

Activity A (continued from previous page)

- 4. <u>Analyze</u>: Compare the air temperatures to the breezes.
 - **A.** At 6:00 A.M., where was the warmest air? **Ocean**
 - **B.** At 6:00 A.M., in which direction did the breeze blow? From the land
 - **C.** At 3:00 P.M., where was the warmest air? **The land**
 - **D.** At 3:00 P.M., in which direction did the breeze blow? **From the ocean.**
- 5. Summarize: What is always true when there is a land breeze? The ocean will be warmerthan the land.
- 6.

What is always true when there is a sea breeze? The land will be warmer than the ocean.

7. <u>Draw conclusions</u>: In general, the land changes temperature much more rapidly than the general. Jotesale.co.U How does this fact explain the existence of land breezes and sea breezes?

There is an imbalance between the two.

- 8. Extend your thinking: With the propriated on the land-set boundary, monitor the windspeed. ength of the sea breeze is set a tha timum. Click Pause when the st
 - strongest? 3:10 PM what time of day is the
 - B. Use the Weather probe to measure the land-air and ocean-air temperatures. What are these

temperatures at this time? 29.1 degrees and 22.2 degrees, respectively.

- **C.** Click **Play**, and then click **Pause** when the strength of the land breeze is at a maximum. What is the time? 4:00 AM
- **D.** What are the land- and ocean-air temperatures now? **17.3 degrees and 20.3 degrees**,

respectively.

E. The wind changes direction at approximately 9:10 A.M. and 12:10 A.M. What is trueabout each of these times?

