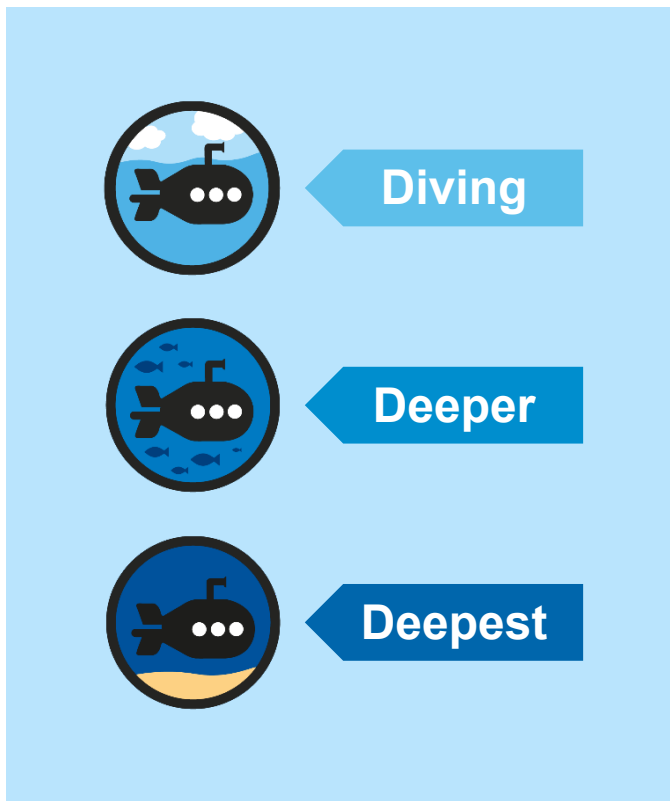


## Line Graphs

# Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

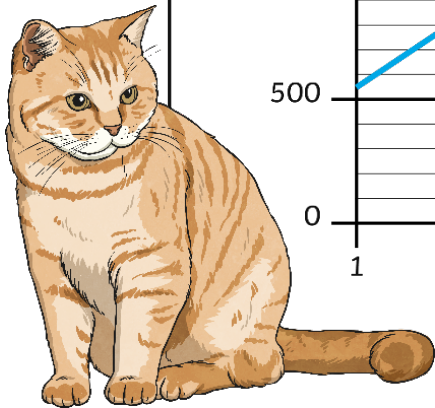
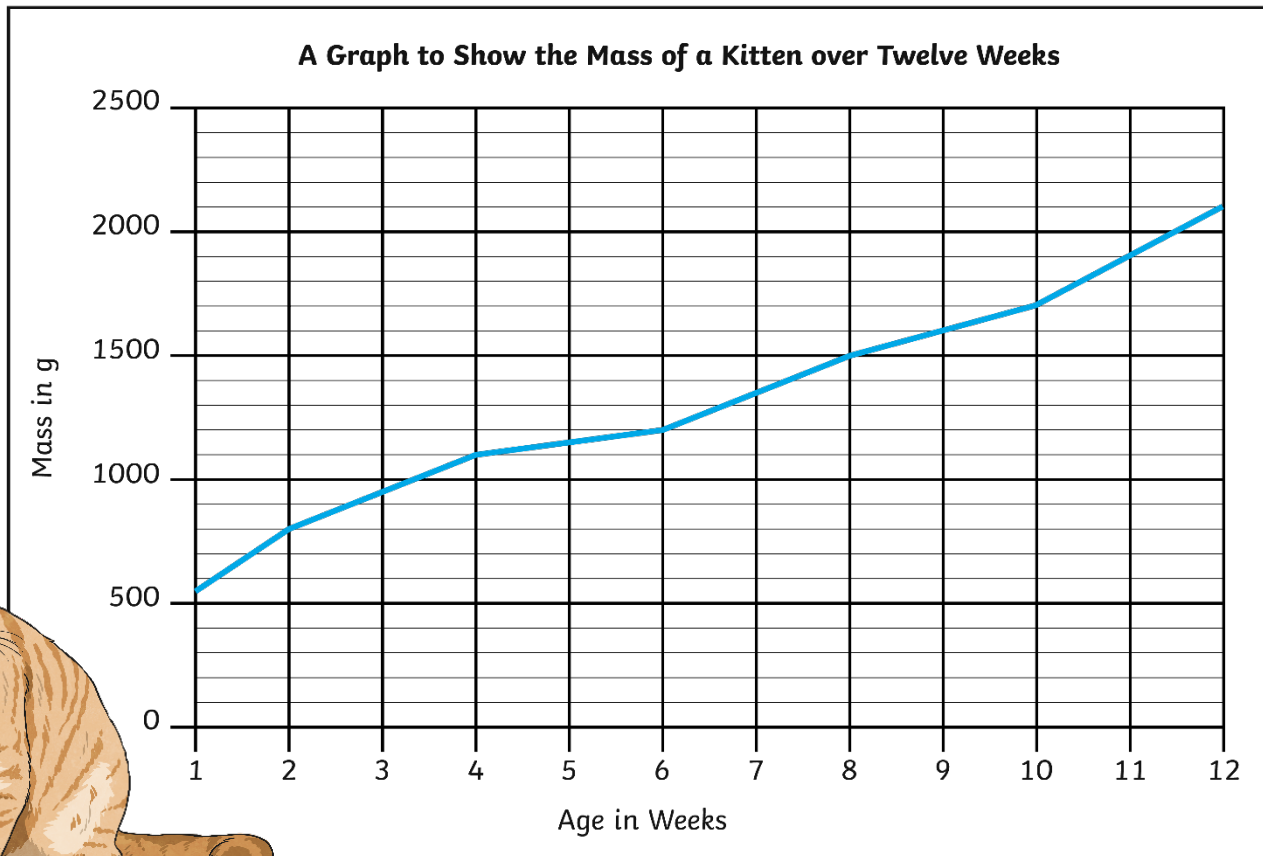
# National Curriculum Objective

- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.



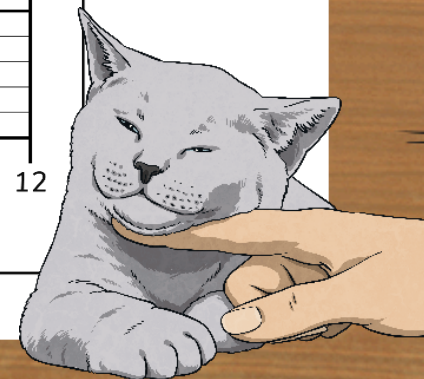
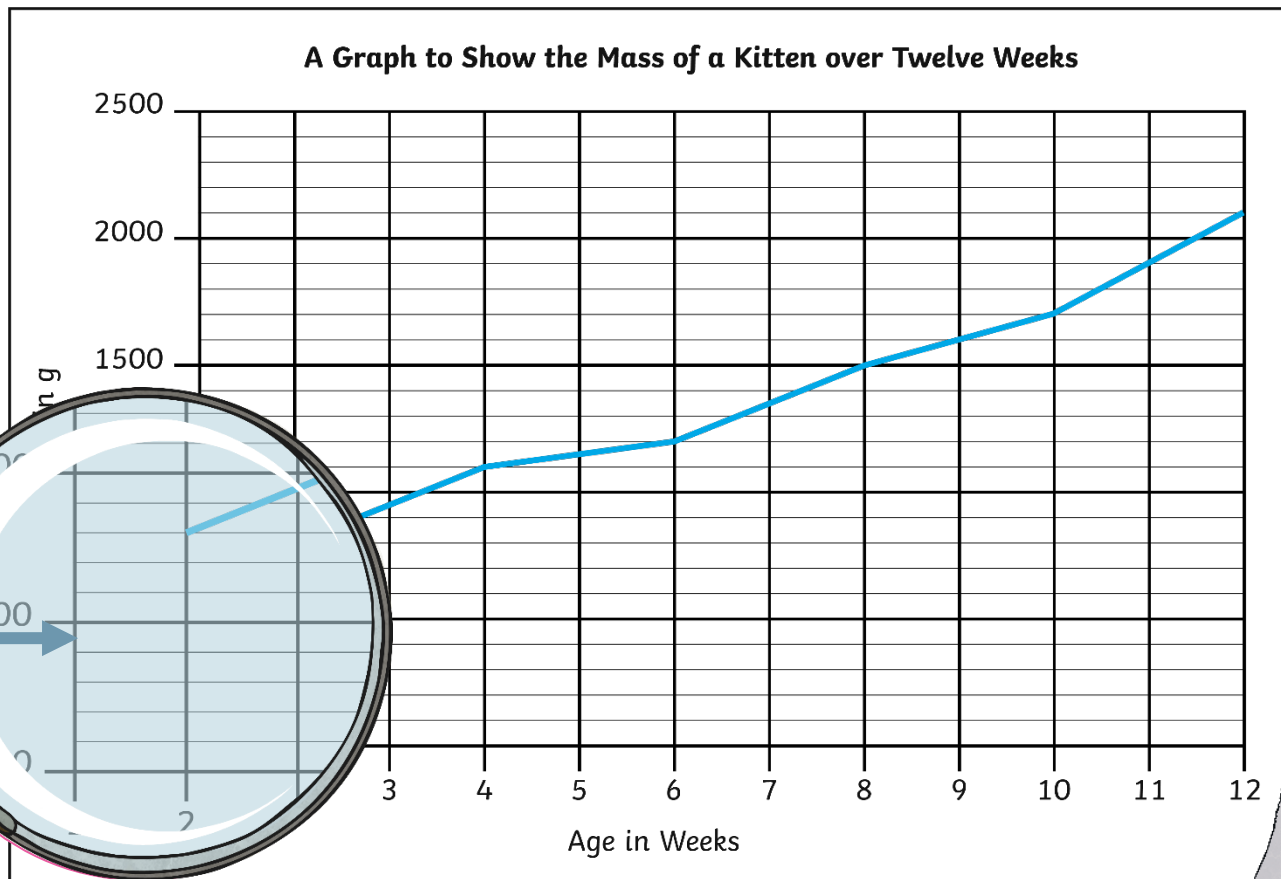
What is the difference in the kitten's mass at 3 and 4 weeks?  
and at 4 weeks?

