

Unit : Handout :  
4 : 111 :

*Lesson 4: Getting Started*

**Purpose:** Reflect on the previous lesson and preview the upcoming lesson.

**Guiding Questions:** How do surface temperatures on the earth affect the temperature of the air above it and the way air moves?

<b>Lesson 4 Preview</b>
<p>In this lesson, you will investigate what happens to air when it is heated or cooled by the surface beneath it.</p> <p><b>Lesson 4 Guiding Questions:</b></p> <ol style="list-style-type: none"><li>1. How does heat move between the earth's surface and the air above it?</li><li>2. How do surface temperatures on the earth affect the temperature of the air above it and the way air moves?</li></ol>

1. Look back at handout 137. Re-read your definitions of the terms weather and climate. Then, read "Weather Versus Climate" on page 44. How accurate was your definition? In the space below, write down the book definitions of weather and climate from page 44.

a. Weather:

b. Climate:

2. On the back of this sheet is a data table. The table shows early summer temperatures of land and of its nearby ocean. Which column (A or B) is land? Which is the ocean? What evidence do you have to support your choice?

(One more question on the back!)

*Table 1 Summer Temperatures Near Portland, Maine*

<b>Time</b>	<b>Column A (Temperature, °C)</b>	<b>Column B (Temperature, °C)</b>
6:00 A.M.	14	18
8:00 A.M.	17	19
10:00 A.M.	18	19
Noon	23	19
2:00 P.M.	26.5	19
4:00 P.M.	27	20
6:00 P.M.	27	20
8:00 P.M.	20	20
10:00 P.M.	18	20
Midnight	16	20
2:00 A.M.	15	20
4:00 A.M.	14	19

3. How do you think the temperature of earth's surface affects the temperature of the air above it? You can use the data table above to help you think about the answer to this question.