

Review Quiz for Air Masses and Fronts

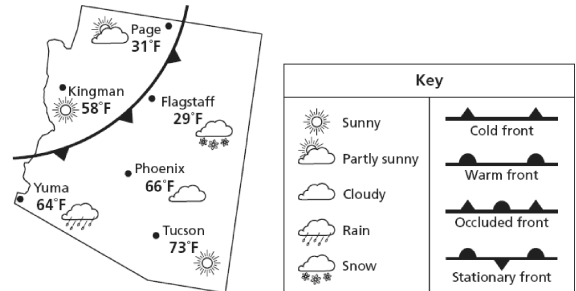
Name: _____

Date: _____

- How does heat from the sun get to Earth?
 - by radiation, using electromagnetic waves to transfer the heat
 - by convection, using liquids and gases to transfer the heat
 - by conduction, using solids to transfer the heat
 - by absorption, using primary waves to transfer the heat
- Which *most likely* occurs when a fast-moving cold air mass moves into a region of warmer, moist air, otherwise known as a cold front?
 - It causes light precipitation for a long period of time.
 - It causes light precipitation for a short period of time.
 - It causes heavy precipitation for a long period of time.
 - It causes heavy precipitation and storms for a short period of time.
- Meteorologists study weather. Which of the following should meteorologists know about?
 - types of fronts
 - types of fossils
 - types of circuits
 - types of adaptations

- Use the information below to answer the following question(s).

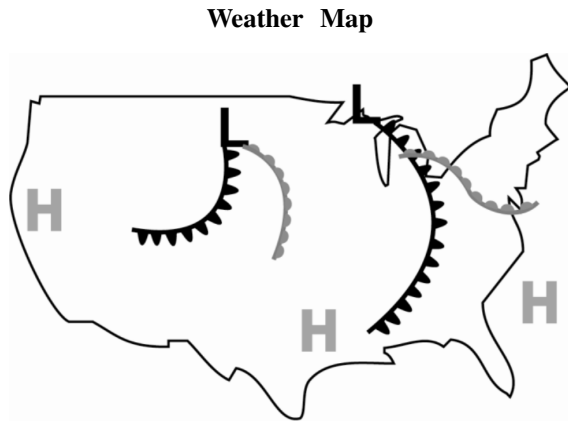
The map below shows the weather conditions for some of the cities in Arizona.



What type of front is moving through Arizona?

- cold front
 - warm front
 - occluded front
 - stationary front
- Which of these effects generally occurs as the result of a warm air mass and a cooler air mass converging at Earth's surface?
 - The sky becomes clear.
 - Winds die down.
 - Cloud formation decreases.
 - Stormy weather patterns develop.

6. Use the weather map below to help you answer the following question .



Which symbol on the map shows a cold front?

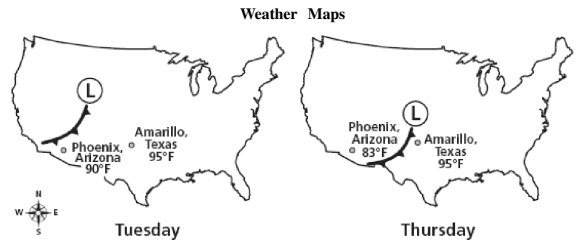
A. H

B. L

C.

D.

7. The following maps show a front as it moves east across the United States.



Key	
(L)	= low pressure
	= front

Which of these describes the weather change that can be expected for Amarillo, Texas?

- A. The cold front will bring cooler temperatures and snow.
- B. The cold front will bring cooler temperatures with thunderstorms and rain.
- C. The warm front will bring warmer temperatures with hot air for several days.
- D. The warm front will bring warmer temperatures with light rain for a few days.

8. The following map shows the location of a warm front on Wednesday during the summer.

Weather Map for Wednesday



Key	
	= warm front
	= low pressure system
	= high pressure system

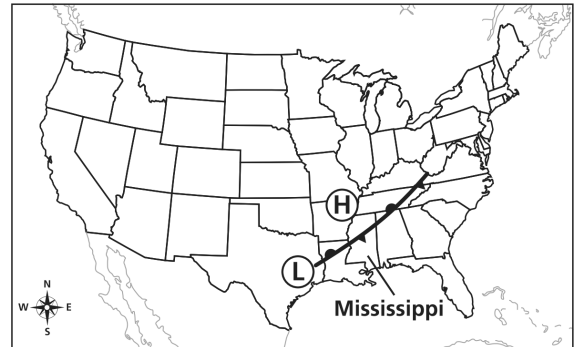
The air around the warm front is moist and is moving toward the New England area.

What type of weather should the New England area expect on Thursday and Friday?

- A. Several days of light rain followed by warm, humid weather
- B. Several days of strong thunderstorms followed by hot, dry weather
- C. Fast-moving, strong thunderstorms followed by warm, humid weather
- D. No precipitation but a sudden change from cool weather to warm weather

9. A cold front traveling southeast collided with a warm front traveling northwest. The following map shows the weather on Monday, the day the two fronts collided.

Weather Map for Monday



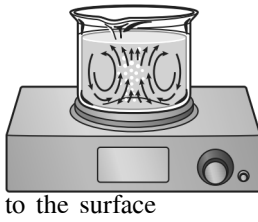
Key	
	= low pressure
	= high pressure
	= front

What type of front is represented on the map?

- A. Cold Front
- B. Warm Front
- C. Occluded Front
- D. Stationary Front

10. Which of the following is the best example of heat transfer by convection?

A. from the lower water



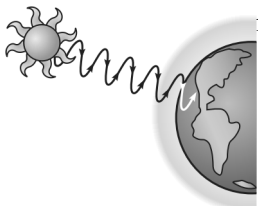
to the surface

B. from the iron to the



shirt

C. from the Sun to Earth



D. from the griddle to the



eggs