Joint Polar Satellite System
Color a Temperature (Ch)art!

The Joint Polar Satellite System (JPSS) is a series of polar-orbiting environmental satellites. JPSS satellites cross the equator 14 times each day in order to observe the entire Earth twice a day. These satellites contribute critical meteorological data that NOAA's National Weather Service uses to make accurate weather forecasts and predict severe weather three to seven days in advance. Satellites in the JPSS constellation gather global measurements of conditions in the atmosphere, oceans, and on land—including temperature, moisture, clouds, rainfall, dense fog, volcanic ash, fire locations, smoke plumes, vegetation, snow and ice cover, and ozone. Two instruments on JPSS measure temperature: the Cross-Track Infrared Sounder (CrIS) and the Advanced Technology Microwave Sounder (ATMS).
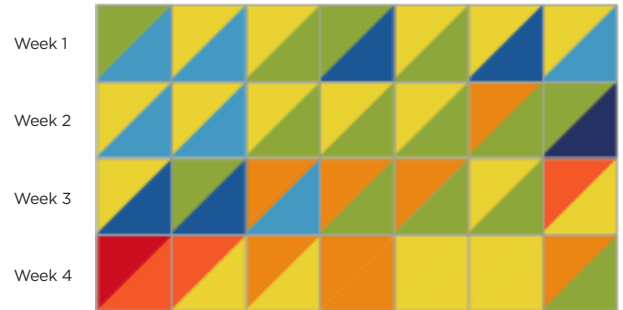
Journaling about local daily average temperatures for a month or a year can be a fun way to learn more about your town's climate and weather conditions. These worksheets will help you identify temperature trends and turn your observations into art.

The following instructions will walk you through how to record or 'log' temperatures in a visually interesting way so that you can easily identify trends and patterns. After picking temperature ranges and colors, you'll fill in one of the following chart designs daily over the course of a month, a year, or whatever time period you'd like. Color examples have been supplied for you that use a traditional hot color (reds) to cool color (blues) scheme but a column has also been left blank so you can choose your own key based on the colors you have available.
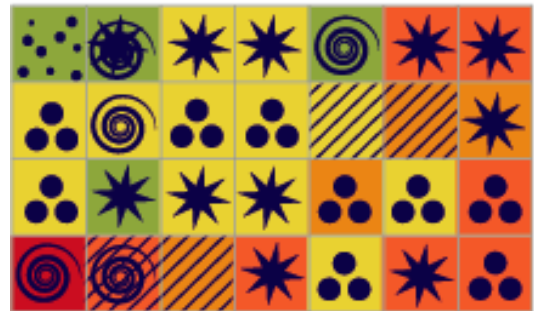
Get NOAA/JPSS scientific data.
You can find your state, town and date ranges:
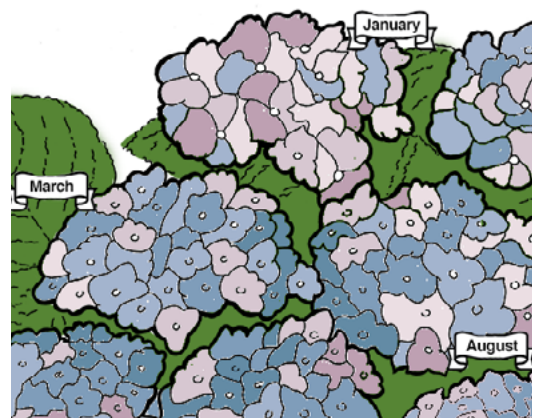www.ncdc.noaa.gov/cag/city/data-info

Examples

Daily AM & PM average temperature
(or 2 days per square)

Week 1

Week 2

Week 3

Week 4

Daily average temperature + weather icon

Flower petals

Sample Color Key

5 colors
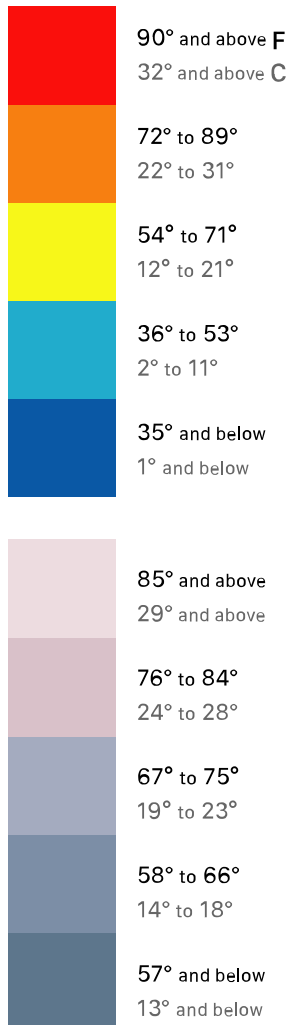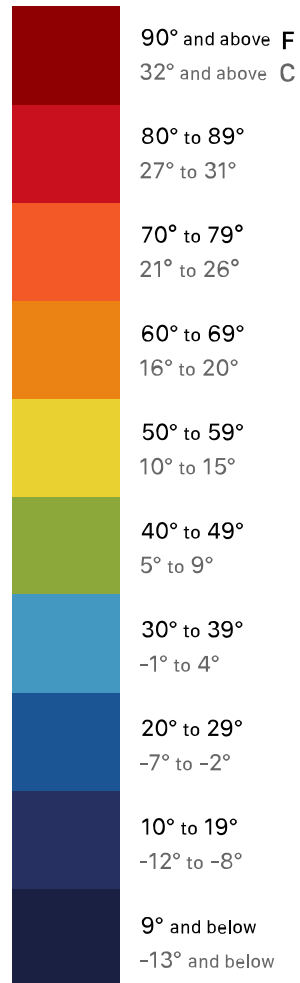
	90° and above F 32° and above C
	72° to 89° 22° to 31°
	54° to 71° 12° to 21°
	36° to 53° 2° to 11°
	35° and below 1° and below

