

## Lesson 14: Wind

### OPENER

These are the **air** temperatures on a beach and on a boat.

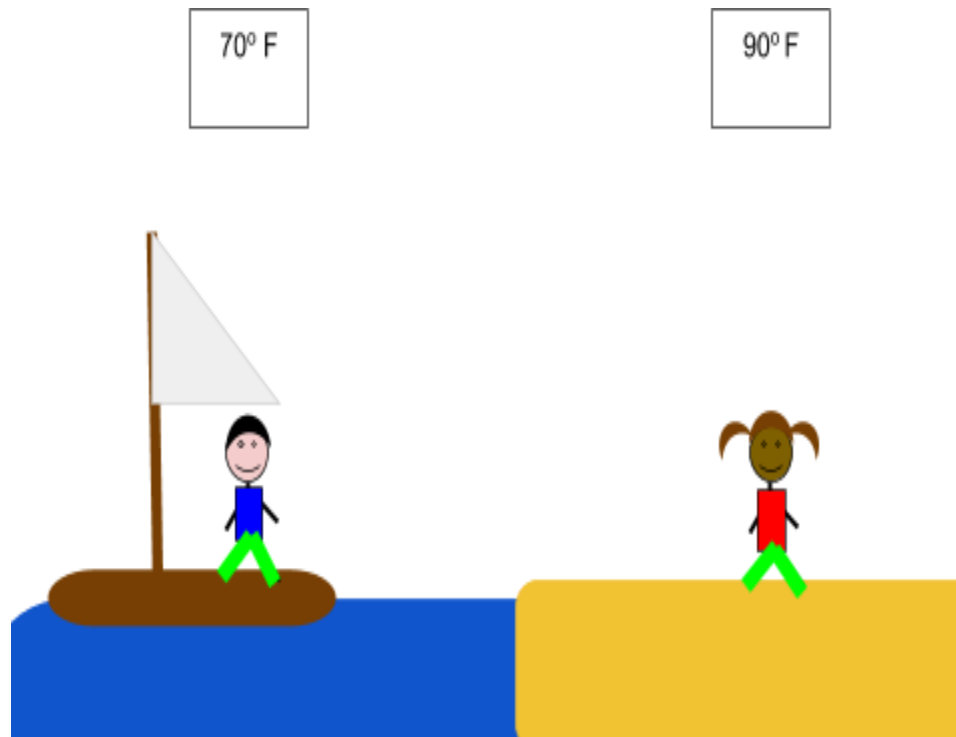
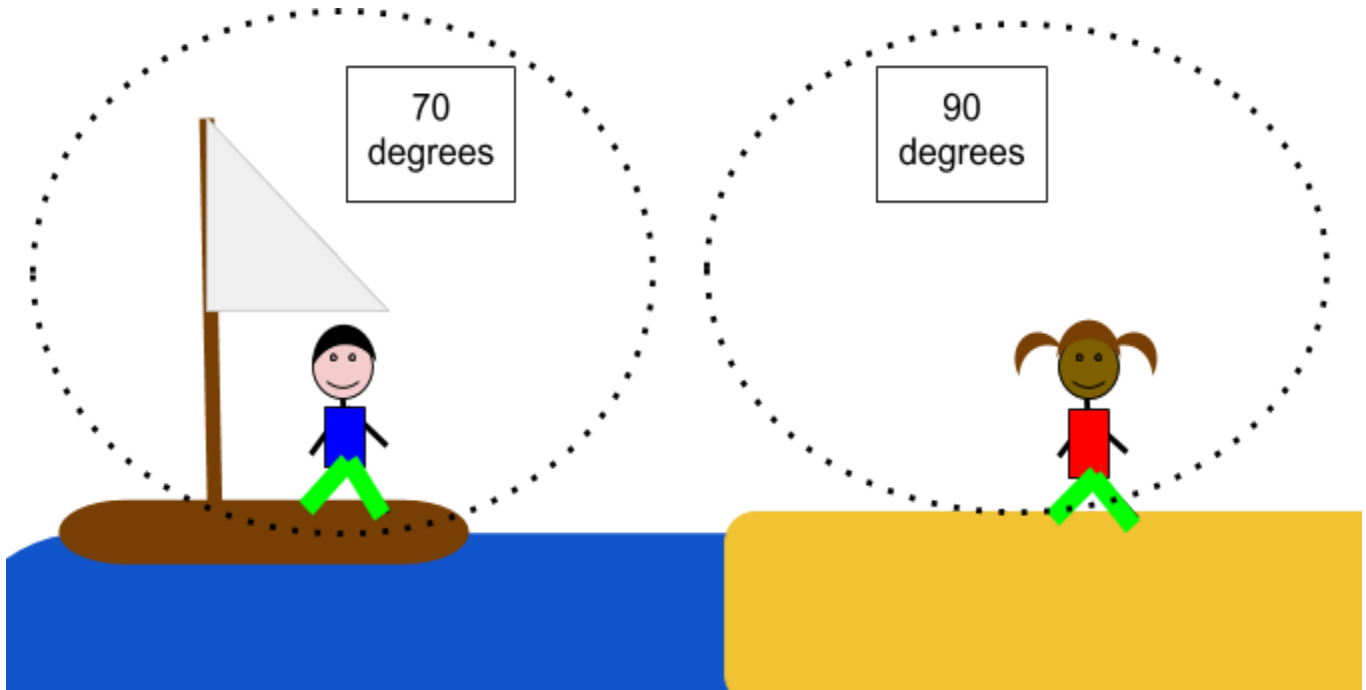


