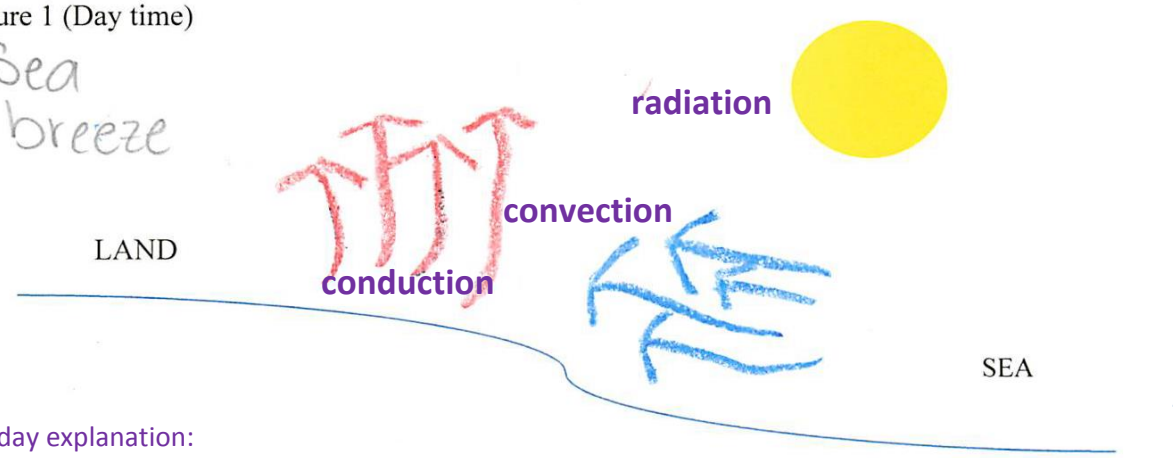
Name: _____ Date: _____ Class: _____

Drawing Sea Breeze and Land Breeze Worksheet Answer Key

Below are two sketches representing land and sea. Based on what you observed in the teacher demonstrations, draw what needs to happen for the wind to blow onto the land during the day in picture 1, and draw what needs to happen in order to have the wind blow out to sea in picture 2. Use **blue arrows** (cool air) and **red arrows** (warm air) to show the convection currents.

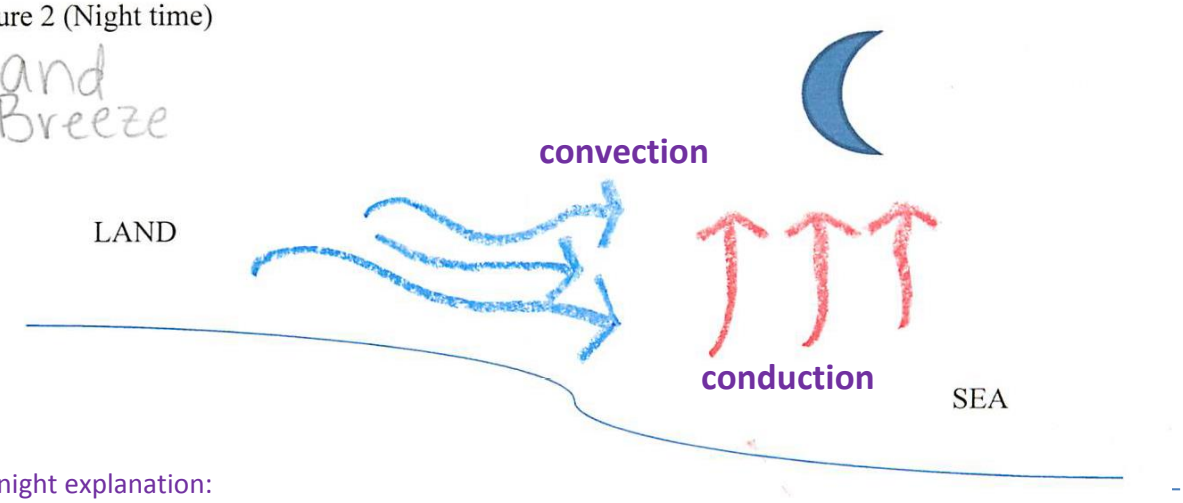
Place labels to identify where in the processes **radiation**, **covection** and **conduction** occur.

Picture 1 (Day time)



During the day explanation:
Radiation comes from the sun and heats the land (as well as the surface of the water really, but not as much).
Conduction heats the air just above the surface of the land (from the heated land).
Convection is the process in which this warmer air rises, causing the cooler air over the water to take its place.

Picture 2 (Night time)



During the night explanation:
No radiation (or much less) from the sun, so the surface of the land cools faster than the surface of the water.
Conduction from the warmer water surface still heats the air directly above it.
Convection causes this warmer air to rise, causing the cooler air over the land to take its place.