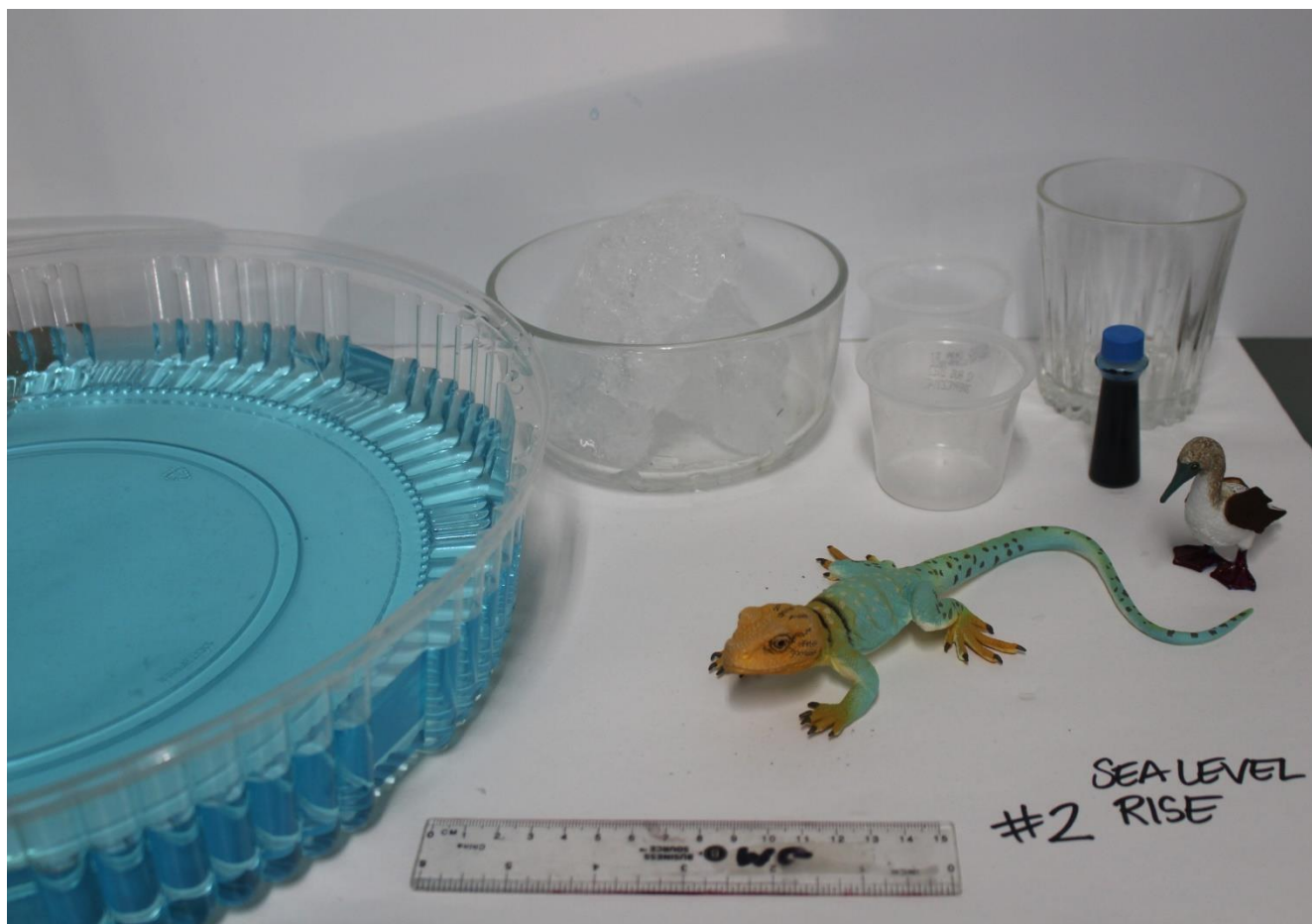


## Materials Required:

### *Sea Level Rise*

- Large watertight container
- 3 smaller containers that can fit inside the larger container e.g., yogurt/ pudding cups.
- Blue food coloring
- 2 smaller figurines of animals or houses
- Block of ice
- Ruler or sharpie to take measurement.



