

**Main Ideas, Key Points,
Questions:**

After watching the video segment, write down key points, main ideas and big questions.

Objective(s):

- *To compare and contrast phase changes of matter: melting/freezing; condensation/vaporization and sublimation/deposition.*
- *To design a model for the relationship between phase changes and temperature.*

Notes:

During the video segment, use words, phrases or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You can ask yourself: "If I was going to explain this to someone else, what would I say?"

After watching the video and performing any associated labs and/or experiments, you should be able to answer the following:

- 1. Describe or draw one of the demonstrations with liquid nitrogen shown by Adrian Elliott from Fernbank Science Center.**
- 2. Explain what happened in the demonstration you described using the term “phase change.”**
- 3. When frozen carbon dioxide (dry ice) warms up, a phase change called SUBLIMATION occurs. What is sublimation?**
- 4. When water vapor gas freezes into snowflakes without becoming liquid, a phase change called DEPOSITION occurs. What is deposition?**
- 5. Below, draw a graphic organizer (seen in the video) that shows the relationship between freezing, melting, vaporization, sublimation, deposition and condensation.**
- 6. How is temperature change related to all these phase changes?**