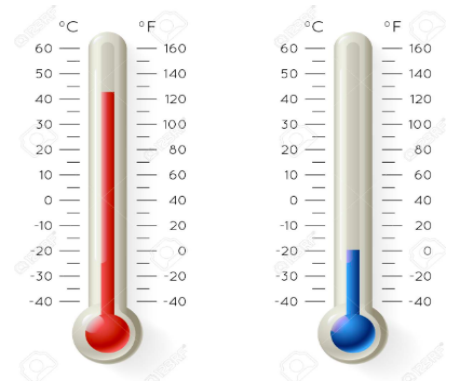


WALT: Add decimals  
Read and create graphs



Average Daily Temperatures  
for McMurdo Station, Vostok Station  
and Amundsen-Scott Base

**Climate data for the American McMurdo station - Continental High Latitude Coast**

Latitude: 77.88°S; Longitude: 166.73°E  
Height -about 24m / 78 feet above sea level

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean
Average daily temperature °C	-2.9	-9.5	-18.2	-20.7	-21.7	-23	-25.7	<b>-26.1</b>	-24.6	-18.9	-9.7	-3.4	<b>-16.9</b>

**Climate data for the Russian Vostok station at the southern geomagnetic pole**

Continental High Plateau  
Data range from 1957 to 1988; Latitude: 78.45°S; Longitude: 106.80°E

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average daily temperature °C	-32.1	-44.3	-57.9	-64.7	-65.6	-65.2	-66.9	<b>-67.6</b>	-66	-57.1	-43.3	-32.1	-55.1

**Climate data for the American Amundsen-Scott station at the South Pole - Continental High Plateau**

Data range from 1957 to 1988; Latitude: 90°S; Longitude: 0

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average daily temperature °C	-28.2	-40.9	-54	-57.3	-57	-58	-59.7	<b>-60</b>	-59.4	-51.1	-38.3	-27.5	-49.4

## Questions based on the tables above.

1. Which station has the highest temperature in January?
2. Which station has the lowest temperature in December?
3. Which station has recorded the lowest temperature over a year? What was the temperature? Which month was it?
4. What is the average daily temperature at the Amundsen-Scott station in August? If the temperature gets warmer by 15 degrees celsius what will the new temperature be?
5. What is the average daily temperature at the Vostok station in July? If the temperature gets colder by 21 degrees celsius what would the new temperature be?
6. What are the coordinates for each station? Write them down.
7. If you had a choice which station would you want to visit? Why?

8. What temperature does water freeze at?

9. What temperature does water boil at?

10. What is the difference between Vostok and McMurdo annual temperatures?

Task: Create a line graph to show the average daily temperatures over the year from all three Antarctic research stations.

Your line graph must include:

- Title
- Labelled x and y axis (time/temperature)
- Accurate scale of numbers on graph (temperature)
- One line for each station
- A key (use a different colour for each station)

➤ You must use a ruler when creating your line graph

★ Make three statements about what the graph is showing.

## Answers to questions based on the tables above.

1. Which station has the highest temperature in January?  
McMurdo
2. Which station has the lowest temperature in December?  
Vostok
3. Which station has recorded the lowest temperature over a year? What was the temperature? Which month was it?  
Vostok -67.6 in August
4. What is the average daily temperature at the Amundsen-Scott station in August?  
If the temperature gets warmer by 15 degrees celsius what will the new temperature be?  
-60 degrees celsius. -45 degrees celsius.
5. What is the average daily temperature at the Vostok station in July? If the temperature gets colder by 21 degrees celsius what would the new temperature be?  
-66.9 degrees celsius. -87.9 degrees celsius.
6. What are the coordinates for each station? Write them down.  
See below each heading.
7. If you had a choice which station would you want to visit? Why?  
Own opinion
8. What temperature does water freeze at?  
0 degrees celsius.
9. What temperature does water boil at?  
100 degrees celsius.
10. What is the difference between Vostok and McMurdo annual temperatures?  
-38.2 degrees celsius.