

The atmosphere: atmospheric circulation

EST

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Complete this concept review handout and keep it as a record of what you have learned.

Definitions

- Atmospheric circulation is _____
- Prevailing winds are _____
- An air mass is _____
- A cyclone is _____

EST Atmospheric circulation cells

Cell	Location	Movement of air
	_____	<ul style="list-style-type: none"> • Air over _____, rises into the atmosphere. • It gradually _____ as it travels toward the 30th parallel. • It runs into winds from the Ferrel cell, descends and returns to _____
	_____	<ul style="list-style-type: none"> • Part of the air approaching the 30th parallel surges toward _____ • Near the 60th parallel, this air collides with winds from _____ • The air rises and returns toward _____
	_____	<ul style="list-style-type: none"> • The temperature of the air drops to its _____ over _____ • The air sinks to the Earth and then turns toward _____, where it collides with the Ferrel cell. • The air is forced to rise and return to _____

EST Prevailing winds

Winds	Location	Direction in the Northern Hemisphere

EST Jet streams

- Name: _____
Speed: _____
Location: _____
- Name: _____
Speed: _____
Location: _____

Characteristics of fronts

Name	Formation	Movement of air	Meteorological conditions
	_____ _____ _____ _____	The warm air rises rapidly above the cold air.	<ul style="list-style-type: none"> • Formation of puffy clouds (cumulus) • Probability of wind and heavy rain
	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____

Anticyclones and depressions

Name	Formation	Movement of air	Meteorological conditions
	Surrounds a high-pressure centre.	_____ _____ _____ _____	_____ _____ _____ _____
	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____