Home Learning: Year 6 Maths

We have set out each week's learning as a series of suggested daily activities. However, the time may look very different for each family. Building in time to look after each other, be physical, creative and relax is as important as completing the set activities. You need to decide what works for you and your family. You could do more of the activities on one day and fewer on another, or you may find it helpful to have a more structured approach. It may help to give clear times for doing activities and clear times for breaks. You will also notice that some of the science, history and DT activities are the same and therefore can be done as a family.

Year 6	Day 1	Day 2	Day 3	Day 4	Day 5
Factual Fluency	https://uk.ixl.com/math /year-6/pie-charts	https://uk.ixl.com/math/ year-6/what-percentage- is-illustrated	https://uk.ixl.com/math /year-6/find-a-missing- angle-supplementary- angles	https://uk.ixl.com/math/year-6/create-line-graphs	https://uk.ixl.com/math/year-6/interpret-line-graphs
Four Days of Reasoning (Monday- Thursday)	Summer Term Week 4(w/c 11 th May) https://whiterose maths.com/homel earning/year-6/ Extension Tasks are below for pupils who normally work with Mrs T OR who have competed the daily task and feel like a challenge	to complete. White Rour schools. As you sugand incrementally. The recommend that you onto more complex, as If you feel your child rehttps://whiterosemat. If your child struggles lower down the school.	ch day. There is a vide ose is an excellent resupport your child, you le lessons will start verace ahead; spend times abstract ideas. The eds greater challent chs.com/homelearning with maths, they could.	•	ed by teachers in s concepts clearly e do not rd before moving set for year groups
Friday	=	his week's learning that you are not sure of sure of. You can simply repeat a lesson or not redo. You could also attempt the Y7 lessons on the White Rose link.			

Home Learning: Year 6 English

Year Six	Day 1	Day 2	Day 3	Day 4	Day 5
Reading	Make sure you have some quie normally do. Check out https://recommendations .	· · · · · · · · · · · · · · · · · · ·	-		
Writing	LO: Begin to Research a Biography This week, you will write a biography of David Walliams the children's author and performer. Watch this of an interview with David in which he discusses how he became a writer (amongst other things! https://www.bbc.co.uk/program mes/p06jt689 There is also an example of a biography below and a fact file here https://www.teachingideas.co.u k/sites/default/files/davidwallia msfactcards.pdf Write down 3 pieces of information you learned about the author and 3 questions you would like to ask him. Draw a mind-map of information you have learned about the author. Look below for an example.	Co: Plan a Biography Organise your information about David Walliams into the following subheadings: Introduction Early life Inspiration for writing Career/ famous work and achievements Conclusion There is a planning format below to help structure your ideas, which you might choose to use.	LO: Write a Biography Day 3 Write the first paragraphs of David Walliams: Introduction Early life and inspiration sure you look at the example you get stuck (you can be copy word for word) Day 4 Write the remaining paragraphic biography of David: Career/ famous work and Conclusion: In your conwrite a few sentences a most famous for — ie himaking people smile.	n for writing. Make ample given below if borrow ideas but don' raphs of your achievements clusion you should about what David is	Writing. Finish, edit, revise your persuasive letter text. Use a green pen if you have one. Share it with someone in your family. When you are happy with your work, you can upload it on ClassDojo.

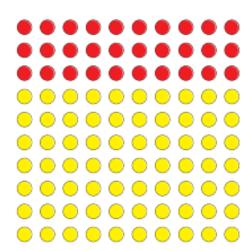
Home Learning: Year 6 Curriculum

Day 1	Day 2	Day 3	Day 4	Day 5
Geography	Science	Art	RE	DT
LO: Begin to understand	LO: Revise life-cycles	LO: To understand	How do we mark the	LO: Research and compare
biomes and climate	 Look at the life 	negative space.	key moments in our	prehistorical ages
zones	cycles of these	For this project you will	lives? Christians often	Clickhttps://www.bbc.co.uk/bit
What are biomes and	animals: frog, chicken,	be drawing what is not	celebrate key	esize/topics/z82hsbk/articles/z
climate zones?	butterfly, Komodo	there!	moments, or	pny34j scroll down and
 Visit 5 different places 	dragon, dog and fish	Pick a simple-shaped	milestones, such as	explore 'How do we know
in your house: How are	(see resources below).	object with a clear	Baptism and	about prehistory?' Click on
they different? Make	Explain how they are	outline and put it	Confirmation	the images and record in
notes to start a colourful	the same and how	against a plain	Create a timeline of	words and pictures the main
and engaging mind map t.	they are different. You		the special moments	events for each prehistoric
 Watch this video 	can organise your	background so you can	in your life so far, for	age.
https://www.bbc.co.uk/b	explanations in a table	see the outline clearly.	example your day of	Create a timeline:
itesize/topics/z849q6f/art	or a poster or in a	Using charcoal,	birth, the birth of a	https://schoolsprehistory.files.
icles/zvsp92p about	written exp	crayons, chalks or paint	brother or sister,	wordpress.com/2014/08/later- prehistory-timeline.jpg to
biomes and this video	Make some	draw the area around	religious ceremonies,	explain to someone in your
https://www.bbc.co.uk/b	generalisations, e.g. all	the object, not the	moving house, starting	house the main events in the
itesize/clips/zr7hyrd	life cycles start with an	object itself.	school, family	Stone Age, Bronze Age and
about climate zones.	egg, except for that of	Keep on filling in the	celebrations or other	Iron Age. Click here:
Add new information to	a mammal.	space until you get near	special times.	https://www.mathsisfun.com/a
your mind map; include a		to the outline of the	Use pictures or	d-bc.html for an explanation
definition of 'biome' and		object and then use a	drawings to illustrate.	of the terms AD and BC.
a definition of 'climate		pencil and your	See example below.	
zone'.		colouring materials to		
		shape and finish it.		
	Everything is Ir	nteresting – are you read	y for a challenge?	

