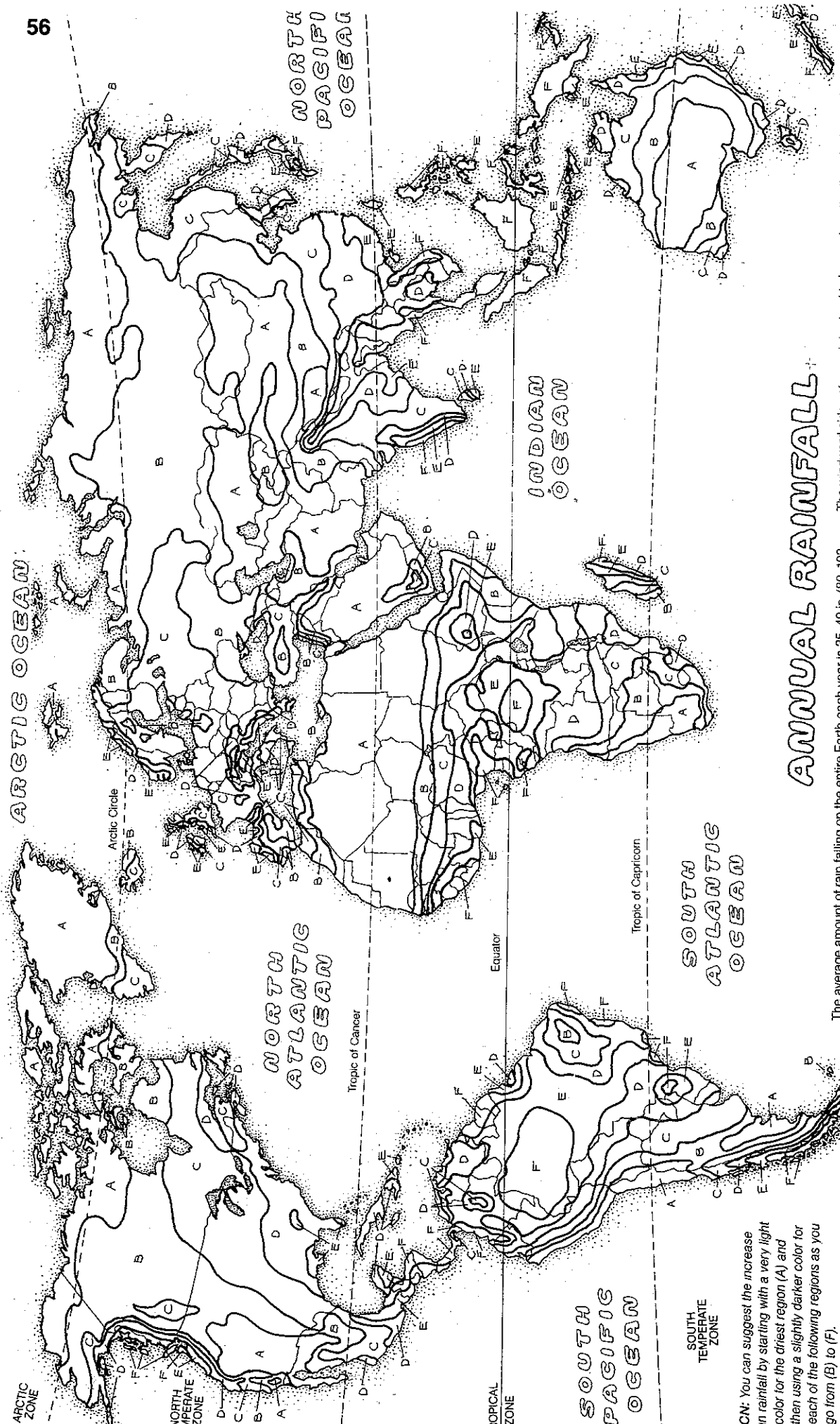


NAME: \_\_\_\_\_

### Annual Rainfall Map

- 1) What is the average annual rainfall amount worldwide? \_\_\_\_\_
- 2) What is the range between the least amount and most precipitation falling on the earth? \_\_\_\_\_
- 3) Where can one find the heaviest amount of rainfall? \_\_\_\_\_
- 4) Why does the equator receive the most precipitation? \_\_\_\_\_
- 5) What causes this heavy rainfall? \_\_\_\_\_
- 6) Where does rainfall tend to be the heaviest? \_\_\_\_\_
- 7) Where does rainfall tend to be the lightest? \_\_\_\_\_
- 8) What place holds the record for (annual) precipitation and how much?  
\_\_\_\_\_ with \_\_\_\_\_
- 10) How does the leeward and windward side of mountains differ in their receiving precipitation?
  - a. Windward \_\_\_\_\_
  - b. Leeward \_\_\_\_\_
- 12) Where can one find coastal deserts worldwide? \_\_\_\_\_
- 13) What causes coastal deserts? \_\_\_\_\_
- 17) Where can it rain anytime of the year?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_



CN: You can suggest the increase in rainfall by starting with a very light color for the driest region (A) and then using a slightly darker color for each of the following regions as you go from (B) to (F).

**INCHES: CENTIMETERS**

UNDER 10 <sup>A</sup>	UNDER 25 <sup>A</sup>
10 - 20 <sup>B</sup>	25 - 50 <sup>B</sup>
20 - 40 <sup>C</sup>	50 - 100 <sup>C</sup>
40 - 60 <sup>D</sup>	100 - 150 <sup>D</sup>
60 - 80 <sup>E</sup>	150 - 200 <sup>E</sup>
OVER 80 <sup>F</sup>	OVER 200 <sup>F</sup>

# ANNUAL RAINFALL

The average amount of rain falling on the entire Earth each year is 35-40 in. (89-102 cm), but the actual amount falling on different regions varies from 0 to 400 in. (1,000 cm). The tropics, especially close to the Equator, get the most rainfall because the Sun's heat is strongest in this region. The greater the heat, the greater the amount of evaporation of water from oceans, lakes, rivers, and reservoirs (warmer air also holds the most moisture). The evaporated water becomes water vapor, which rises in the warm air. The air cools at higher altitudes, and the water vapor condenses and forms clouds. Water droplets form, and thousands of them combine to create each raindrop that is part of rainfall.

