

Develop and Use a Model to Show the Lake-Effect Phenomenon

Phenomenon:

During a lake-effect snow storm there is a lot of snow that falls on the land that is on the opposite side of the lake from where the storm is coming from. Many times, it doesn't hit in the same place each time it happens.

1. Obtaining Information: (20 minutes)

In small groups obtain information about the lake-effect phenomenon.

1. Ask questions that you might have about the phenomenon.
2. Find data that supports this phenomenon.
3. Use models, diagrams, tables, and charts to gather information.
4. Talk and discuss with each other the data/information found.
5. Come up with a consensus of how it happens.

2. Reasoning (20 minutes)

In your small groups analyze your data/information to seek patterns to use as evidence to support explanations for the causes of the system.

1. Construct explanations supported by evidence for the cause of the phenomenon.
2. Create a drawn model of reasoning about the interactions of the components of the system.
3. Use data, information, patterns to make about the causes of the system.
4. Present how data/evidence/core ideas support the explanations of the phenomenon.

3. Communication (20 minutes)

In your small groups put together a presentation.

1. Use patterns to support the explanations.
2. Present an argument of how the evidence supports your explanation.
3. Use evidence to support an argument for the causes of the system in terms of matter and energy.
4. Use models to communicate reasoning about the interactions of the components of the system and the cause and effect relations.