Image by KCM, used with permission

- ❖ What causes the air temperature difference?
- ❖ Which air mass will have more water vapor in it?
- ❖ What will happen to the air mass above the land when it gets warm enough? (Hint: Think about the density of the air mass.)

# Air Masses Diagram



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1. Start with the 4 cards that say “Set A.” Put these in order with your partner. Agree on the correct order. Then compare with other partner pairs at your table.
2. Take out the 5 cards that say “Set B.” Decide which of these comes next, and so on. Put the 5 cards in order.
3. Now turn the 9 cards into a cartoon story in 3 or 4 frames with the air masses as characters. With your partner, decide what the frames will be. Then draw your cartoon on your own paper. You can use speech bubbles and thought bubbles.



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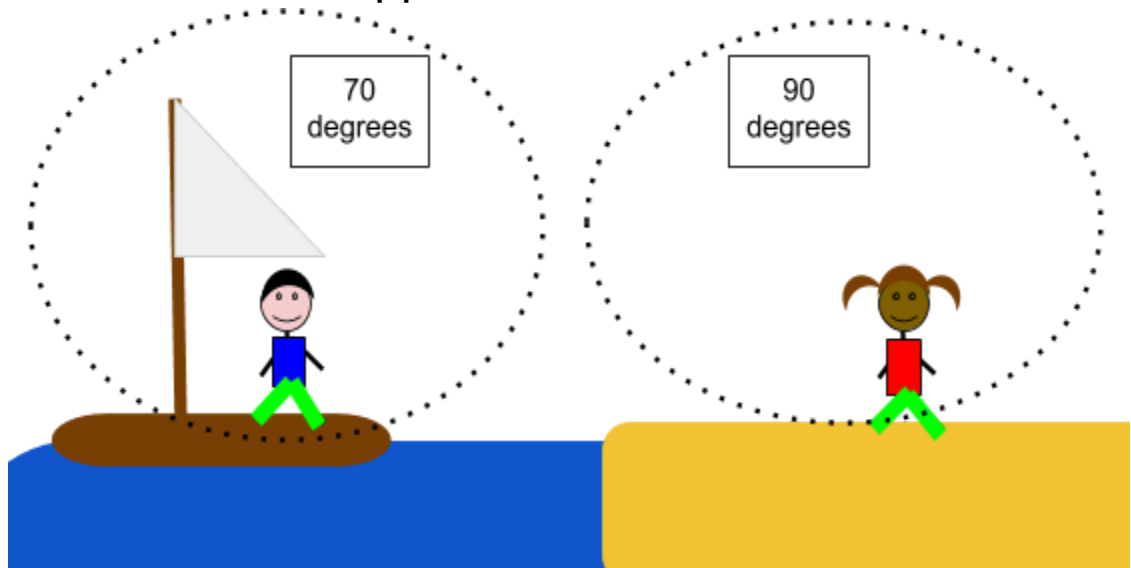
## Lesson 14: Wind

### EXIT CARD

- ❖ The air above lakes is usually calmer in the morning. But in the afternoon it can be windy. Why?

### HOMEWORK

- ❖ Think about the air masses moving. When did the air pressure drop on the beach? Why?
- ❖ What happened next?



Moving Air Masses Card Sort (Sets A & B)

Set A

The cold, moist air moves in to replace the warm air mass.

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Set A

Pressure drops.

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Set A

There is a warm air mass over the land.

Set A

Warmer air rises.

Set B

If it gets cold enough and the pressure is low enough, it might rain.

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Set B

The land warms the cold, moist air mass. It becomes a warm, moist air mass.

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Set B

If air cools enough and the pressure drops, the water vapor in it condenses into clouds.

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Set B

When air rises it cools because it's colder higher up.

Set B

Warmer air rises.