

Hardiness Zone Activity

Answer the following questions using the Illinois hardiness zone map.

1. Illinois consists of 5 different hardiness zones. Using the hardiness zone map for Illinois and the chart below, list the annual average temperature range (Fahrenheit) for the following zones:

Zone 4b _____

Zone 6a _____

Zone 5a _____

Zone 6b _____

Zone 5b _____

USDA Hardiness Zones and Average Annual Minimum Temperature Range

Zone	Fahrenheit	Celsius	Example Cities
1	Below -50 F	Below -45.6 C	Fairbanks, Alaska; Resolute, Northwest Territories (Canada)
2a	-50 to -45 F	-42.8 to -45.5 C	Prudhoe Bay, Alaska; Flin Flon, Manitoba (Canada)
2b	-45 to -40 F	-40.0 to -42.7 C	Unalakleet, Alaska; Pinecreek, Minnesota
3a	-40 to -35 F	-37.3 to -39.9 C	International Falls, Minnesota; St. Michael, Alaska
3b	-35 to -30 F	-34.5 to -37.2 C	Tomahawk, Wisconsin; Sidney, Montana
4a	-30 to -25 F	-31.7 to -34.4 C	Minneapolis/St. Paul, Minnesota; Lewistown, Montana
4b	-25 to -20 F	-28.9 to -31.6 C	Northwood, Iowa; Nebraska
5a	-20 to -15 F	-26.2 to -28.8 C	Des Moines, Iowa; Illinois
5b	-15 to -10 F	-23.4 to -26.1 C	Columbia, Missouri; Mansfield, Pennsylvania
6a	-10 to -5 F	-20.6 to -23.3 C	St. Louis, Missouri; Lebanon, Pennsylvania
6b	-5 to 0 F	-17.8 to -20.5 C	McMinnville, Tennessee; Branson, Missouri
7a	0 to 5 F	-15.0 to -17.7 C	Oklahoma City, Oklahoma; South Boston, Virginia
7b	5 to 10 F	-12.3 to -14.9 C	Little Rock, Arkansas; Griffin, Georgia
8a	10 to 15 F	-9.5 to -12.2 C	Tifton, Georgia; Dallas, Texas
8b	15 to 20 F	-6.7 to -9.4 C	Austin, Texas; Gainesville, Florida
9a	20 to 25 F	-3.9 to -6.6 C	Houston, Texas; St. Augustine, Florida
9b	25 to 30 F	-1.2 to -3.8 C	Brownsville, Texas; Fort Pierce, Florida
10a	30 to 35 F	1.6 to -1.1 C	Naples, Florida; Victorville, California
10b	35 to 40 F	4.4 to 1.7 C	Miami, Florida; Coral Gables, Florida
11	above 40 F	above 4.5 C	Honolulu, Hawaii; Mazatlan, Mexico

2. Locate your county and write what hardiness zone it is located. Name 5 other counties who share the same hardiness zone as your county.

My County: _____ Hardiness zone: _____

5 counties who share the same hardiness zone: _____

3. Why do you think there are different hardiness zones for different counties?

4. On the United States National Arboretum website, the hardiness zones are given for each state along with examples of woody plants that would normally succeed in those growing zones. Visit www.usna.usda.gov/Hardzone/hrdzon4.html and write the common name of the six given plants below.

1. _____ 2. _____
3. _____ 4. _____
5. _____ 6. _____

Think About It....

5. The first hardiness zone map was published in 1960 and was later revised in 1965. Because of improvements in technology and recorded data, our plant hardiness zone map was again revised in 1990. This 1990 version shows in detail the lowest temperatures that can be expected each year in the United States, Canada, and Mexico. These temperatures are based on the lowest temperatures recorded for each of the years from 1974 to 1986 in the U.S. and Canada and 1971 to 1984 in Mexico. Based on environmental trends, make a prediction of when the next revision of the hardiness zone map will be and what changes we might see in average annual temperatures.

Hardiness Zone Map Answer Key

- Zone 4b** -25 to -20 F
Zone 5a -20 to -15 F
Zone 5b -15 to -10 F
Zone 6a -10 to -5 F
Zone 6b -5 to 0 F
- Answers will vary; depends on location.
- Answers will vary.
- Flowering dogwood; Slender deutzia; Common privet; Boston ivy; Japanese rose; Japanese yew
- Answers will vary. Possible discussion includes global warming.