



Temperature Sensor: Activity Instructions

1. On [Choose Path](#) page
 - Select [Sensor Data](#)
2. On [Sensor Data Configuration](#) page
 - Select a [wireless device to continue](#)
 - Select your sensor (check that the number matches the number on your sensor)
 - Click it to connect

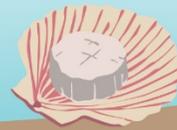
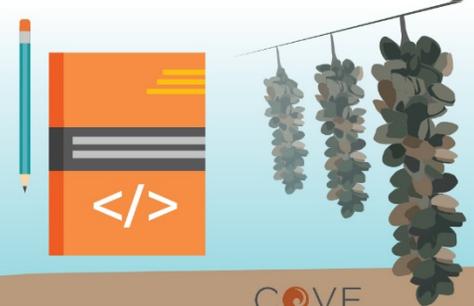
Templates

- Select [Table and Graph](#)
3. [Table and Graph](#) page

At bottom left corner you should see the current reading of the room temperature

Below that you will see Periodic 10Hz

- Click the circle beside it
 - Where you see [Sample Rate](#) – click the left arrow to change to [5s](#) – OK
 - Press start
 - You should start to see the readings on the screen.
 - After 20 seconds press stop
4. A team member will hold the temperature sensor bar in their hands (the metal rod)
 - Press [start](#) to take a reading, holding the bar the entire time – hold for 20s
 - Press [stop](#)
 5. At the bottom right click the [Experiment tools](#) button (looks like a wrench crossed with a screw-driver)
 - Select [Manage Runs](#)
 - Select [Rename Run](#)
 - Select [run 1](#) and give it a name (e.g. the name of the first person who's temperature was registered) – Click [Done](#)
 6. Pass the sensor to the next person on the team
 - Repeat steps 4-5 for each person on the team



7. On the chart, click the boxes for each run to see temperature comparisons for you team. **Who has the hottest hands on the team?**

Activity 2

1. Go to main menu on the top left 
 - Select [New Experiment](#)
 - You will get a prompt to save changes – you can select ‘no’
2. Sensor data screen - Ensure your temperature sensor is still clicked
 - Select [Table and Charts](#)
 - Change Period to [5s](#)
3. Put sensor bar into first aquatic sample
 - Press [start](#) – let run for 30 s (or longer if temperature has not reached a steady reading)
 - Press [stop](#)
4. Click [Experiment Tools](#) at bottom right (wrench with screwdriver icon)
 - Select [Manage Runs](#)
 - Rename – click the new run to rename and type in a name (e.g. aquarium near window)
5. Move sensor to next sample
 - Repeat steps 3-5 for the rest of the samples listed (be sure to press STOP after each run).
6. On the graph, select all of the runs.
 - Click the  icon – to fit to scale, to see all of the runs.
 - What samples had the warmest water? How can you account for the temperature differentials?
7. Hold the power button in for a few seconds to turn the sensor off.

Discussion

1. Compare your runs. What was the temperature differential between the sunny and shady samples? The samples with fish, aquatic plants, and algae?
2. Why would temperature be a factor to monitor in aquaculture? (Review the info sheet on your table, and be prepared to summarize to the group during your debrief).
3. As a group, discuss how else you might use the Temperature Sensor in your class to conduct a marine investigation or illustrate an ocean STEM concept. Be prepared to share with the larger group. (Please capture this on the flip chart).