



# *Blue Impact: Thermal Expansion*

## *Student Sheet*

### **DIRECTIONS**

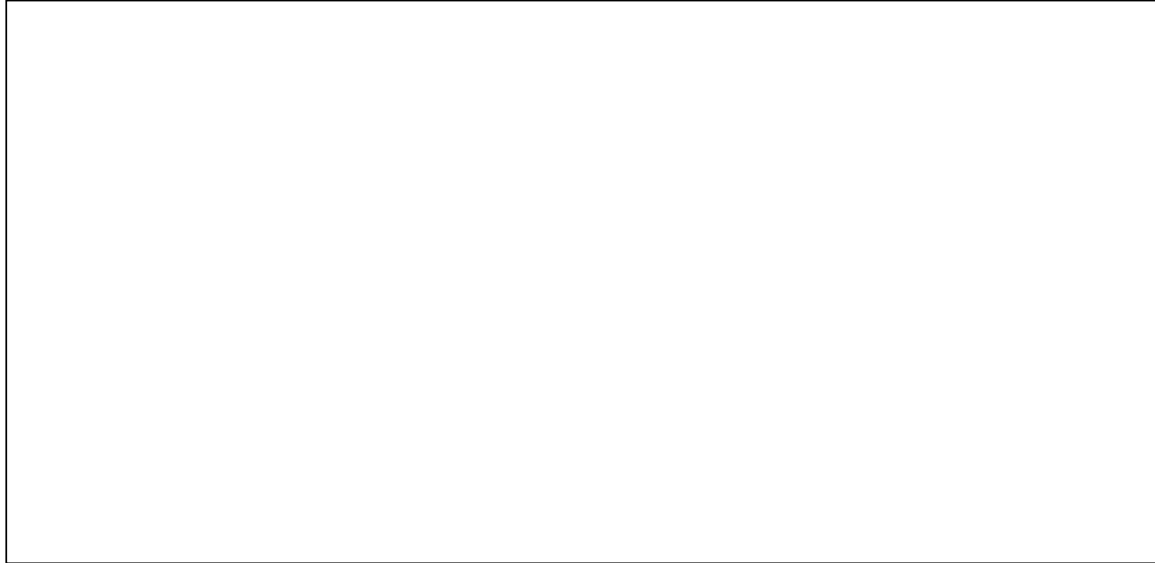
Answer the following questions while watching the New England Aquarium's **Blue Impact Thermal Expansion: Dance of the Rising Oceans** video. It is a good idea to read all the questions before you start the video. You may need to pause or replay sections to help you answer the questions.

### **QUESTIONS**

1. Draw a water molecule in the box below.

2. In the box below, draw 10 water molecules below and arrange them as if they were cold.

3. In the box below, draw 10 water molecules below and arrange them as if they were warm.



4. Which is more dense?

- a. cold water molecules
- b. warm water molecules
- c. they are the same

5. Which molecules vibrate faster?

- a. cold water molecules
- b. warm water molecules
- c. they move the same

6. When do water molecules take up more room?

- a. when they are warm
- b. when they are cold
- c. temperature does not impact the amount of space the molecules take up

