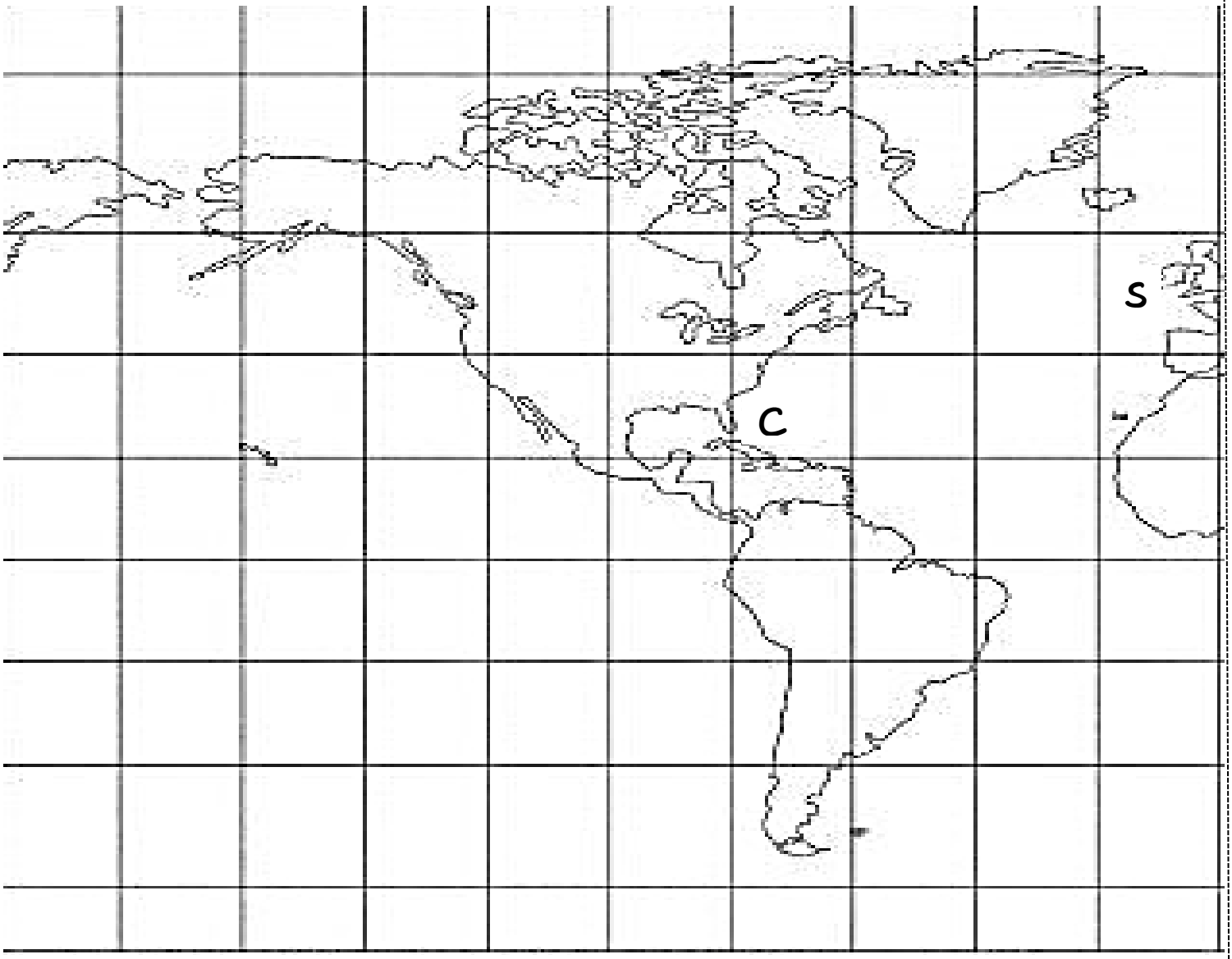
GLOBAL

Activity 2 – Jumbo Notes

Directions – Use the notes from activity 1, a ruler, and colored pencils to complete the diagram by following the directions below.



