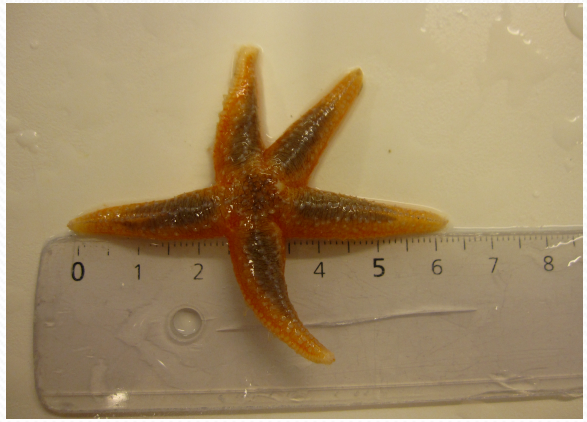
Observation



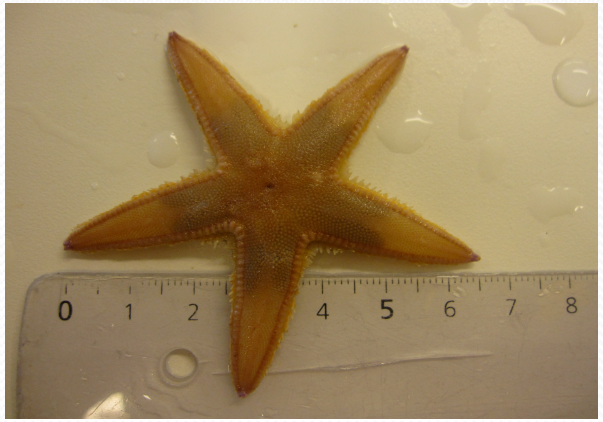
The Aim

- The aim of this project is to find out if the scallop reacts to the four species of starfish.

The different species of starfish

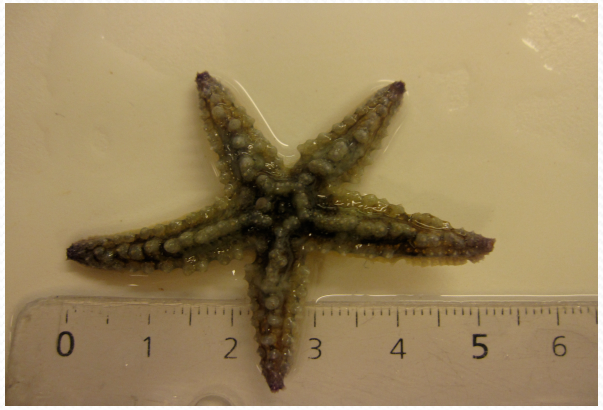


Common starfish (Asterias rubens)



Comb starfish (Astropecten irregularis)

Blood starfish (Henricia sanguinolenta)



Spiny starfish (Marthasterias glacialis)

The hypothesis

- The prediction is that the starfish that eat mussels will make the great scallop swim away.

The null hypothesis

- The scallop won't react to the carnivores that eat mussels,

  which are the Spiny starfish and the Common starfish.

