

Unit 3 Handout \_\_\_\_\_

Lesson 5: Weather Fronts

**Purpose:** Analyze the origin, meeting, and movement of air masses with different temperature and humidity conditions.

**Guiding Questions:** What happens when two air masses of the same and different temperatures meet?

**Directions.** Read pages 86-87 in the textbook. Then, complete the tables below.

|                         | <b>Cold Front</b>                                                                |
|-------------------------|----------------------------------------------------------------------------------|
| <b>Define it:</b>       |                                                                                  |
| <b>Explain it:</b>      | <i>Keywords to use: air mass, warm air, cold air, rise/sink, density (dense)</i> |
| <b>Related Weather:</b> |                                                                                  |
| <b>Draw it:</b>         |                                                                                  |

Name .....

Period .....

Date .....

|                         | <b>Stationary Front</b>                                                          |
|-------------------------|----------------------------------------------------------------------------------|
| <b>Define it:</b>       |                                                                                  |
| <b>Explain it:</b>      | <i>Keywords to use: air mass, warm air, cold air, rise/sink, density (dense)</i> |
| <b>Related Weather:</b> |                                                                                  |
| <b>Draw it:</b>         | <i>(Gotta use your brain on this one!)</i>                                       |

|                         | <b>Warm Front</b>                                                                |
|-------------------------|----------------------------------------------------------------------------------|
| <b>Define it:</b>       |                                                                                  |
| <b>Explain it:</b>      | <i>Keywords to use: air mass, warm air, cold air, rise/sink, density (dense)</i> |
| <b>Related Weather:</b> |                                                                                  |
| <b>Draw it:</b>         |                                                                                  |

|                         | <b>Occluded Front</b>                                                            |
|-------------------------|----------------------------------------------------------------------------------|
| <b>Define it:</b>       |                                                                                  |
| <b>Explain it:</b>      | <i>Keywords to use: air mass, warm air, cold air, rise/sink, density (dense)</i> |
| <b>Related Weather:</b> |                                                                                  |
| <b>Draw it:</b>         |                                                                                  |

**Part 2.**

On the next page is an image of a weather map. You need to

1. Find and label each type of front on the map.
2. Indicate the direction the front is moving.

To help you read the map, visit the following site:

<http://okfirst.mesonet.org/train/meteorology/Fronts.html>

Read the section called "Figure 1 - Types of Fronts." This provides images that show how fronts are displayed on a map. You do not need to read the entire page (but you can if you'd like!). It contains lots of helpful information on the characteristics of fronts.

**Optional:** If you need animations of weather fronts you may visit this site:

[http://www.phschool.com/atschool/phsciexp/active\\_art/weather\\_fronts/](http://www.phschool.com/atschool/phsciexp/active_art/weather_fronts/)

This site, however, does not work on the iPad.