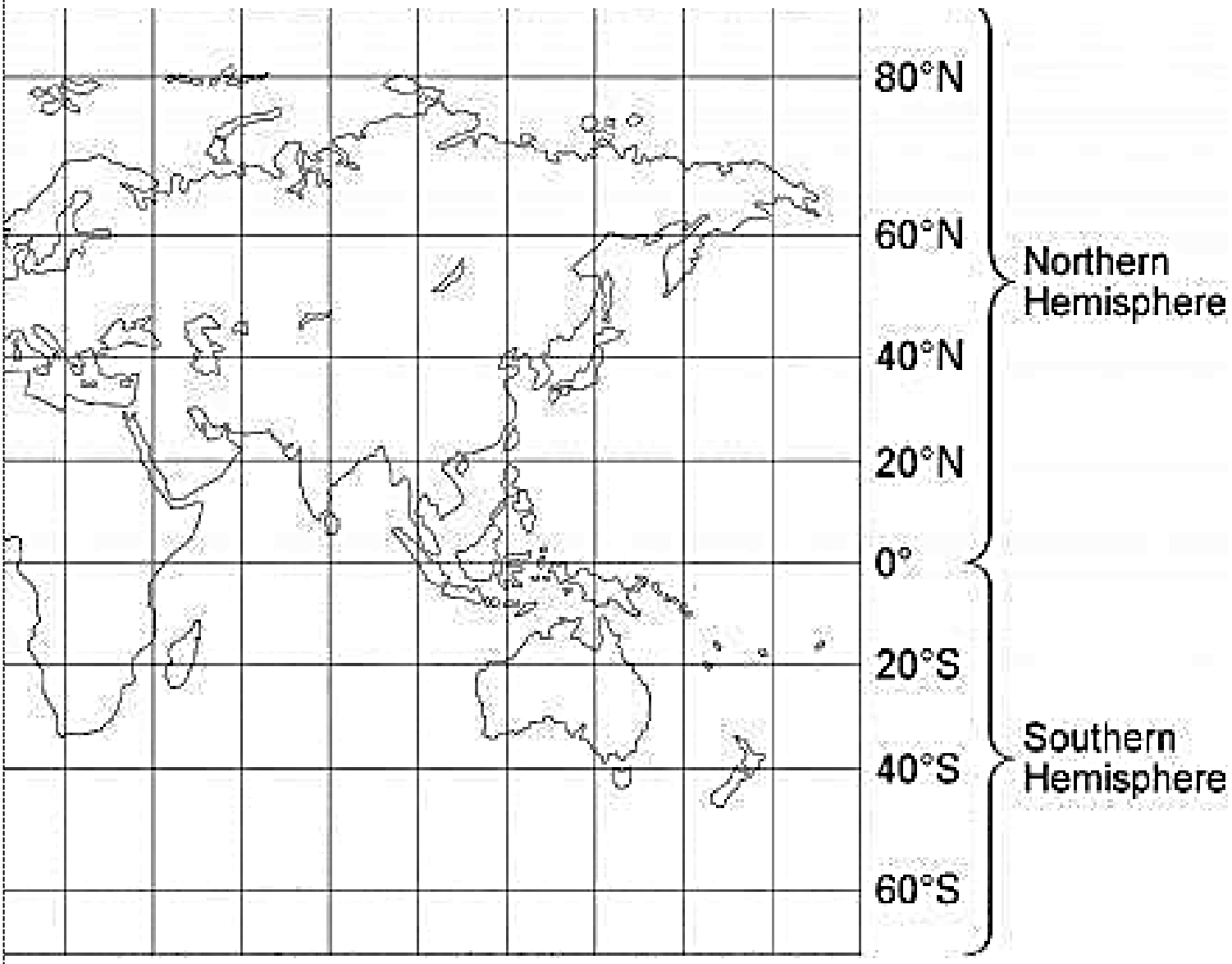
Follow the procedures step by step to complete the amazing global wind map of science.

1. Use a red colored pencil and highlight the equator on the map.
2. Use an orange colored pencil to make a line across the map at the 30^{o} latitude line in each hemisphere.
3. Use a purple colored pencil to highlight the line across the map at the 60^{o} latitude line in each hemisphere.
4. Color in the area of the map between 30^{o} and the equator in light green.
5. Color in the area of the map between 30^{o} and 60^{o} in yellow in both hemispheres.
6. Color in the area of the map between 60^{o} to poles in light blue in both hemispheres.
7. Label the location of each of the following global winds
    a. Doldrums b. trade winds c. horse latitude d. prevailing westerlies e. polar easterlies
8. Use arrows to show the direction each of the following trade winds flow.
    a. trade winds b. prevailing westerlies c. polar easterlies

cut the dotted line

Winds

Glue Here



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Analysis Questions

1. What are 2 patterns this diagram shows about global winds?

2. What global wind affects St. George Utah? Explain how you know this.

3. What winds would Christopher Columbus have used to travel from Spain (S) to the Caribbean (C)? Draw his possible route on the map in dark blue.

4. Which winds would he have needed to return to Europe? Draw his possible route in dark green.

5. Would winds have favored European explorers seeking to travel east around the tip of Africa? Why or why not?

Name _____Date _____ Period _____ 97

GLOBAL WINDS NOTES

Activity 1 – Notes – Go to CANVAS and open the assignment titled "GLOBAL WINDS". Use the PowerPoint to fill in the blanks below.

What is Wind?	Wind is the _____of air caused by an _____ heating of the Earth's surface.
What Heats Earth's Surface	Heat from the sun heats the _____ of the Earth. This heat arrives to Earth in the form of _____ Radiation is the _____ of energy by _____waves. Radiation can transfer heat without direct contact between objects. Solar radiation originates from the sun.
Convection Cells	Winds does _____ travel _____from the equator to poles. Due to the _____of hot, low pressure and less dense air with cold, high pressure, more dense air, wind travels via _____cells. Convection cells are: Pockets of cycling warm, _____ dense, _____ pressure air with cool, denser high-pressure _____. Pressure _____results in global movement of air.
What are Global Winds?	Global winds are winds that are_____ by the movement of air between the equator and the _____
Doldrums	Little or low wind area _____ the equator where _____ air rises.
Trade Winds	Winds that flow between _____ latitude toward the equator (_____). Flow in a _____ direction in the northern hemisphere Flow in a _____ direction in the southern hemisphere
Horse Latitude	Little or low _____ area where air is _____. Found at _____ latitude.
Prevailing Westerlies	Winds that blow from the _____to the _____ Found between _____ and _____ latitudes.
Polar Easterlies	_____that flow away from the poles. Blows from _____ to _____ Found between the poles (_____) and _____ latitude.