3 and a half weeks or between  
3 and 4 weeks





A second kitten has a mass of 400g at birth and puts on 50g in a week. Where would we plot the first point on this graph?



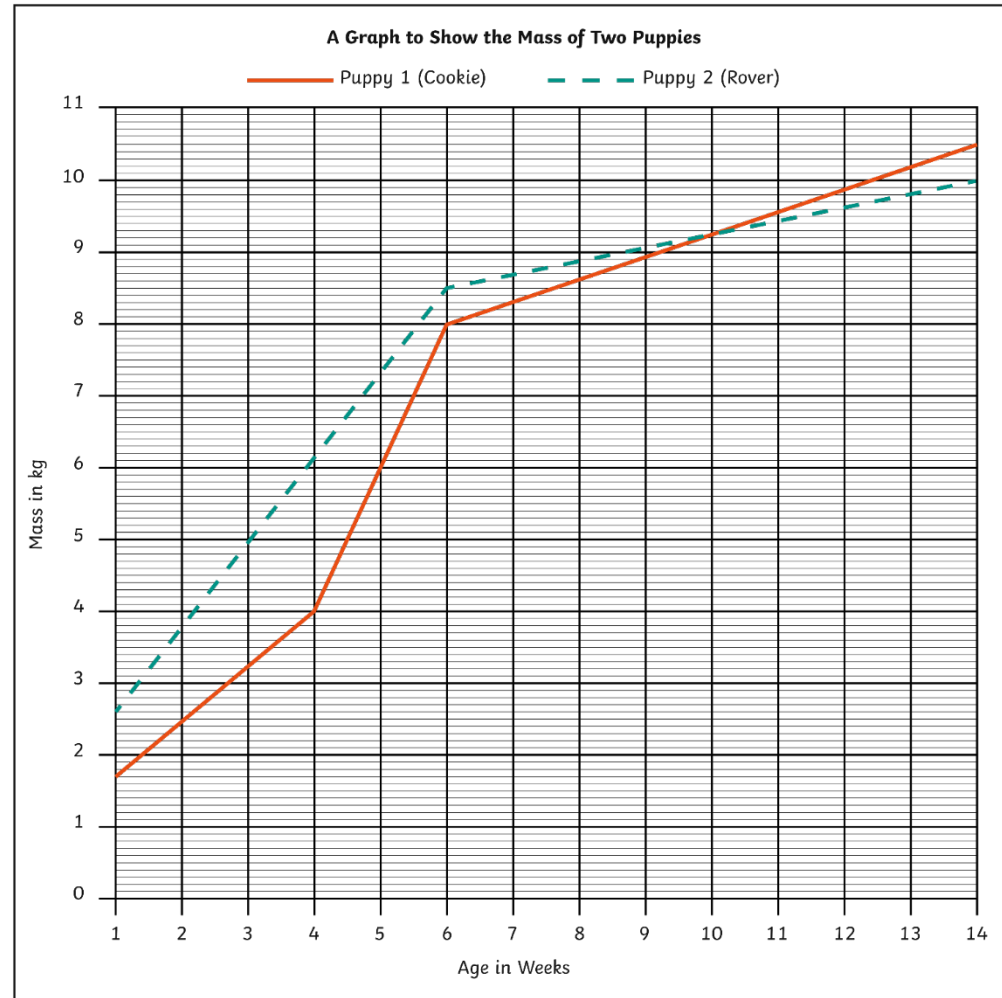
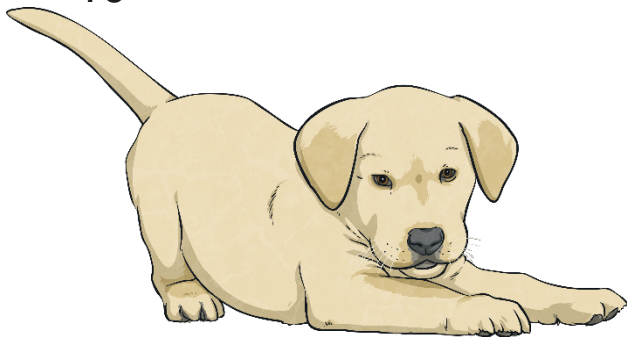


