
















PHASE CHANGE

Directions:

1. Log into Collisions and navigate to the Phase Change Game.
2. Play the Tutorial levels, if you haven't done so already.
3. Exit the levels and enter the Phase Change Sandbox. 
4. Complete the phase changes outlined below and record the requested information.

Name: _____

	Ne 	Ar 	Xe 	HI 	OF ₂ 	H ₂ O 	SO ₂ 
Starting temperature	-274 °C						
Melting point	-249 °C						
Boiling point	-246 °C						
Type of IMF: <ul style="list-style-type: none"> ✦ LDF ✦ Dipole-Dipole ✦ Hydrogen Bond 	LDF						

	N ₂ 	NF ₃ 	NH ₃ 	HCN 	CH ₂ O 	CH ₄ 	CH ₃ F 
Starting temperature							
Melting point							
Boiling point							
Type of IMF: <ul style="list-style-type: none"> ✦ LDF ✦ Dipole-Dipole ✦ Hydrogen Bond 							

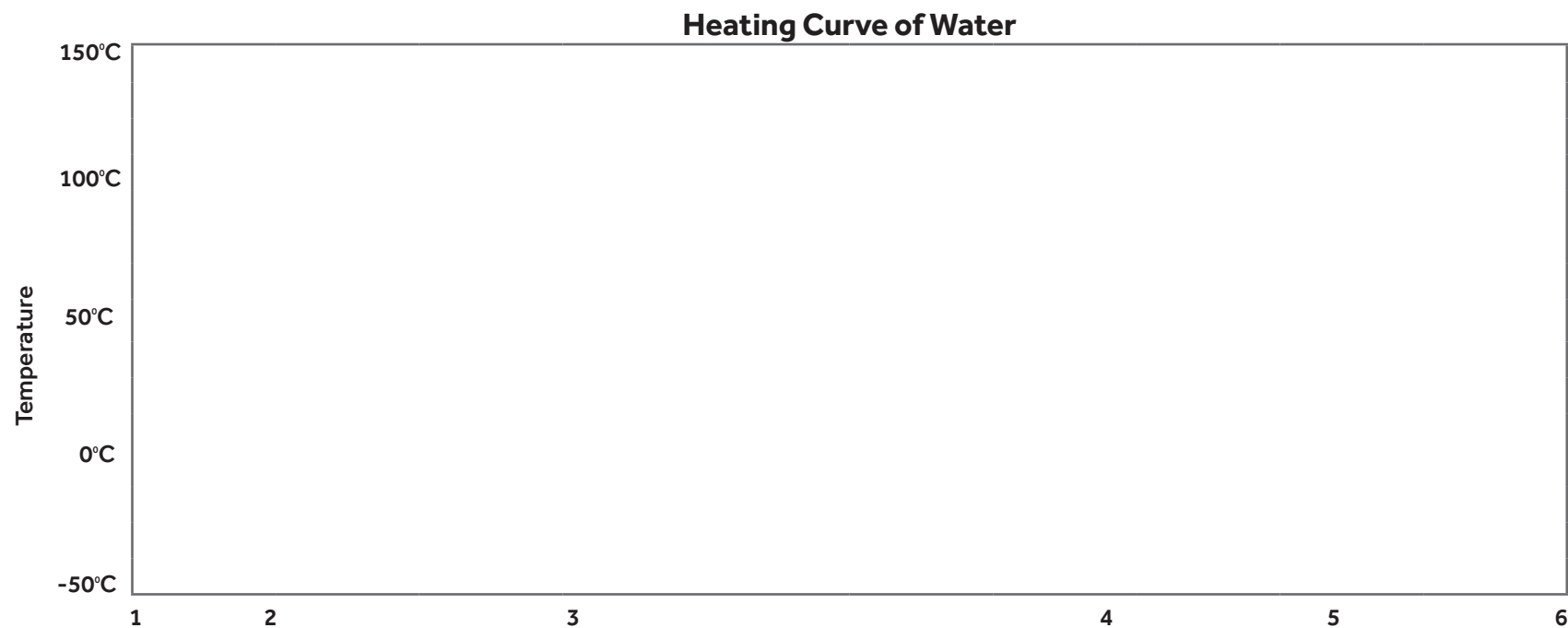
Analysis Question: Using the data collected above, describe the relationship between IMF type and boiling point.

PHASE CHANGE

1. Using the information collected for water (H₂O), graph the following table below:

X Axis	Y Axis (Temperature)
1	Starting temp: _____
2 - 3	Melting point: _____
4 - 5	Boiling point: _____
6	Ending temp*: _____

*To collect this value, complete the phase changes again in the Sandbox, heat the gas as much as possible (after boiling), and record the final temperature.



2. Label each section of your graph above with the following terms: **melting, boiling, solid only, liquid only, gas only, solid & liquid, liquid & gas**