L.O.: I can reactivate my prior knowledge (...).

Think - Pair - Share: What do these pictures represent? Explain.
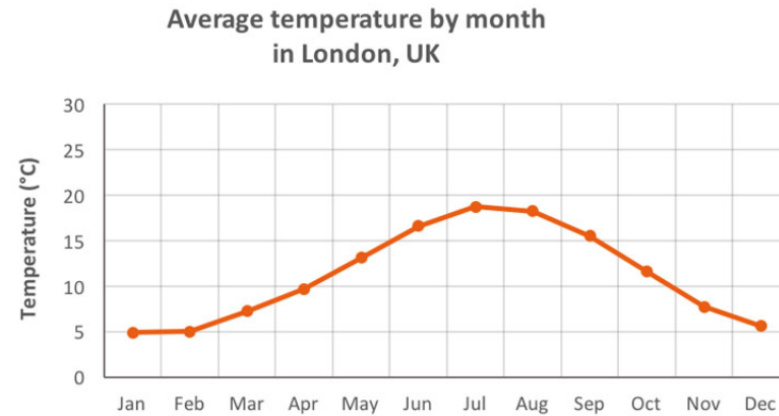
Sentence-Stems:
- With the pictures, I associate ...
Keywords:
...

L.O.: I can read and interpret line graphs.

Think-Pair-Share I: What are the characteristics of a line-graph? Where do we use it? What exact questions could we ask?

Average temperature by month in London, UK

Temperature (°C)

30
25
20
15
10
5
0

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

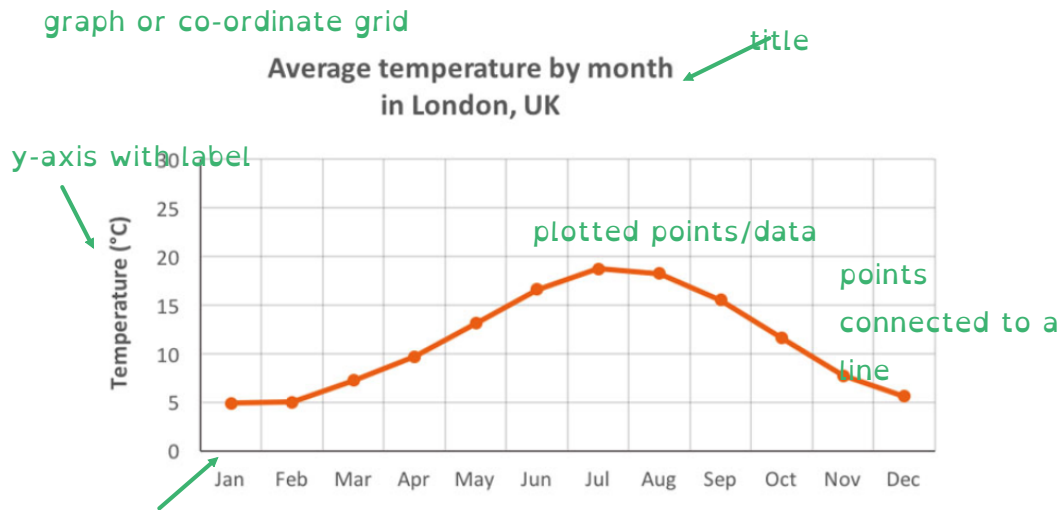What I know ...

Sentence-Stems:
  - We use line-graphs when ...
  - To read and interpret them, I need to ...
Keywords:
statistics, graphs, line-graph, bar-graph, bar-chart, data, y-axis, x-axis, plot, read, along the corridor and up the stairs, ...

L.O.: I can read and interpret line graphs.

You are right, line graphs have ..

graph or co-ordinate grid

title

**Average temperature by month
in London, UK**

y-axis with label

plotted points/data

points

connected to a

line

x-axis with label

Remember: Line-graphs always visualise data over the course of time.

Use: Geography (temperature during the day, month, year or longer),

Economy (value of things, sales or profits of shops, ...

