Snow Day assignment – all sciences

Thundersnow

What is Thundersnow and Why Does It Happen?
"Thundersnow" Facts: Mysterious Storms Explained
Wild Winter Weather: Why Is Thundersnow So Rare? - ABC ...
It's thunder. It's snow. It's thundersnow! - USA Today
Video: UK weather: what is thundersnow? - Telegraph

Above are five active links that deal with thundersnow.
Read the four articles, watch the video, and answer the following questions.

1. What is thundersnow?

2. List at least three thundersnow events (place and date) that are mentioned in the articles.

3. When are thundersnow storms likely to occur? (time of year)

4. What circumstances need to be present in order for this type of storm to happen?

5. Using the information in the above question, explain why this is contrary to normal snow storm circumstances?

6. What percent of snowstorms are associated with thunder?

7. Define the following terms in reference to the articles: turrets, elevated convection, graupel, harbinger, and quasihorizontal.

8. All the articles mention that thundersnow is a predictor (harbinger) of something. What is that something? Give textual examples.
   All of the articles mention that thundersnow is a predictor of significant snowfall. According to USA Today, studies found that “when lightning strikes during a snowstorm, it’s likely at least six inches of snow will fall.”

9. Have you ever seen/heard thundersnow?

Science Academic Standards associated with the above assignment.

Process Standards – Nature of Science

- Explain how scientific knowledge can be used to guide decisions on environmental and social issues.

Reading Standards for Literacy in Science

- Cite specific textual evidence to support analysis of science texts, attending to precise details of explanations or descriptions.
- Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

Integration of Knowledge and Ideas

- Compare and contrast findings presented in a text to those from other sources, noting when the findings support or contradict previous explanations or accounts.

Grade Level – High School Science

Learning Target –

- Explain how scientific knowledge can be used to guide decisions on environmental and social issues.
- Cite specific textual evidence to support analysis of science texts, attending to precise details of explanations or descriptions.
- Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
- Compare and contrast findings presented in a text to those from other sources, noting when the findings support or contradict previous explanations or accounts.

Relating to Students -

- The topic, thundersnow is one that occurs rarely. Students should be interested in what it is and why it occurs. If the students ever experience thundersnow – they will know what it is.

Assessment -

- The students will the questions associated with the reading and define the terms with 70% accuracy.

- nation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.
- Compare and contrast findings presented in a text to those from other sources …, noting when the findings support or contradict previous explanations or accounts.