

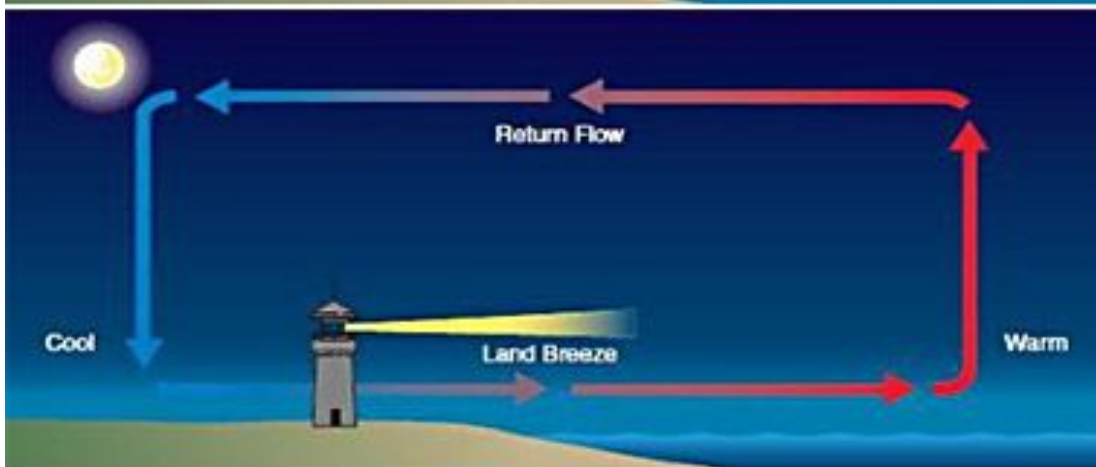
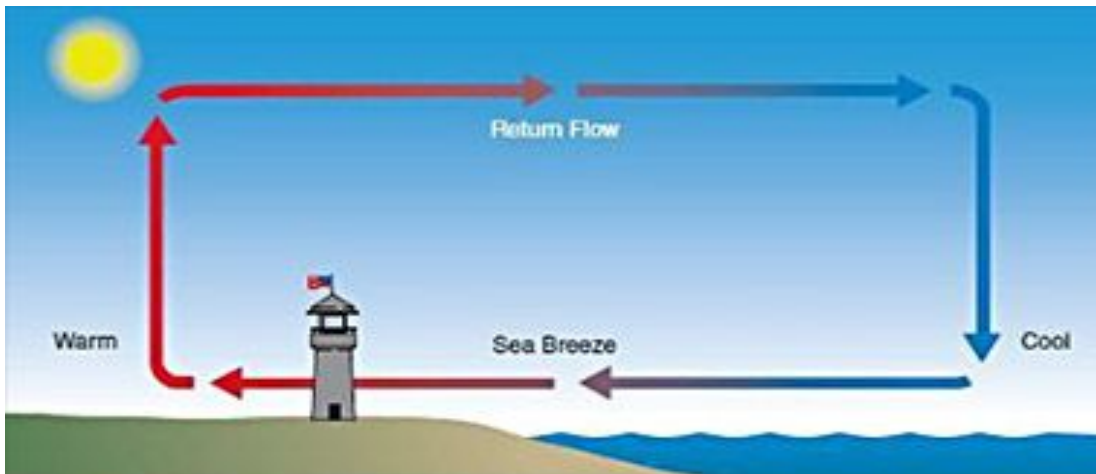
Weather: Land and Sea breezes

In lab [55] we looked at the different heating and cooling properties of sand and water. This was a model for what really happens on Earth. On Earth, there is land and there are large bodies of water like oceans, seas and lakes.

Answer in your notebook:

1. Title the next clean page: LAND AND SEA BREEZES
2. Complete these sentences in your notebook. Use the words:
sand water
 - a. _____ heats up faster than _____ .
 - b. It takes longer for _____ to cool down than _____.
3. In the experiment, what modeled the land and what modeled the large bodies of water?
4. Do you think the land and large bodies of water would have the same cooling and heating properties as what they modeled? Explain

Look at the diagrams below. The arrows show the movement of air. This is what we call wind. Wind is created from masses of air being different temperatures. Warmer air usually rises and colder air usually falls. You also get horizontal movement. This is shown on the diagram as the breeze and return flow,



Analysis: answer in your notebook

5. Complete these sentences in your notebook. Use the words:

land sea warmer cooler

- a. The _____ is warmer during the day, while it is _____ at night.
 - b. While the _____ is cooler during the day, it is _____ at night.
 - c. The breeze always flows from the _____ area to the _____ area.
6. Think about the results of the lab. Why do you think the water is warmer than land at night?
7. Why do you think the breeze shifts when the sun goes down?
8. Thinking Question: How do you think the cooling properties of land and water would make living near the ocean different than living inland?
9. Cut out the diagram on the front and glue into your notebook.