What is the difference between the mass of the 2 puppies at 7 weeks?

400g

When did Cookie become heavier than Rover?

After week  
10





Liz should have compared the difference between each puppy's mass in week 1 and week 14.

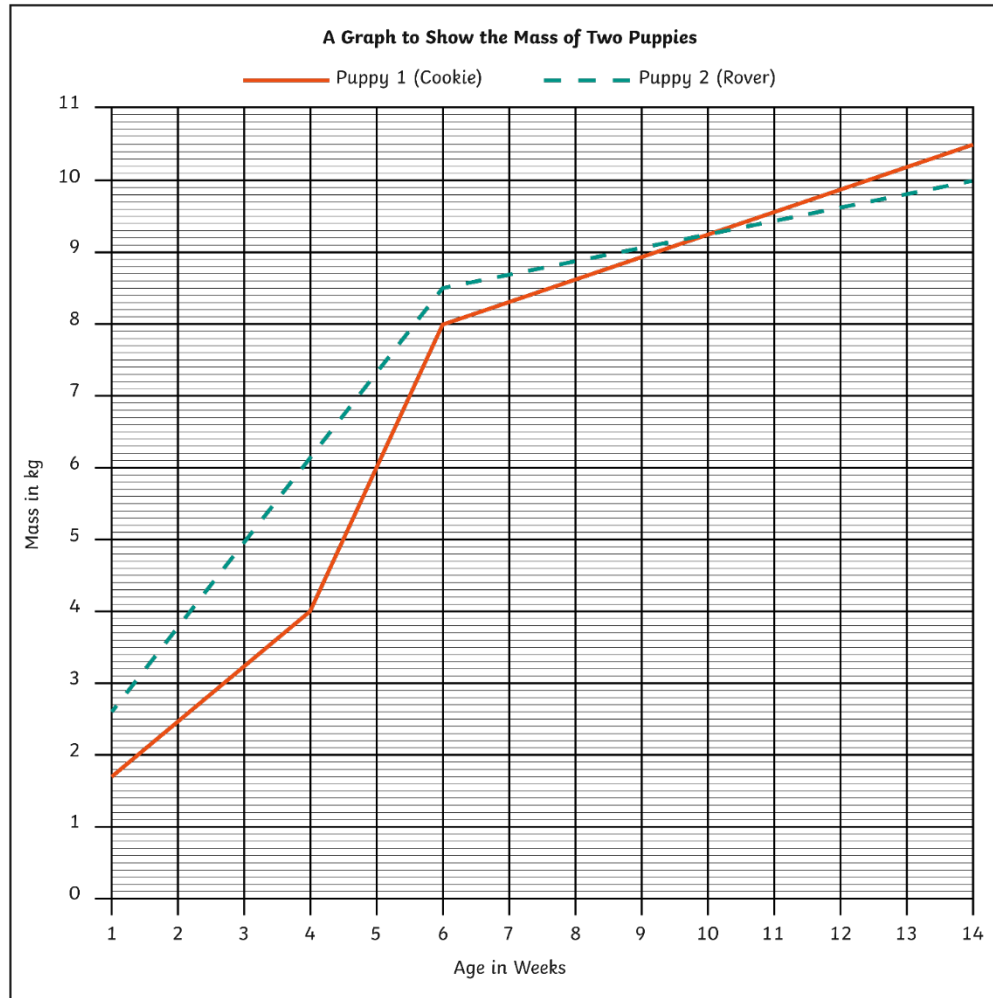
Cookie

$10.5\text{kg} - 1.5\text{kg} = 9\text{kg}$   
mass gain

Rover

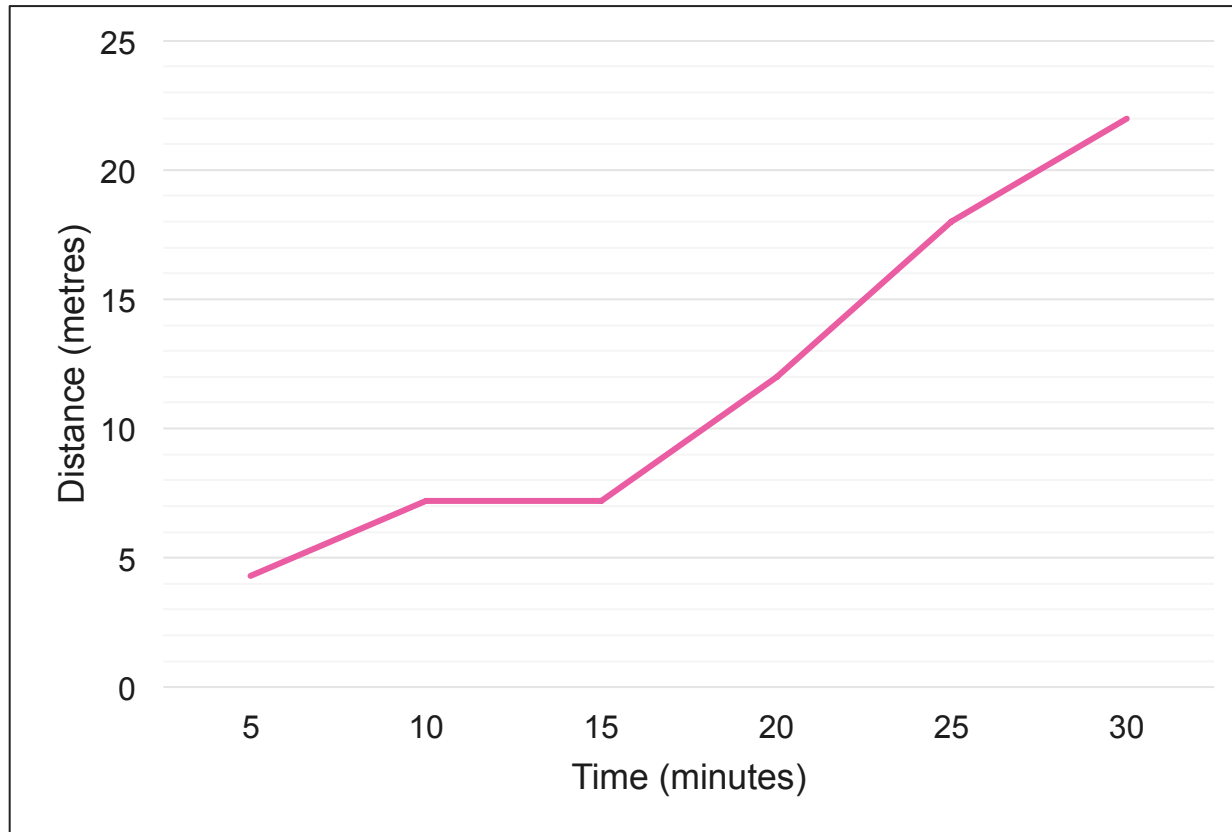
$10\text{kg} - 2.5\text{kg} = 7.5\text{kg}$   
mass gain

Cookie gained the most mass.





