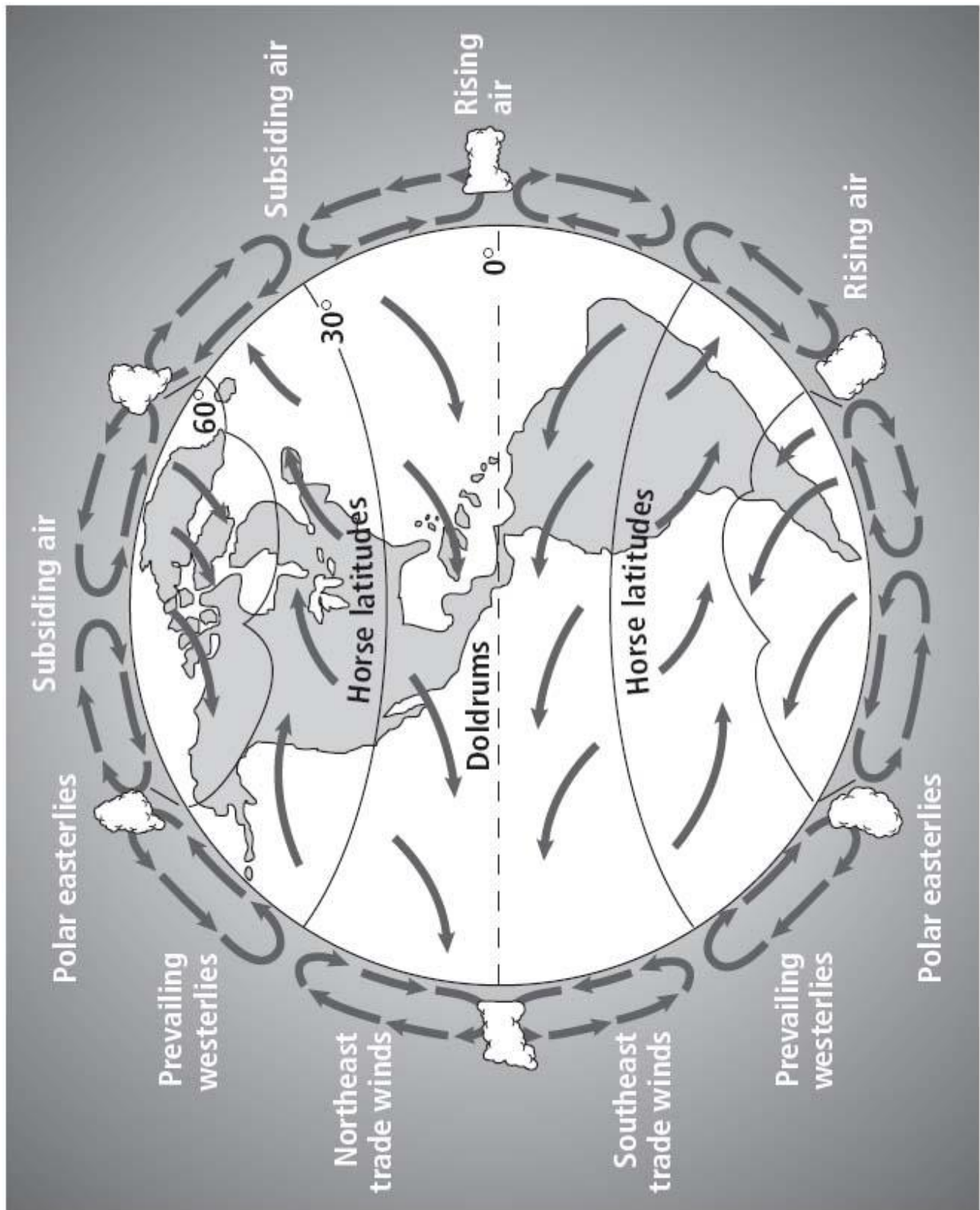


GLOBAL WIND SYSTEM



GLOBAL WIND SYSTEMS

1. What wind systems move air from about 30° north or south latitude toward the equator?
2. Describe the movement of air in the huge convection current between 30° north latitude and the equator.
3. According to the diagram, what forms as a result of rising air at the equator?
4. How might this account for the formation of tropical rain forests at the equator?
5. What wind systems move air from about 30° to 60° north or south latitude?
6. Describe the movement of air in the huge convection current between 30° and 60° south latitude.
7. Would you expect high or low air pressure at the poles? Explain your answer.
8. What wind systems move air from about 60° north or south latitude to the poles?

GLOBAL WIND SYSTEMS ANSWERS

1. What wind systems move air from about 30° north or south latitude toward the equator?

The northeast trade winds in the northern hemisphere and the southeast trade winds in the southern hemisphere.

2. Describe the movement of air in the huge convection current between 30° north latitude and the equator.

Air rises at the equator and then flows northward. At about 30 degrees north latitude, the air sinks. When it reaches the surface, it flows south, back toward the equator. At the equator, the air rises again and the cycle starts all over.

3. According to the diagram, what forms as a result of rising air at the equator? How might this account for the formation of tropical rain forests at the equator?

Clouds form as air rises at the equator. Clouds often bring rain, and the presence of clouds and rainfall makes tropical rain forests possible.

4. What wind systems move air from about 30° to 60° north or south latitude?

Prevailing westerlies

5. Describe the movement of air in the huge convection current between 30° and 60° south latitude.

Air sinks at 30 degrees, then moves south along the surface. At about 60 degrees, air rises and then moves north toward the equator. At 30 degrees, the air sinks again and the cycle starts all over.

6. Would you expect high or low air pressure at the poles? Explain your answer.

High pressure; air sinks at the poles.

7. What wind systems move air from about 60° north or south latitude to the poles?

polar easterlies

GLOBAL WIND SYSTEMS

1. What wind systems move air from about 30° north or south latitude toward the equator?

*The **(northeast southeast)** trade winds in the northern hemisphere and the **(northeast southeast)** trade winds in the southern hemisphere.*

2. Describe the movement of air in the huge convection current between 30° north latitude and the equator.

*Air rises at the **(Equator Poles)** and then flows **(Northward Southward)**. At about 30 degrees north latitude, the air **(Rises Sinks)**. When it reaches the surface, it flows south, back toward the equator. At the equator, the air **(Rises Sinks)** again and the cycle starts all over.*

3. According to the diagram, what forms as a result of rising air at the equator? How might this account for the formation of tropical rain forests at the equator?

*Clouds form as air rises at the **(Equator Poles)**. Clouds often bring rain, and the presence of clouds and rainfall makes tropical rain forests possible.*

4. What wind systems move air from about 30° to 60° north or south latitude?

Prevailing westerlies Polar Easterlies Trade winds

5. Describe the movement of air in the huge convection current between 30° and 60° south latitude.

*Air sinks at **(0 30 60)** degrees, then moves south along the surface. At about 60 degrees, air rises and then moves north toward the equator. At 30 degrees, the air sinks again and the cycle starts all over.*

6. Would you expect high or low air pressure at the poles? Explain your answer.

(High Low) pressure; air sinks at the poles.

7. What wind systems move air from about 60° north or south latitude to the poles?

Prevailing westerlies Polar Easterlies Trade winds