Name: _____

Period: ___

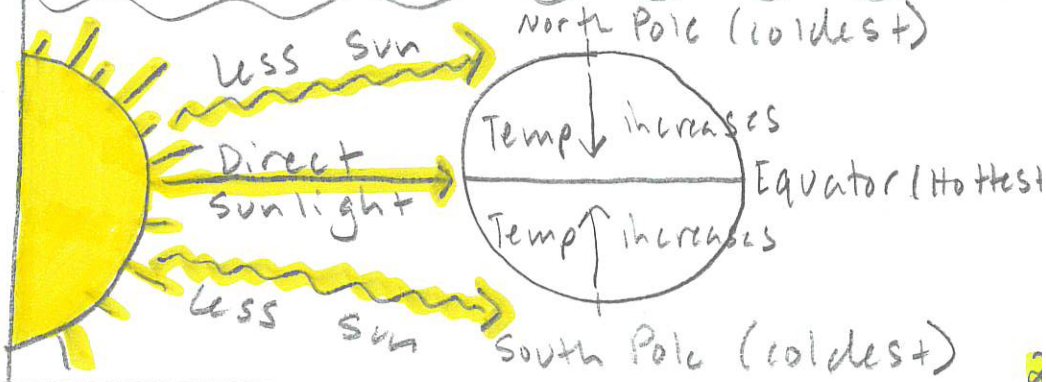
Wind Notes

Wind: movement of Air
(aka wind current)

Differential Heating

Different locations receive different amounts of sunlight.

More Sunlight = Warmer Less Sunlight = Colder



1

Differential Pressure

Places on Earth have different Pressure

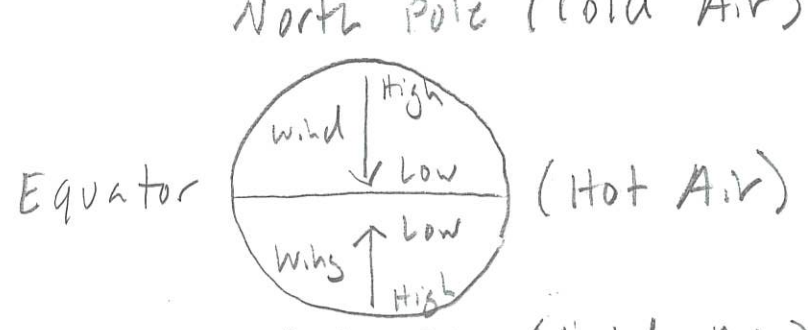
Hotter Air (e.g. Hawaii)	Cooler Air (e.g. Alaska)
less Air molecules (Farther Apart)	more Air molecules (closer together)
Lower Pressure	Higher Pressure

2

What Causes Wind?

Differences in air pressure around Earth

Air always moves from high → Low Pressure
So, air moves from Poles → Equator



4

Coriolis Effect

All air moving from Poles → to → Equator

Curves because of Earth's rotation

Revolution vs. Rotation

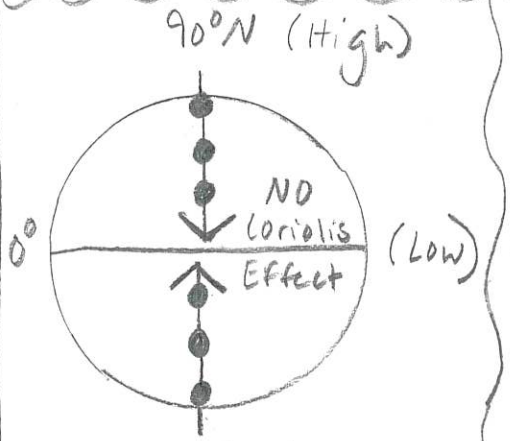
aka orbit	aka spin
1 Year or 365 Days	24 Hours

5

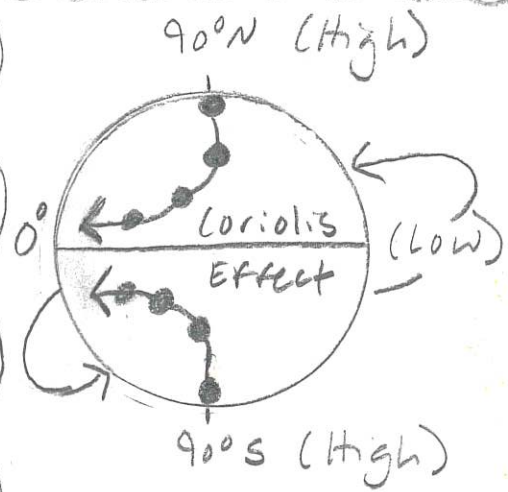
No Spin vs. Spin

We're pretending Earth doesn't spin

Earth in reality is spinning.



Straight Path



Curved Path

6

Wind movement

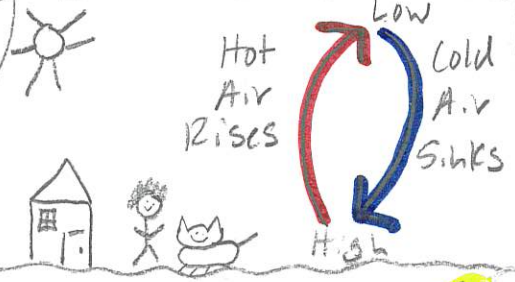
Wind moves horizontally and vertically!

Horizontally	vertically
Sideways R → ← L	Up and Down ↑ ↓

old Hot cold

0°N Air → 0° ← Air 90°S

igh Low High



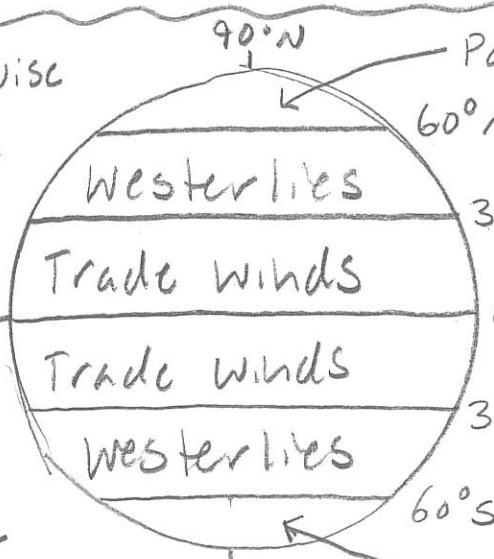
7

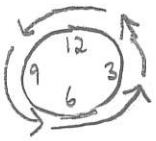
Air always moves from High to Low Pressure

Global Winds

Names of winds around Earth.

Clockwise





Counter Clockwise

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