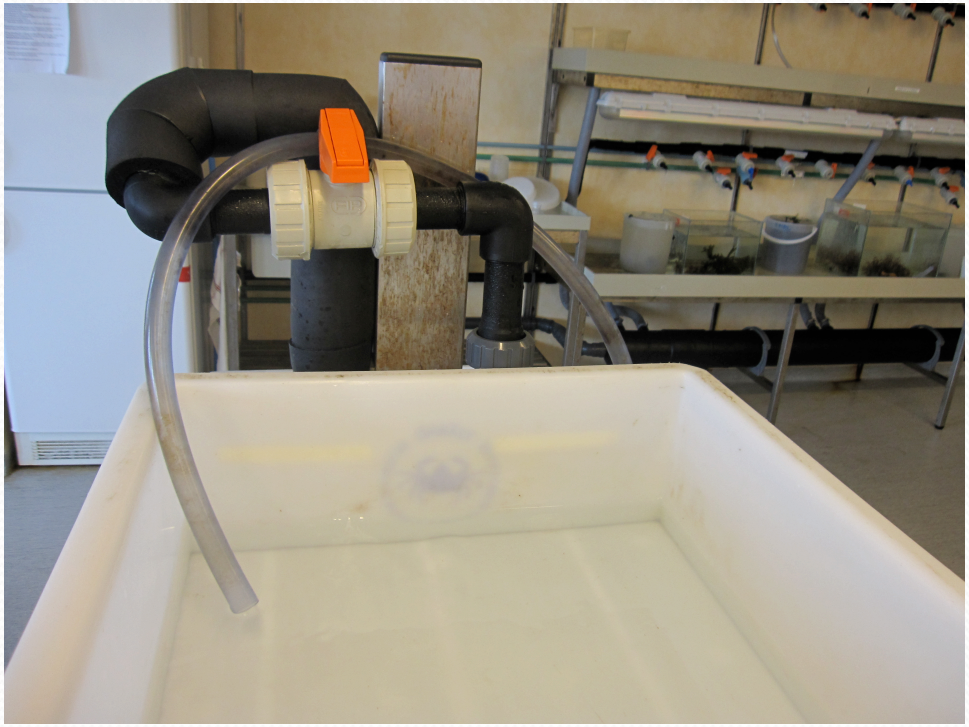
- The scallop will react to the starfish that eat mainly bacteria, sponges and small molluscs,

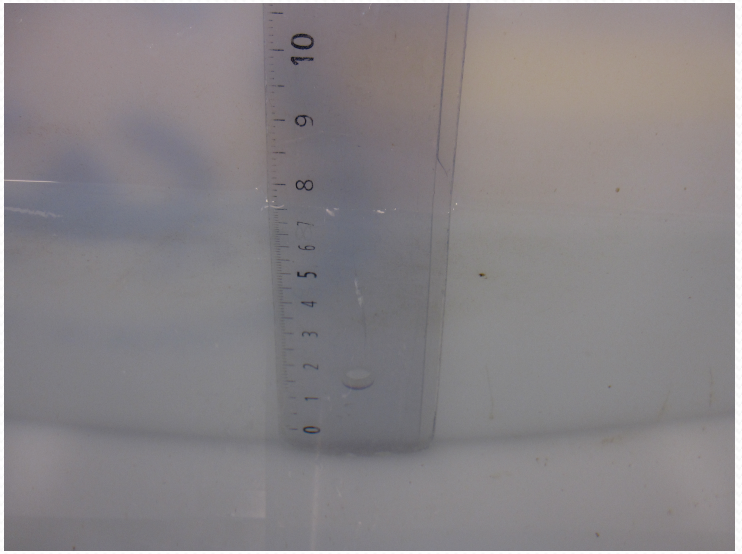
  which are the Blood starfish and the Comb starfish.

