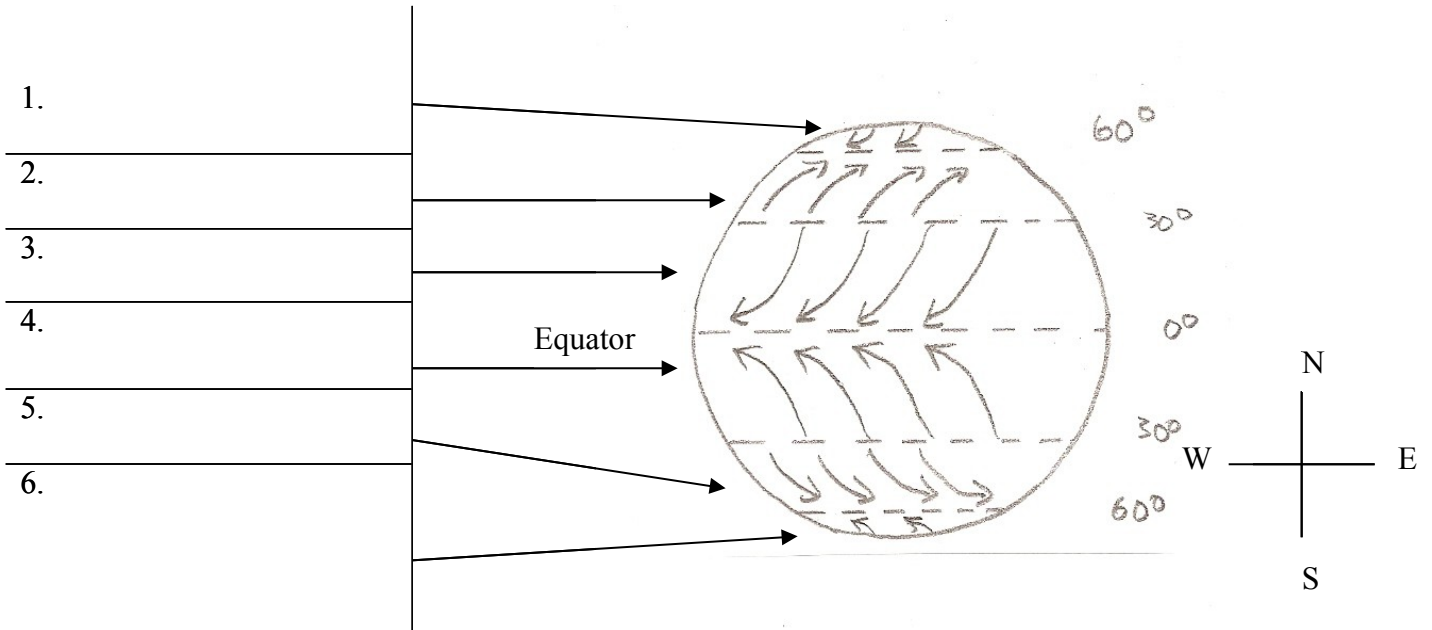


Global Winds (From Prentice Hall Earth Science p. 334 and Holt Science Spectrum p. 611)

Standard 5: Differential (uneven) heating of the Earth by the sun results in circulation patterns in the atmosphere and oceans called air and ocean currents.

Part 1: Global Wind Patterns Label the winds on the lines below.



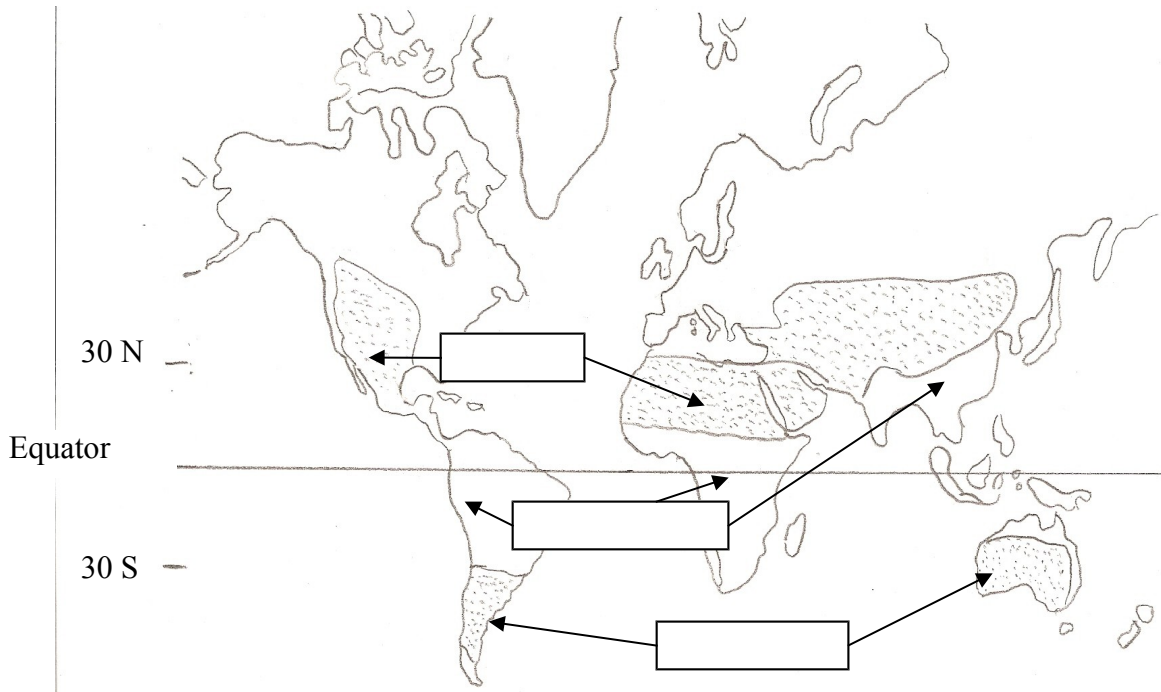
(7.) Global winds blow in east-west zones across the Earth called _____.