Sentence-Stems:
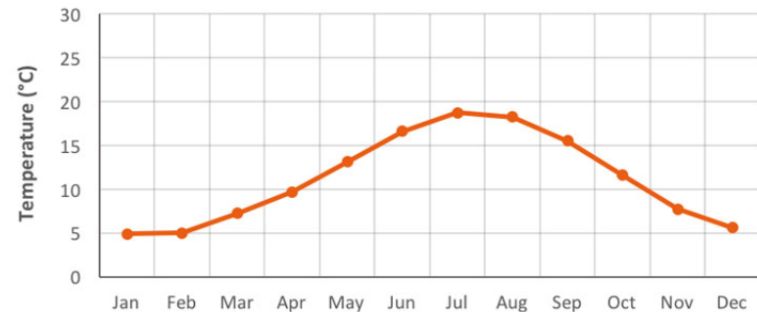- We use line-graphs when ...
- To read and interpret them, I need to ...
Keywords:
statistics, graphs, line-graph, bar-graph, bar-chart, data, y-axis, x-axis, plot, read, along the corridor and up the stairs, ...

L.O.: I can read and interpret line graphs.

Think-Pair-Share I: What are the characteristics of a line-graph? Where do we use it? What exact questions could we ask?

Average temperature by month
in London, UK

1.   Which month is the warmest?

2.   Which month is the coldest?

3.   What is the temperature difference between the hottest and coldest month?

4.   True or false? Explain. April is on average twice as warm as January.

5.   True or false? Explain. September is warmer than June.

6.   True or false? Explain. The temperature difference between July and April is about 8°C.

7.   True or false? Explain. Two months have the same average temperature, January and February.
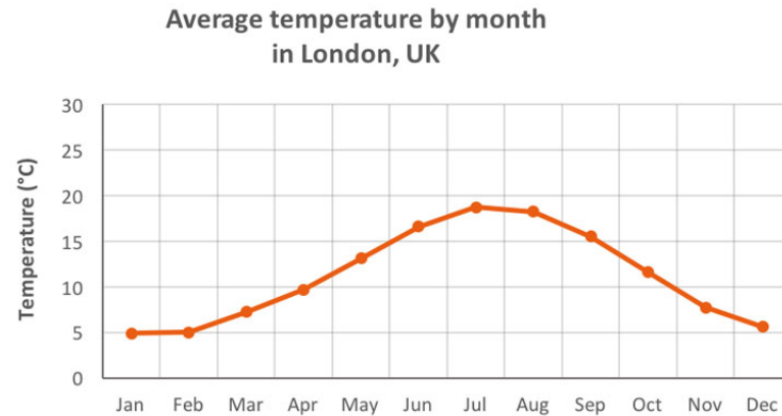
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   - We use line-graphs when ...
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   statistics, graphs, line-graph, bar-graph, bar-chart, data, y-axis, x-axis, plot, read, along the corridor and up the stairs, ...
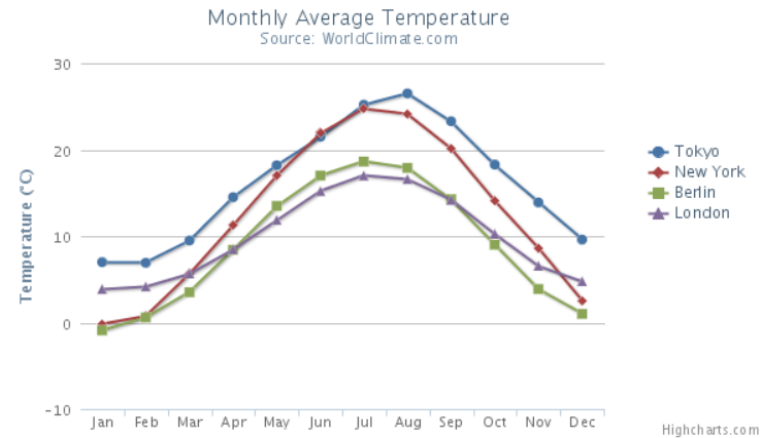
L.O.: I can read and interpret line graphs.

How well did you do?

Average temperature by month in London, UK

1. Which month is the warmest? July (18/19°C)

2. Which month is the coldest? January and February (5°C)

3. What is the temperature difference between the hottest and coldest month? 18-5=13; 19-5=14; 13°/14°

4. True or false? Explain. April is on average twice as warm as January.
   True (January 5°C; April 10°C)

5. True or false? Explain. September is warmer than June.
   False (September 15°C < June 17°C)

6. True or false? Explain. The temperature difference between July and April is about 8°C. True (July 18/19°C; April 10°C)

7. True or false? Explain. Two months have the same average temperature, January and February.
   False, not just January and February (5°C), but also March and November seem to have the same average temperature (7.5°C).

L.O.: I can read and interpret line graphs.

Let's spice this up a little bit! What do you notice here?

1. How much warmer is the average January in Tokyo than New York?

2. For which 3 cities is July the warmest month?

3. How much warmer is the October in Tokyo than Berlin?

4. Which month has the same average temperature in Berlin and London?

5. Describe what you notice when comparing the average temperature in Berlin and London?

6. What do all 4 lines and cities have in common?

7. Challenge: Which city shows the largest temperature differences?
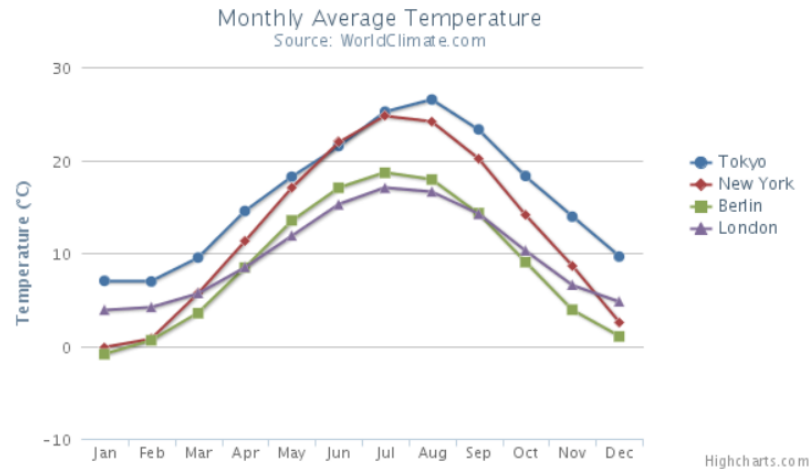
Sentence-Stems:
  - We use line-graphs when ...
  - To read and interpret them, I need to ...
  Keywords:
  statistics, graphs, line-graph, bar-graph, bar-chart, data, y-axis, x-axis, plot, read, along the corridor and up the stairs, ...

L.O.: I can read and interpret line graphs.

Let's spice this up a little bit! What do you notice here?

Monthly Average Temperature
Source: WorldClimate.com

1. How much warmer is the average January in Tokyo than New York?
   ca. 7°/8°

2. For which 3 cities is July the warmest month? New York, London, Berlin

3. How much warmer is the October in Tokyo than Berlin? 9°/10°

4. Which month has the same average temperature in Berlin and London?
   April and September

5. Describe what you notice when comparing the average temperature in Berlin and London? Berlin is more extreme (winters are colder, summers are hotter); Curve is very similar; ...

6. What do all 4 lines and cities have in common?
   Winter (Dec - Feb,); Summer (June-Sep); January = coldest month

7. Challenge: Which city shows the largest temperature differences?
   New York (25°)

7

L.O.: I can read and interpret line graphs.

Task: Complete the tasks from your sheet in your book.

Plenary

RL: My top-tips for reading and interpreting line-graphs ...

1. ...   2. ...   3. ...

Sentence-Stems:

    - We use line-graphs when ...

    - To read and interpret them, I need to ...

Keywords:

statistics, graphs, line-graph, bar-graph, bar-chart, data, y-axis, x-axis, plot,

read, along the corridor and up the stairs, ...