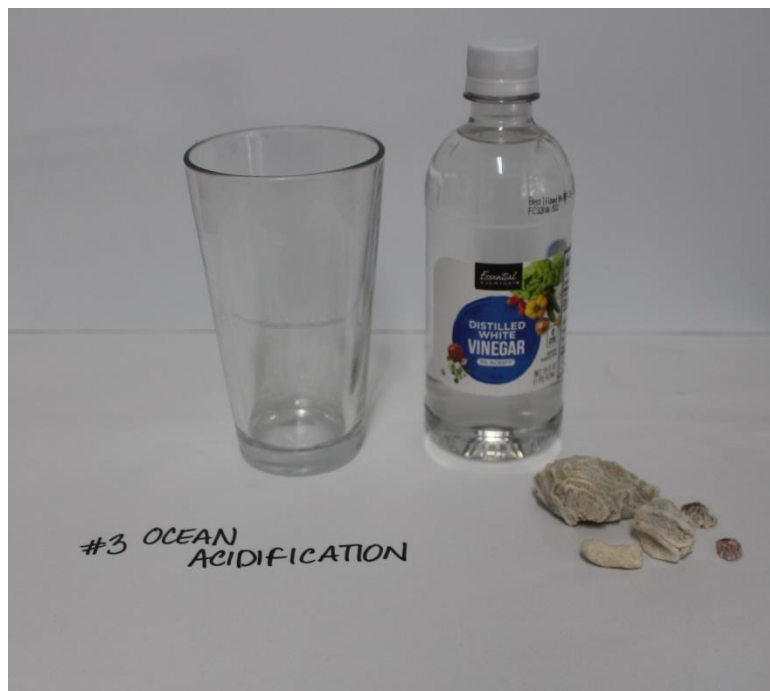
### *Temperature change*

- 2 cups
- Blue food coloring
- 2 thermometers



### *Ocean Acidification*

- Cup
- Pieces of shell or dead coral
- White vinegar



## Demonstration Set Up:

### *Sea level rise*



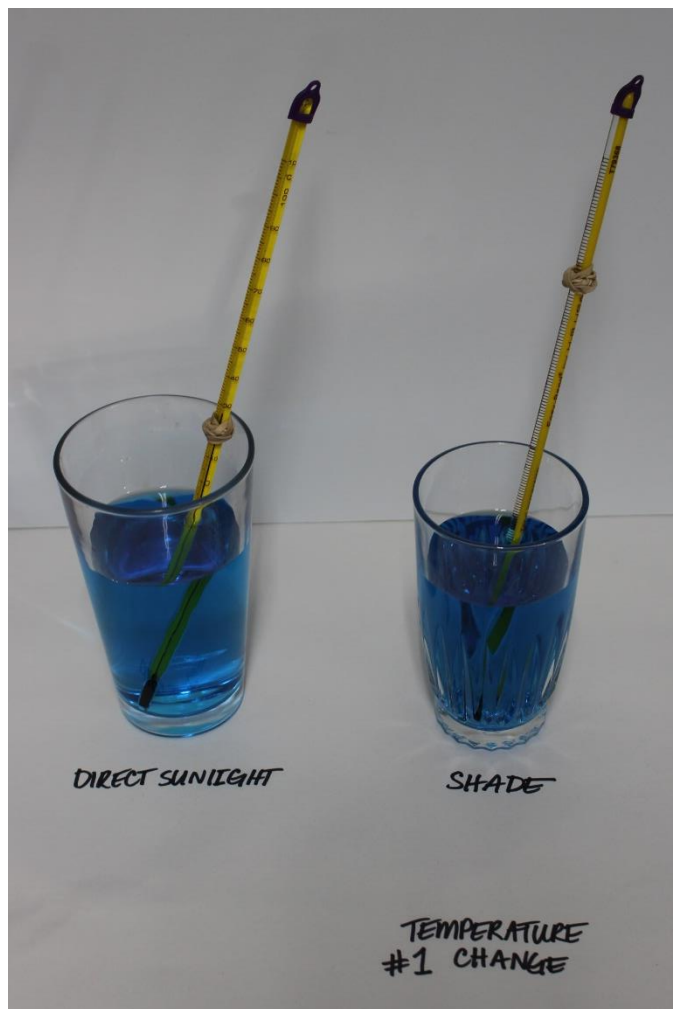
Place the 3 smaller containers inside of the larger one and fill up the water until it is just under the lip of the smaller containers (in this case 2 pudding cups were used as the smaller containers and a tumbler glass was used for the ice).

Make sure you place a large enough piece of ice on the taller container so that when it melts, it raises the water level to just over the toes of your figurines. You want to ensure your smaller containers do not float up so make sure you either fill them with water or weigh them down. It is optional to use blue food coloring, but it makes the distinction of ocean and land more obvious.

### *Temperature Change*

This is a simple set up using whatever thermometers you think will work so that students can easily read them when taking the temperatures at the end.

Again, food coloring is optional but also helps to make it clear that we are talking about the ocean.



### *Ocean Acidification*

This does not require very much vinegar. Put enough in to just cover the piece of shell or coral that you are looking to dissolve. The smaller piece of shell or coral, the more likely it is that the whole thing dissolves. Make sure you see fizzing coming from the shell or coral to confirm that it is working.