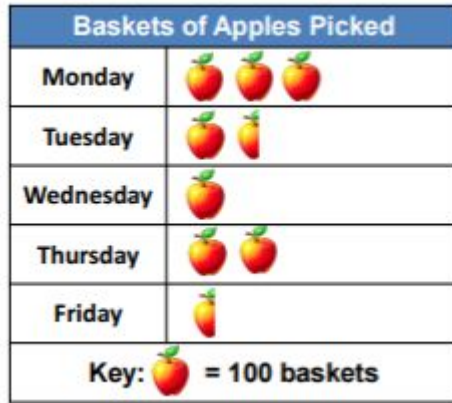


# THE PICTOGRAPH AND THE LINE GRAPH

# PICTOGRAPH

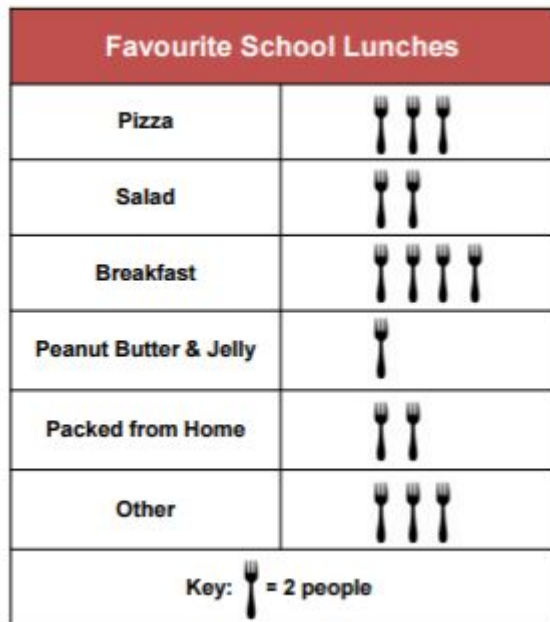


**Pictographs** are very similar to bar graphs, however pictures or images are used instead of bars.

We will be creating, reading and answering questions about pictographs.

Pictographs are sort of fun because of the pictures that can be included.

# EXAMPLE 1



When reading a pictograph, it will be helpful to start by looking at the title and the key.

From the title, we see that a group of people were asked about their favourite school lunch.

From the key, we note that each fork represents 2 people.

Now we can determine how many people voted for each.

# EXAMPLE 2

Using a table of values to create a pictograph:

Average amounts of Snow in January	
Montreal	50 cm
Quebec City	70 cm
Saguenay	65 cm
Toronto	35 cm
Calgary	15 cm
Winnipeg	25 cm

First, we need to choose a picture or image that would make sense to represent the information.

Next, we need to determine a key for the pictograph.

If we were to let each snowflake equal 5 cm, we would need 14 snowflakes for Quebec City (70 cm). That is a lot of snowflakes.

It would be better to let each snowflake be equal to 10 cm.

Note that not all of the measurements are multiples of ten.

So, to represent 5 cm, we will use half of a snowflake.



# EXAMPLE 2 - CONTINUED

Next, we will replace the number of centimetres with the appropriate number of snowflakes.

Montreal = 50 cm → 5 snowflakes

Quebec = 70 cm → 7 snowflakes

Saguenay = 65 cm → 6.5 snowflakes

Toronto = 35 cm → 3.5 snowflakes

Calgary = 15 cm → 1.5 snowflakes

Winnipeg = 25 cm → 2.5 snowflakes

Average amounts of Snow in January	
Montreal	    
Quebec City	      
Saguenay	      
Toronto	   
Calgary	 
Winnipeg	  
Key:  = 10 cm	

# LINE GRAPHS

Line Graphs are used to show changes over **time**.

This includes showing the price of a stock from day to day or the height of child from year to year.

Line graphs are an easy way to **visually** show these changes.

# EXAMPLE #1

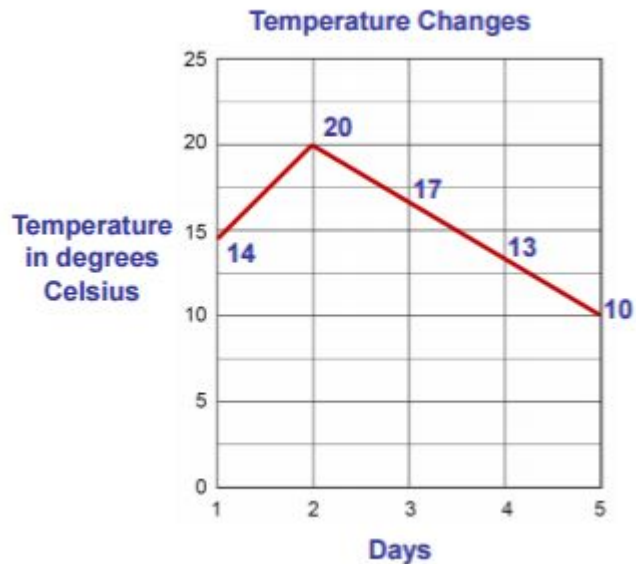
Temperature Changes	
Day	Temperature
1	14°C
2	20°C
3	17°C
4	13°C
5	10°C

This table gives us all the information we need in order to make a line graph.

Notice that the temperature is changing over time.

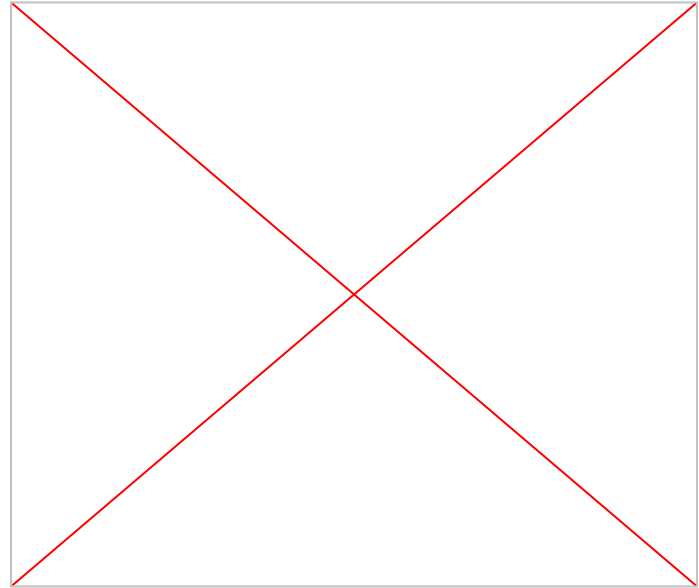
The time (days) goes across the horizontal axis.

The temperatures (°C) go up the vertical axis.



# EXAMPLE #2: DOUBLE LINE GRAPH

Temperature in Quebec City and Halifax		
Day	Quebec City	Halifax
1	5	10
2	8	18
3	3	11
4	0	8
5	2	6





# EXAMPLE 2: CONTINUED

Graphs and Functions

