Name _____ Date _____ Hour _____

Weather Patterns . *Guided Reading and Study*

Air Masses and Fronts

This section describes huge bodies of air, called air masses, and explains how they move. The section also explains how the meeting of different air masses affects weather.

As you read about the four types of fronts, complete the compare-and-contrast table below.

Types of Fronts

Front	How It Forms	Type of Weather
Cold front	A cold air mass overtakes a warm air mass.	**a.**
Warm front	**b.**	**c.**
Occluded front	**d.**	**e.**
Stationary front	**f.**	**g.**

Introduction

1. What is an air mass?

_____

_____

Types of Air Masses

2. Scientists classify air masses according to _____ and _____.

3. Is the following sentence true or false? Polar air masses have low air pressure. _____

4. Complete the compare/contrast table showing the types of air masses and their characteristics.

Types of Air Masses and Their Characteristics

Type or Air Mass	Characteristics
a.	Warm and humid
b.	Cool and humid
c.	Warm and dry
d.	Cool and dry

How Air Masses Move

5. In the continental United States, major wind belts generally push air masses from _____ to _____.

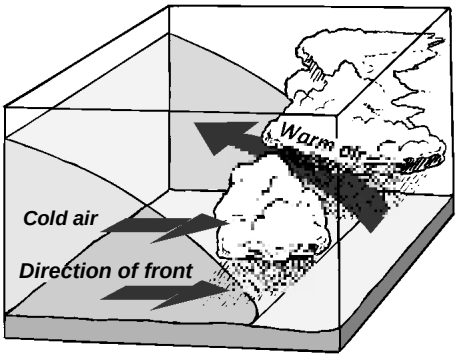
6. How do jet streams affect air masses?

_____

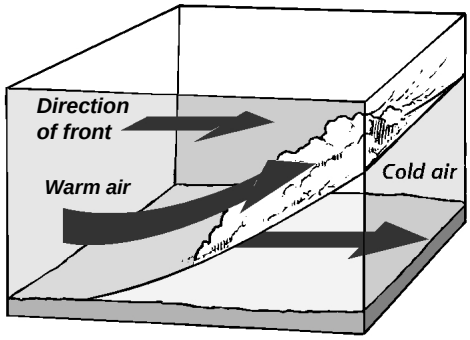
_____

Types of Fronts

7. Label the drawings to indicate a cold front and a warm front.



a. _____



b. _____

Match the type of front with how it forms.

Type of Front	How It Forms
_____ **8.** cold front	**a.** A moving warm air mass overtakes a slowly moving cold air mass.
_____ **9.** warm front	**b.** A warm air mass is caught between two cooler air masses.
_____ **10.** stationary front	**c.** A rapidly moving cold air mass runs into a slowly moving warm air mass.
_____ **11.** occluded front	**d.** A cold air mass and a warm air mass meet and remain stalled over an area.

12. Circle the letter of each sentence that is true about fronts.

a. Cold fronts can bring violent thunderstorms.
b. Warm fronts are associated with clouds and rain.
c. Stationary fronts may bring many days of clouds and precipitation.
d. Occluded fronts always bring fair weather.