

ATMOSPHERIC ENERGY EXCHANGES

Name _____

Define the following terms.

transpiration -	frictional drag -	jet stream -
sea breeze -	land breeze -	adiabatic temperature change -
sublimation -	zones of divergence -	zones of convergence -

Give the best answer to the following questions.

- The three factors affecting *evaporation* rate are: 1) _____, 2) _____, 3) _____.
- A 100ml container shaped like a BEAKER / FLAT PAN would permit more rapid evaporation, because it would have more _____.
- When the air is at 100% relative humidity, LOTS / SOME / NO evaporation will occur.
- Frictional drag* is caused by _____ and occurs at _____.
- Since warm air is MORE / LESS dense than cold air, and since moist air is MORE / LESS dense than dry air, warm, moist air will tend to RISE / SINK, and its pressure will be HIGHER / LOWER than that of cold, dry air.
- Variations in insolation result in _____ heating of the Earth's surface, which causes _____ differences in the atmosphere, creating C_____.
- Divergence zones* are HIGH / LOW pressure, WET / DRY areas with RISING / DESCENDING air.
- Convergence zones* are HIGH / LOW pressure, WET / DRY areas with RISING / DESCENDING air.
- The mnemonics: "_____ & DRY" and "_____ & OUT" apply to _____ pressure areas.
- Earth's *planetary wind belts* shift toward the _____ when the Sun's vertical rays strike 23.5°S.
- The U.S. is located in the belt of winds called the _____.
- The high-speed, high altitude *jet streams* control the directions of _____ at the surface.
- In the Southern Hemisphere, winds are deflected to the _____.