(8.) At the north and south poles, global winds blow from _____ to _____. (3.) These cold winds are called _____ - _____. (9.) Between 60° and 30° latitude, global winds blow from _____ to _____. (10.) These winds are called _____. (11.) The weather in the western USA comes in on _____ ly winds from the _____. (12.) Between 30° north or 30° south latitude and the equator, winds blow from _____ to _____. (13.) These winds are called the _____ s because sailing ships used these winds to bring goods from Europe to the Americas in the seventeen hundreds. (14.) The winds are _____ at the equator. (15.) These calm winds are called the _____ s. (16.) Having “the doldrums” is another way of saying that you are _____. (17.) The zone close to the equator is called the _____ - _____ because sailors sometimes had to throw their horses overboard because they ran out of food for them while waiting for the winds to pick up. (18.) The winds blowing from north to south in the northern hemisphere curve _____ due to the _____ of the Earth. (19.) Bending of north south winds due to the rotation of the Earth is called the _____ effect. (20.) Ocean water is hottest at the _____ and coldest at the _____ s. (21.) Ocean water has a _____ specific heat capacity. (22.) Ocean currents move heat on Earth from the _____ to the _____

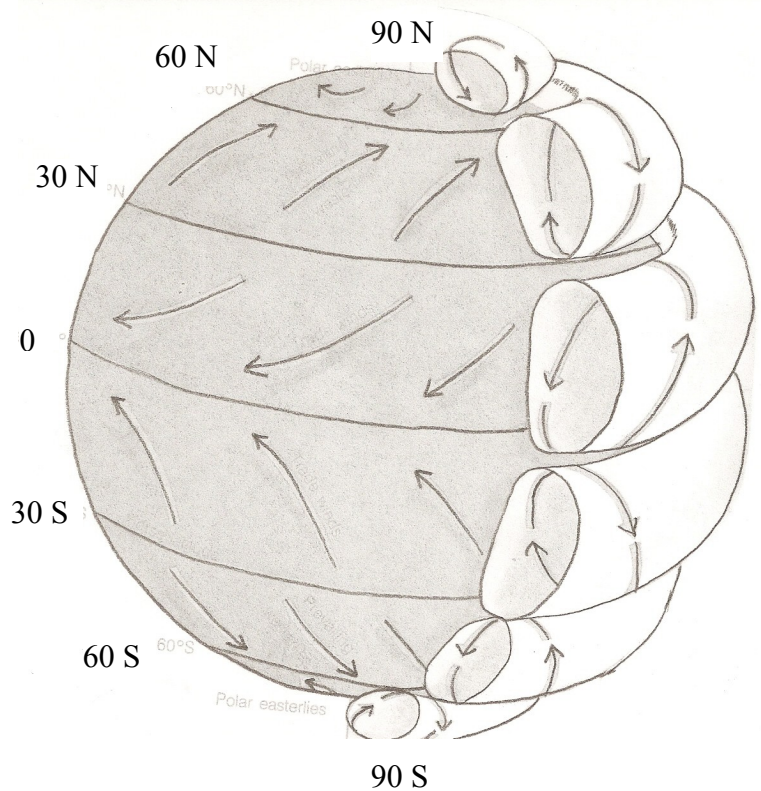
Word Bank

| | | |
|-------------------|--------------|-----------------|
| latitudinal bands | trade winds | horse latitudes |
| polar easterlies | east to west | west to east |
| westerly, | east to west | “doldrums” |
| westerlies | calm | rotation |
| Pacific Ocean | poles | Coriolis |
| equator | poles | clockwise |
| sad | high | equator |

Part 2: World Wide Deserts and Rainforests are in Latitudinal Bands



(23.) Uneven heating of the Earth by the _____ sets up _____ circulation of winds called wind cells.
 (24.) Winds at the equator _____ e. (25) Rising air in the troposphere _____ s down. (26.) Cool air can't hold as much water as _____ m air so that's why it _____ s so much at the equator.
 (27.) For this reason, most of the world's tropical _____ n forests are located close to the _____ r. (28) At 30° north and 30° south latitude, air is _____ g. (29.) Falling air has _____ h pressure and _____ s up. (30.) This falling warm air holds onto its moisture and that is why the Earth's _____ s are located at 30° north and 30° south latitudes.



Word Bank

vertical
cools

rise
rain

deserts
warms

warm
equator

sun
rains

falling
high