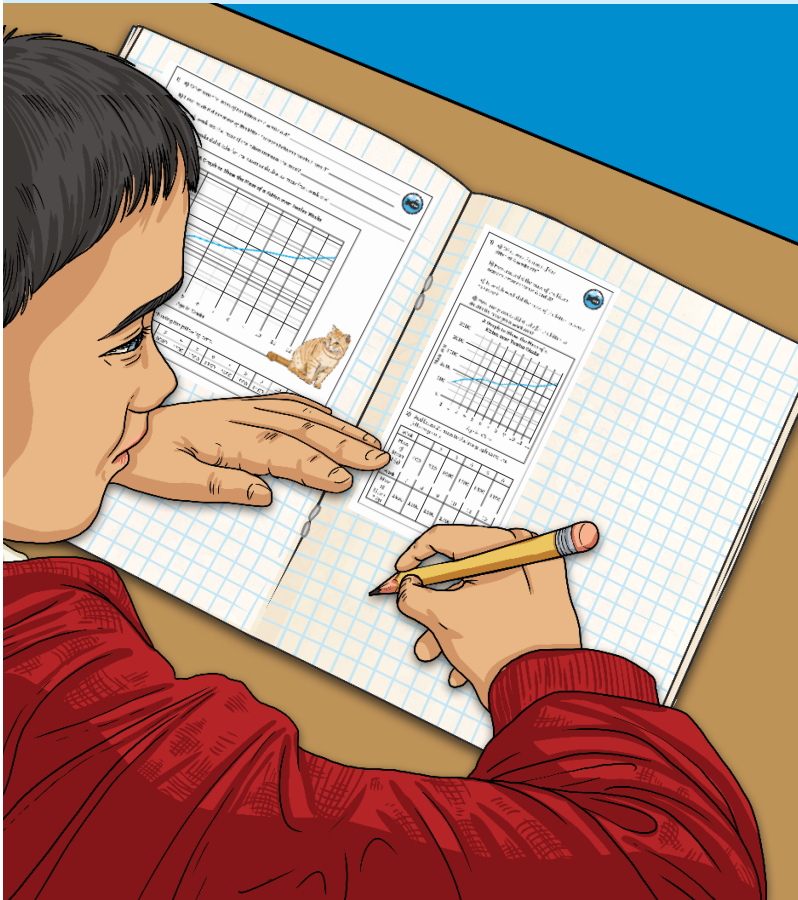
### How Far a Tortoise Walked around a Garden over Half an Hour



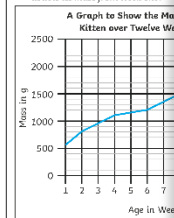
Discuss what you think happened to the tortoise over the course of the 30 minutes.

# Line Graphs

Dive in by completing your own activity!



- 1) a) What was the mass of the kitten at 4 weeks old?
- b) How much did the mass of the kitten increase between weeks 6 and 8?
- c) In which week did the mass of the kitten increase the most?
- d) How many weeks did it take for the kitten to double its mass from week one?



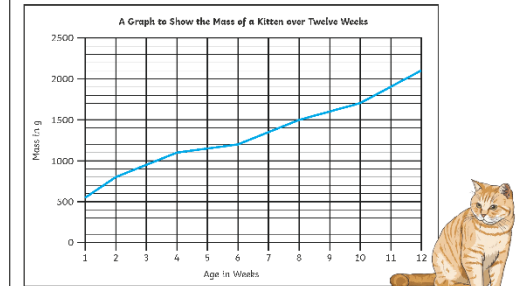
- 2) Add kitten 2's mass to the line graph following data.

Week	1	2	3	4
Mass of kitten 2 (g)	400	750	1000	1200

Week	7	8	9	10
Mass of kitten 2 (g)	1450	1500	1600	1700

- 1) a) What was the mass of the kitten at 4 weeks old? \_\_\_\_\_
- b) How much did the mass of the kitten increase between weeks 6 and 8? \_\_\_\_\_
- c) In which week did the mass of the kitten increase the most? \_\_\_\_\_
- d) How many weeks did it take for the kitten to double its mass from week one? \_\_\_\_\_



- 2) Add kitten 2's mass to the line graph using the following data.

Week	1	2	3	4	5	6	7	8	9	10	11	12
Mass of kitten 2 (g)	400	750	1000	1200	1300	1350	1400	1500	1600	1700	1800	1850

# Need Planning to Complement this National Curriculum Aim

Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and

other graphs.

For more planning resources to support this aim, [click here](#).

**Kings and Queens**  
In a 10-page lesson, children are presented with basic bar graphs, and Kings and Queens of England from the 12th to the 15th century.

**Kings and Queens Statistics**

**Kings and Queens Grouped Bar Chart**  
Read, Posing and Write four questions about the graph. How do the Kings and Queens of England compare in terms of their reigns?

**Statistics: Kings and Queens Statistics**

Updated Mastery Content

twinkl  
planit

**Sponsored Swim Stacked Graph**  
Rita and Anwar write four questions about the graph. Can you correctly answer them?

**Sponsored Swim Statistics**

**Find My Match**  
You have three minutes to quietly roam around the classroom to find your matching card generated just for you!

**Statistics: Sponsored Swim Statistics**

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Twinkl PlanIt is our award-winning scheme of work with over 4000 resources.