Rainfall tends to be heaviest over or near large bodies of water. Rainfall is usually very light in the interiors of continents and in the ice-covered polar regions. It is heaviest where seasonal winds (monsoons) bring vast quantities of moisture from the sea. Monsoons contributed to the highest annual rainfall ever recorded: 1,042 in. (2,647 cm) in Cherrapunji, India, north of the Bangladesh border.

The windward sides of mountains tend to be much wetter than the leeward sides because moisture-laden winds sweep upward to the cooler elevations, causing accelerated condensation and the release of rain. The moisture-free winds then pass over the peaks and down the leeward slopes, only to intensify the dryness of those lands lying in the "rain shadow." The Pacific Northwest of the United States and Canada shows how the presence of tall mountains can influence climate—very little rain can cross the massive ranges into the dry interior.

Unusual coastal deserts are found along the west coasts of Africa and South America where cold ocean currents, lying offshore, cool the moisture-laden clouds, causing rain to fall before the clouds can reach land.

Most rainfall is seasonal, but on the northwestern and eastern coasts of North America, in northern and western Europe, and on the eastern coast of South America, it can rain at any time of the year. In some Equatorial regions, such as the Amazon Basin, it usually rains every day of the year.

**Interpreting the Map**  
**Annual Rainfall**

1. Where might you find precipitation recorded every day of the year? \_\_\_\_\_
2. In central Europe and Asia, what precipitation amount is most dominate? \_\_\_\_\_
3. How much precipitation does our area of the United States receive? \_\_\_\_\_
4. What areas of the world receive the least amount of rain?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
8. What amount of precipitation occurs the most often worldwide? \_\_\_\_\_
9. Which continent has the most variation in amount of precipitation? \_\_\_\_\_
10. What precipitation amount dominates Australia? \_\_\_\_\_
11. Using the map what precipitation amount dominates North America? \_\_\_\_\_
12. How many different precipitation amounts does India have? \_\_\_\_\_