

Worksheet: Weather, Storms

name:

*Use sentences.

1. *Read pages 559-560. Look at figure 3 on p. 560. How would “continental polar” air be different from air that came from the Gulf of Alaska (maritime polar)? (2 ways)
2. Look at figure 3 on p. 560. What two types of air masses have the most influence on our weather in Montana? Don't abbreviate.
3. *Read about fronts (starts on page 564). Look at the diagrams on pages 565 and 566. When warm air and cold air meet, why does the warmer air always get forced aloft (upward)?
4. What are the two differences that cause weather along cold fronts to be more violent than weather along warm fronts (p. 565)?
5. *Explain what a “stationary front” is.
6. *Look at figure 12 on page 567. Explain how an “occluded front” forms.
7. What type of cyclone is shown on page 568 and also in the map on page 569? (The answer is not “a mature cyclone”.)
8. What is the purpose of the series of diagrams above and below the map on page 569?
9. Where does warm air eventually end up after the occluded front has formed?
10. Look at the diagram atop page 570. What is happening to the air near the surface beneath an area of high pressure? Circle three.

Air is rising.
Air is sinking.

Air is flowing toward the center.
Air is flowing away from the center.

Air is flowing clockwise.
Air is flowing counterclockwise.

11. Look at the diagram atop page 570. What is happening to the air near the surface beneath an area of low pressure? Circle three.

Air is rising.
Air is sinking.

Air is flowing toward the center.
Air is flowing away from the center.

Air is flowing clockwise.
Air is flowing counterclockwise.

12. *Look at figure 17 on p. 572. In terms of airflow, what is the big difference between the mature stage and the other two?

13. *What is a “mesocyclone”?

14. *What is the point of figure 18 on p. 573, and what has formed beneath the mesocyclone?

15. What are three other names for hurricanes? (p. 575)

16. *Look at the two small maps in the upper right of p. 578. Explain why the summers are rainy in India. Be thorough and use your own words.

17. *Look at the graphics and captions along the right side of p. 579. What is the difference between a hurricane and a typhoon?