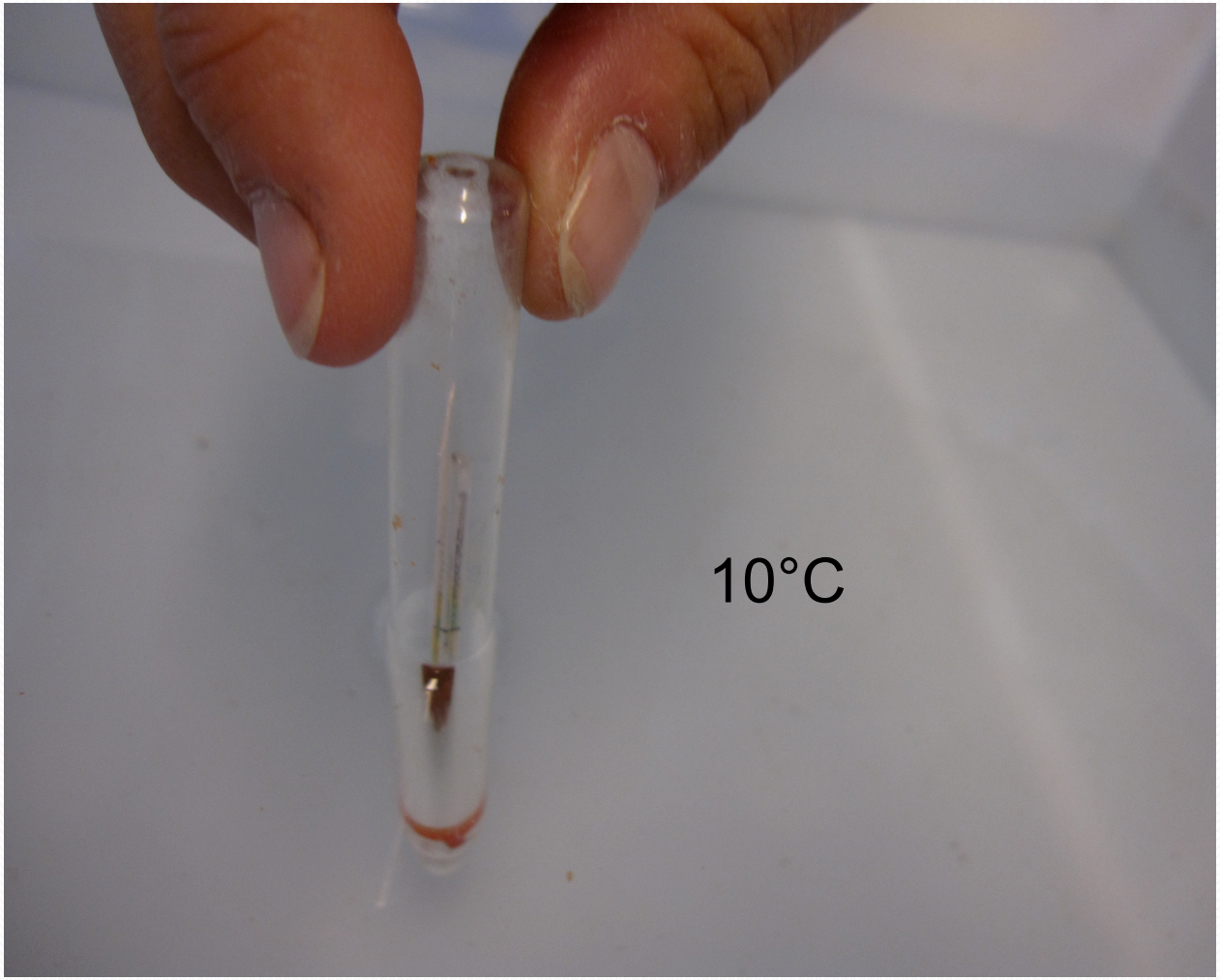
The variables

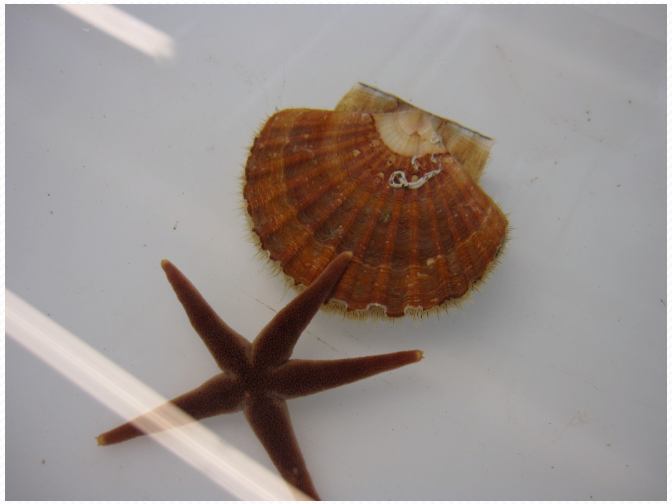
- Independent variable: the different species of starfish
- Dependent variables: the reaction of the scallop
- Controlled variables: one minute for reaction to take place. The sea water, the temperature of the water, the light, the size of the different starfish.

The method






10°C



The results

Name (latin name)	Trial 1	Trial 2
Common starfish (Asterias rubens)	11.85 seconds	10.85 seconds
Spiny starfish (Marthasterias glacialis)	8.16 seconds	8.43 seconds
Blood starfish (Henricia sanguinolenta)	NO REACTION	NO REACTION
Comb starfish (Astropecten irregularis)	NO REACTION	NO REACTION

The results support our hypothesis