## **Summer Ice Storm - Answer Guide**

Name: \_\_\_\_\_

Use this space to <u>write</u> what you think might have caused the summer ice storm and any other important things you learn.

Use this space to <u>draw</u> what you think might have caused the summer ice storm and any other important things you learn. Label your drawing with words if it is helpful.

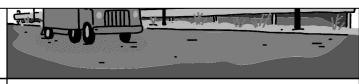
Student answers can and should vary slightly after each Mystery as they learn more. However, here are the ideas we had in mind after each Mystery.

M1: Water moves from the ground up into the air when it evaporates; this is how clouds form. Students can explain this via writing, drawing, or both. We felt both was best.

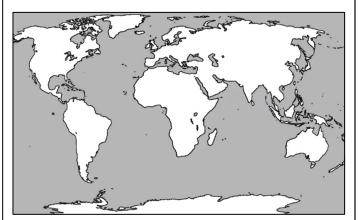
M2: This hailstorm came from a cumulonimbus cloud. The tops of these clouds are very, very cold. This should be explained in both writing and drawing.

M3: The temperature high in the sky is very cold everywhere, but it is coldest above the tropics. This is true even if the ground is warm. Students can show this on the world map below or just write this idea down. A warm ground below a cold sky can create strong upward blowing winds. They should explain this in their drawing and in words.

After M3, students should be able to tie all of these pieces together and explain how an icy hailstorm can happen during warm weather!



## World Map



## Regional Map

