Copyright © Houghton Mifflin Company. All Rights Reserved.

## **Types of Weather Fronts**

When large masses of warm air and cold air meet, they do not mix. Instead, they form a front, usually hundreds of miles long. When a front passes, the weather changes. The chart describes the four main types of fronts and the weather changes each type brings.

| Type of Front   | How It Forms   | Weather It Brings  |
|---|--|--|
| Cold front<br>Cold air<br>Warm air<br>Front moving this way $\rightarrow$                 | Forms when a cold air<br>mass pushes under a warm<br>air mass, forcing the warm<br>air to rise.  | Thunderheads can form as<br>the moisture in the warm<br>air mass rises, cools, and<br>condenses. As the front<br>moves through, cool, fair<br>weather is likely to follow. |
| Warm front<br>Warm air<br>Cold air<br>Front moving this way>                              | Forms when a moist, warm<br>air mass slides up and over<br>a cold air mass.  | As the warm air mass rises,<br>it condenses into a broad<br>area of clouds. A warm<br>front brings gentle rain<br>or light snow, followed by<br>warmer, milder weather.    |
| Stationary front<br>Warm air<br>Cold air<br>Little or no forward<br>movement of the front | Forms when warm and<br>cold air meet and neither<br>air mass has the force<br>to move the other. They<br>remain <i>stationary</i> , or<br>"standing still."    | Where the warm and cold<br>air meet, clouds and fog<br>form, and it may rain or<br>snow. Can bring many<br>days of clouds and precipi-<br>tation.                          |
| Occluded Front<br>Warm air<br>Cold air<br>Cold air<br>Front moving this way →             | Forms when a warm air<br>mass gets caught between<br>two cold air masses. The<br>warm air mass rises as the<br>cool air masses push and<br>meet in the middle. | The temperature drops<br>as the warm air mass is<br>occluded, or "cut off,"<br>from the ground and<br>pushed upward. Can bring<br>strong winds and heavy<br>precipitation. |

