Zoning In

Did You Know? Climate describes what the weather is like over a long period of time. Different parts of the world have different climates. The polar zones located around the North and South Poles have very cold, dry climates. The tropical zone is hot and wet all year. The United States is in a temperate zone, so the weather is warm in the summer and cold in the winter. Snow is common in temperate climates.



Polar Climate

- 1 Wet snowflakes take up less space than dry, fluffy snowflakes. It may take 3 inches of wet snow to equal 1 inch of water. Find and shade the multiples of 3 on the multiplication table.
- 2 Complete the second column of the Comparison Table to show the inches of wet snow needed to equal the given inches of water.
- 3 Dry, fluffy snowflakes take up more space than wet, dense snowflakes. It may take 9 inches of dry snow to equal 1 inch of water. Find and shade the multiples of 9 on the multiplication table.
- 4 Complete the third column of the Comparison Table to show the inches of dry snow needed to equal the given inches of water.
- **Extension** For each inch of water, compare the inches of wet and dry snow. What multiplication pattern do you see? Use the multiplication table to help you.

| × | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|----|----|----|----|----|----|----|----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 |

| Comparison Table | | | | | | | | |
|--------------------|-----------------------|-----------------------|--|--|--|--|--|--|
| Inches of Water | Inches of Wet Snow | Inches of Dry Snow | | | | | | |
| 1 | 3 | 9 | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |