

# Varied Fluency

## Step 1: Read and Interpret Line Graphs

### National Curriculum Objectives:

Mathematics Year 5: (5S2) [Solve comparison, sum and difference problems using information presented in a line graph](#)

### Differentiation:

**Developing** Questions to support reading and interpreting line graphs. One set of data represented.

**Expected** Questions to support reading and interpreting line graphs. Two sets of data represented.

**Greater Depth** Questions to support reading and interpreting line graphs. More than two sets of data represented.

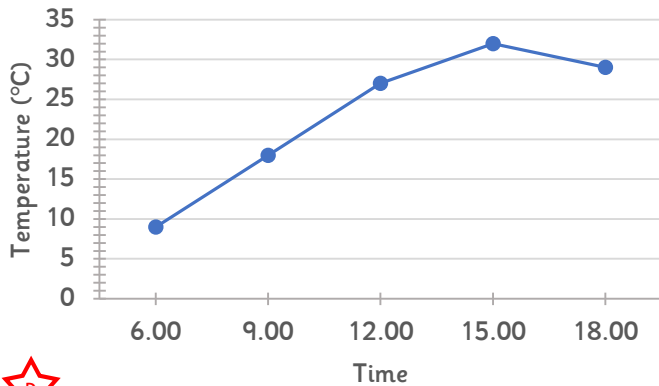
More [Year 5 Statistics](#) Resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Varied Fluency – Read and Interpret Line Graphs

1a. What were the highest and lowest temperatures recorded?

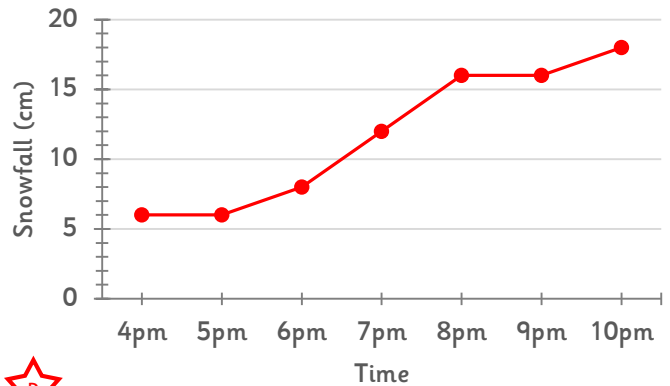
Temperature on Monday



VF

1b. How much snow fell between 8pm and 9pm?

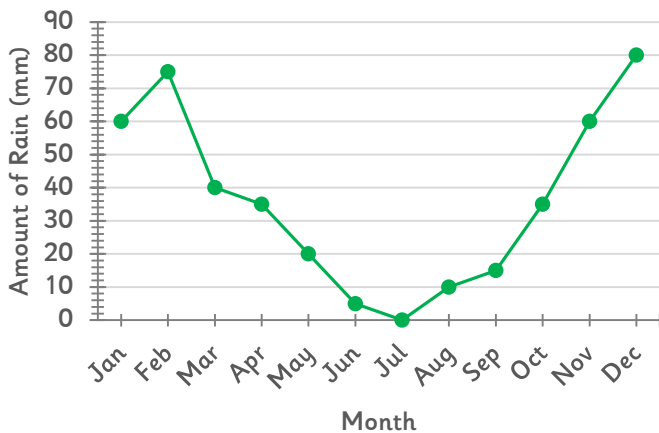
Afternoon Snowfall Accumulation



VF

2a. Which months saw more than 40mm of rain?

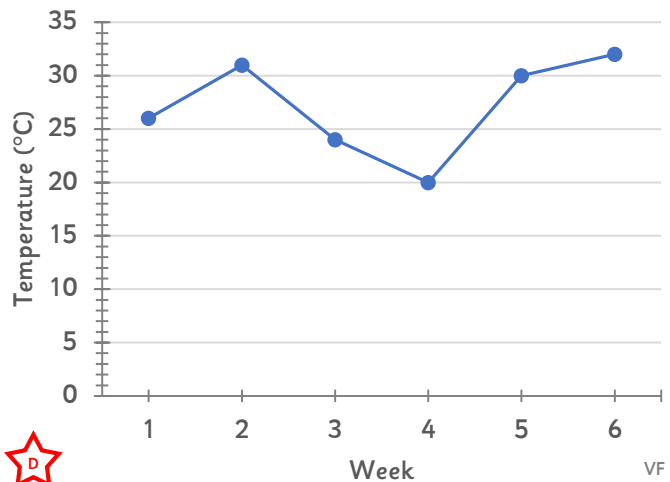
Amount of Rain in One Year



VF

2b. In which weeks were the temperatures above 30°C?

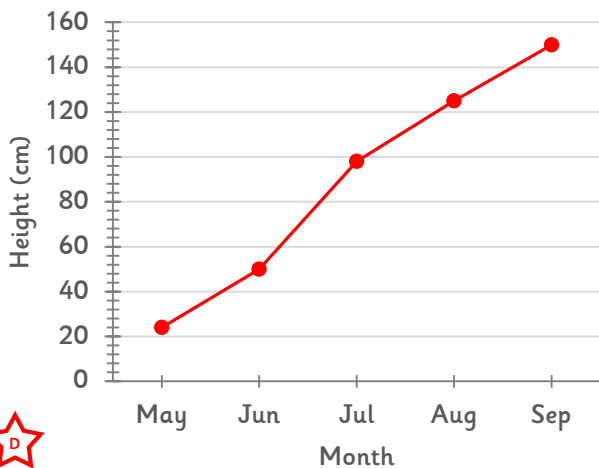
Average Temperature During The School Holidays



VF

3a. Which month was the height of the plant 125cm?

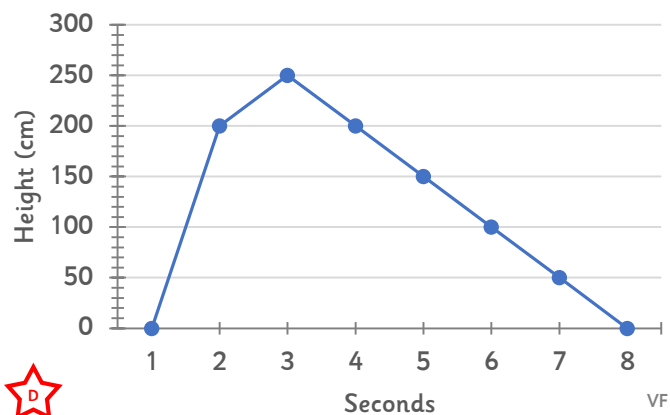
Height of Bean Plant



VF

3b. How long did it take the astronaut to reach 250cm?

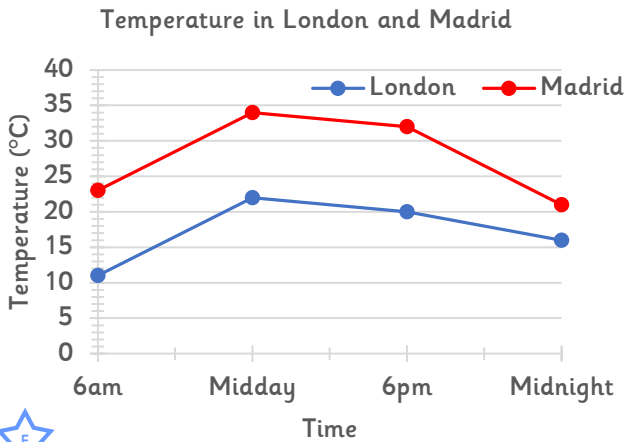
Lunar Space Jump



VF

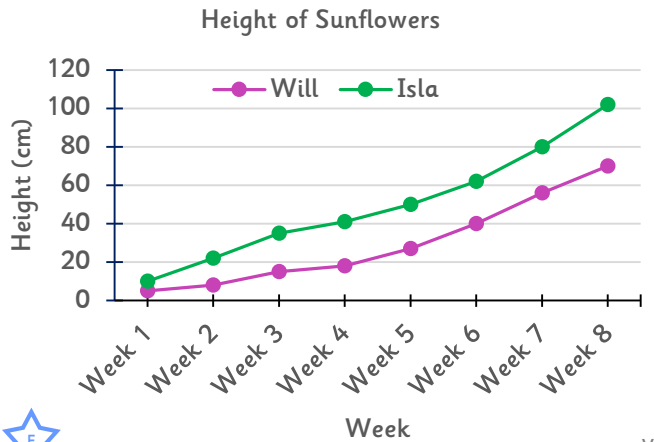
# Varied Fluency – Read and Interpret Line Graphs

4a. What was the difference in temperature at Midday?



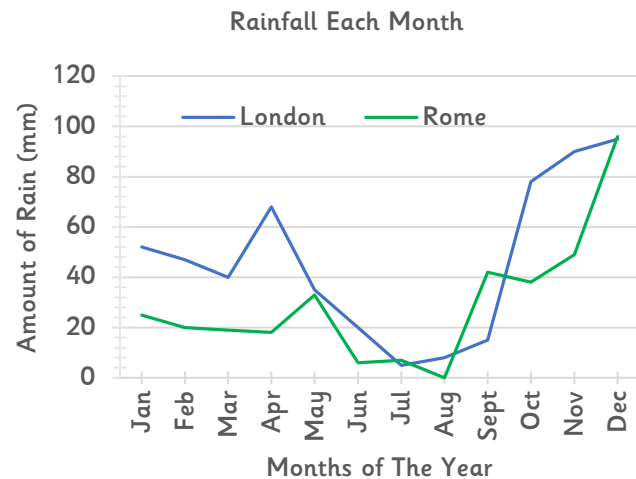
VF

4b. What was the difference in height at 6 weeks?



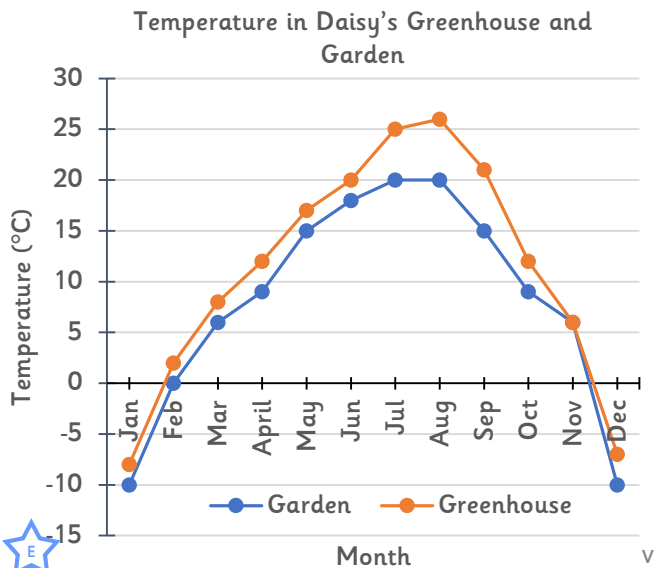
VF

5a. How many months saw more than 40mm of rain in both cities?



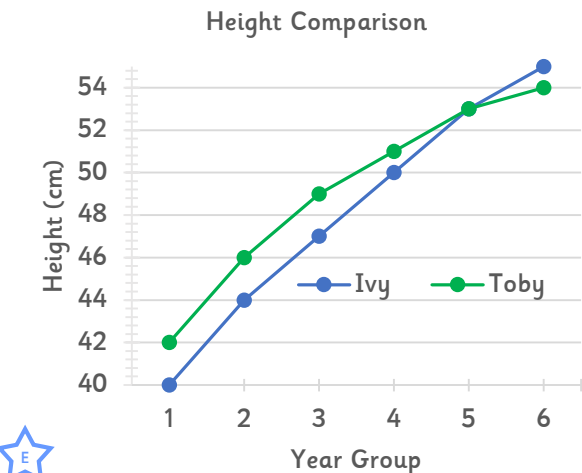
VF

5b. In which months were the temperatures below 0°C?



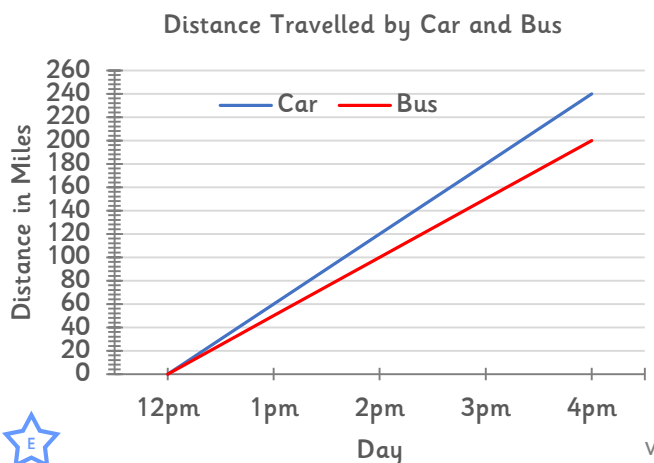
VF

6a. Who was taller in Year 4? Who was taller in Year 6?



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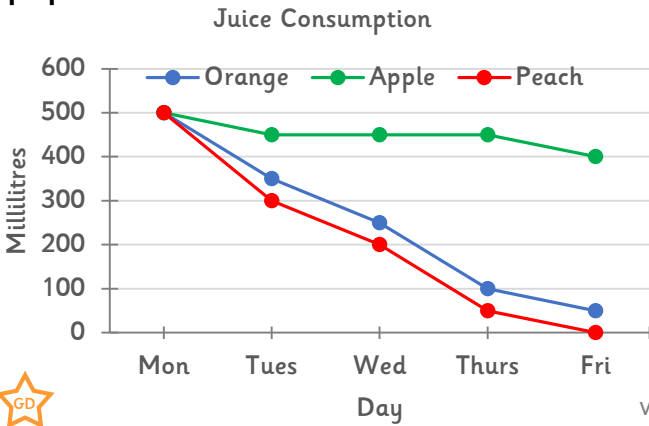
6b. Which vehicle travelled the farthest between 12pm and 4pm?



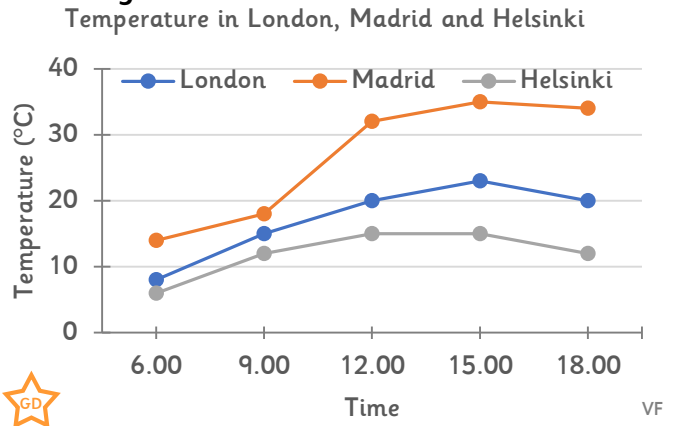
VF

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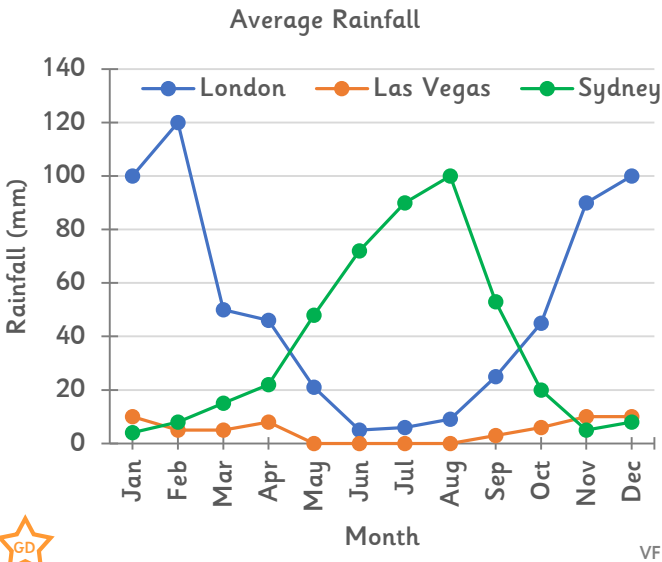
7a. Which flavour was the most popular? Which flavour was the least popular?



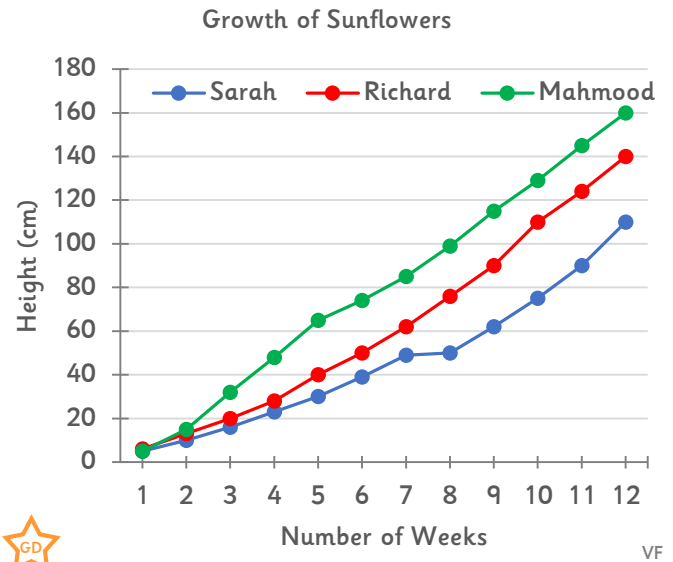
7b. What was the difference in temperature in Madrid and Helsinki at Midday?



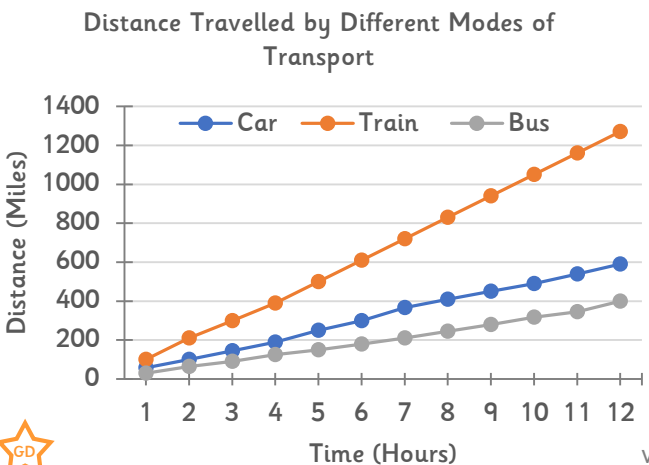
8a. Which months had the highest amount of rainfall for each city?



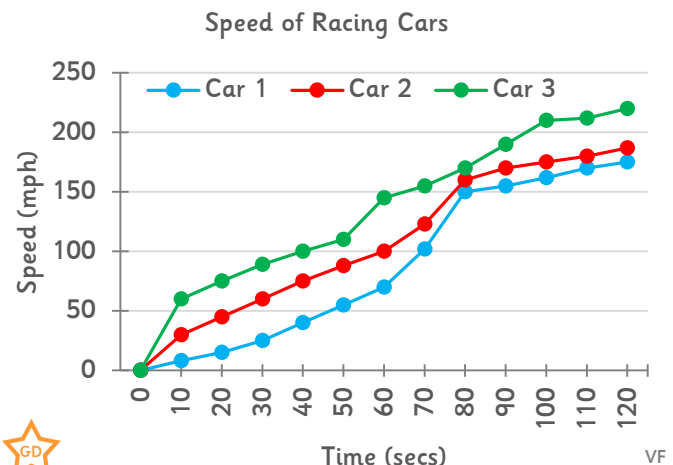
8b. In which week did each person's sunflower pass a height of 100cm?



9a. How many hours did each vehicle take to travel 200 miles?



9b. How long did each car take to reach 150mph?



# Varied Fluency – Read and Interpret Line Graphs

Answers below are exact. Accept answers which are one more or one less than the given answer.

## Developing

- 1a. Highest =  $32^{\circ}\text{C}$ ; lowest =  $9^{\circ}\text{C}$
- 1b. 0cm
- 2a. January, February, November and December
- 2b. 2 and 6
- 3a. August
- 3b. 3 seconds

## Expected

- 4a.  $12^{\circ}\text{C}$
- 4b. 22cm
- 5a. 2 (November and December)
- 5b. January and December
- 6a. Year 4 = Toby; Year 6 = Ivy
- 6b. The car

## Greater Depth

- 7a. Most popular = Apple; least popular = Peach
- 7b.  $17^{\circ}\text{C}$
- 8a. London = February; Las Vegas = January, November and December; Sydney = August
- 8b. Mahmood = week 9; Richard = week 10; Sarah = week 12
- 9a. Car = 4.5 hours; Train = 2 hours; Bus = 7 hours
- 9b. Car 1 = 80 seconds; Car 2 = 80 seconds; Car 3 = 70 seconds