	85° and above 29° and above
	76° to 84° 24° to 28°
	67° to 75° 19° to 23°
	58° to 66° 14° to 18°
	57° and below 13° and below

10 colors

	90° and above F 32° and above C
	80° to 89° 27° to 31°
	70° to 79° 21° to 26°
	60° to 69° 16° to 20°
	50° to 59° 10° to 15°
	40° to 49° 5° to 9°
	30° to 39° −1° to 4°
	20° to 29° −7° to −2°
	10° to 19° −12° to −8°
	9° and below −13° and below

15 colors

	105° and above F 41° and above C
	98° to 105° 37° to 40°
	91° to 97° 33° to 36°
	84° to 90° 29° to 32°
	77° to 83° 25° to 28°
	70° to 76° 21° to 24°
	63° to 69° 17° to 20°
	56° to 62° 13° to 16°
	49° to 55° 9° to 12°
	42° to 48° 6° to 10°
	35° to 41° 2° to 5°
	28° to 34° −2° to 1°
	21° to 27° −6° to −3°
	14° to 20° −10° to −7°
	13° and below −11° and below

1. Decide how many colors to use.

2. You may set a custom temperature range. Consider a range to cover the span of time you will record. You may choose a seasonal temperature range.

3. Set a color for each square. You can also customize your color palette.

4. You can even add and customize each square with added weather icons or patterns.

5. Use the grid template sheet to mark each square with a color and/or pattern for each day according to your prefered color key.

Pattern/icon

Cloudy

Rainy

Sunny

Snow

Windy
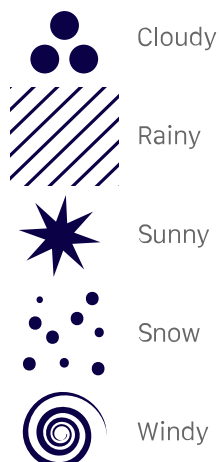
Make Your Own Color Key

5 colors

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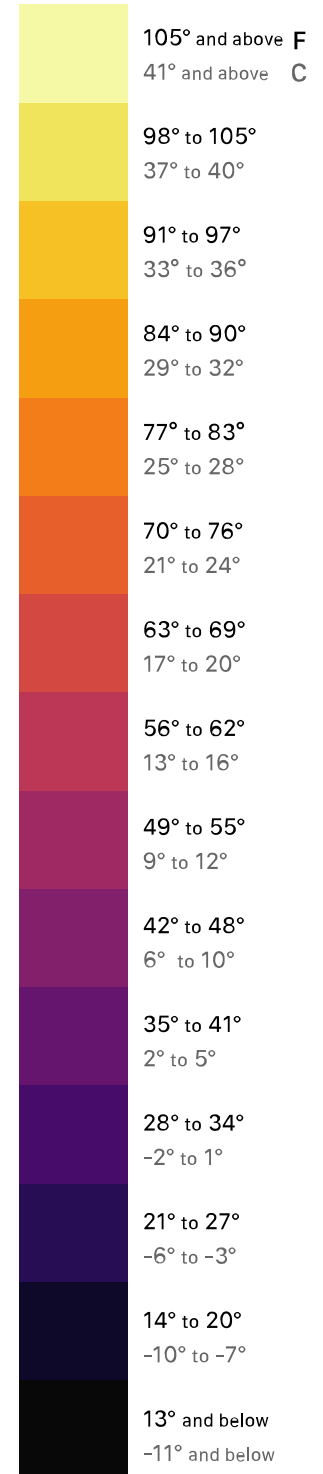|	
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Pattern/icon

Cloudy

Rainy

Sunny

Snow

Windy

Date range:

Su	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa

| Su | M | T | W | Th | F | Sa | Su | M | T | W | Th | F | Sa |

Date range:

	Su	M	T	W	Th	F	Sa	Su	M	T	W	Th	F	Sa
Day / Night														