Fractions to percentages



1

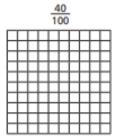


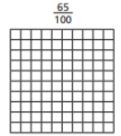
- a) What fraction of the array of counters is red?
- b) What fraction of the array of counters is yellow?
- c) What percentage of the array of counters is red?
- d) What percentage of the array of counters is yellow?
- e) What do you notice about the two percentages?

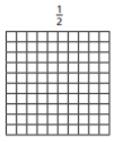


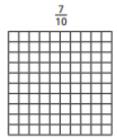
2

a) Shade the hundred squares to represent the fractions.









b) Write the fractions as percentages.

c) Compare your shaded grids with a partner's.
What is the same and what is different?



- Fill in the missing numbers.
 - a) $\frac{9}{10} = \frac{100}{100} = \frac{9}{9}$
- c) $\frac{9}{50} = \frac{100}{100} = \frac{9}{100}$
- b) $\frac{9}{20} = \frac{100}{100} = \frac{9}{100}$
- d) $\frac{9}{25} = \frac{100}{100} = \frac{9}{100}$
- $\frac{1}{10}$ is 10%, so $\frac{1}{20}$ must be 20%.

Explain the mistake that Ron has made.

What is the correct answer?

- Convert the fractions to percentages.
 - a) $\frac{1}{4} =$
- b) 1/5 =
- 1/2 =

2/5 =

3 =

4/5 =

- c) $\frac{16}{20}$ =
- d) $\frac{45}{50}$ =

8/20 =

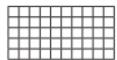
9 =

4/20 =

- 18 =
- e) What do you notice?



- 3/5 greer
- 14% re
- 4/20 blue
- the rest yellow



b) What percentage of the grid is yellow?

a) Use each digit card once to make the statements correct.



- 1
- 2
- 3
- 4
- 5

- > 0%
- 75% = 4
- 3 < 65%

b) Are there any other solutions?



White Rose Maths

Equivalent FDP

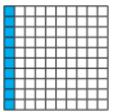
What fraction, decimal and percentage of each grid is shaded blue?

				П	

fraction =

decimal =

percentage =

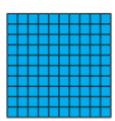


fraction =

decimal =

decimal =

percentage =



fraction =

percentage =

Match the equivalent fractions, decimals and percentages.



15 100 0.05

5%

1 20

0.5

15%

<u>1</u> 5

0.2

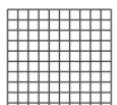
50%

1/2

0.15

20%

3 a) Shade the grid in the given proportions.



- 3 green
- 0.03 red
- 13% blue
- 0.3 yellow

b) What proportion of the grid is unshaded?
Write your answer as a fraction, decimal and percentage.

	1		
fraction =	decimal =	percentage =	



Complete the table.

Fraction	Decimal	Percentage
	0.21	
		12%
2 10		
	0.4	
	0.44	
		4%
3 4		
	0.99	

5 Amir was asked to complete the statement using <, > or =.

14% > 0.4



14 is greater than 4

What mistake has Amir made?

6 Match the decimal cards to the people.





My decimal is $\frac{4}{10}$ less than 100%.





My decimal cannot be simplified when it is written as a fraction.





My decimal is 10% less than $\frac{3}{4}$





My decimal is greater than 60%.



Use the digit cards to write a decimal greater than $\frac{1}{5}$ but less than 40%.



You may not use a card more than once in each number.













How many other answers can you find?

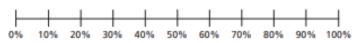


White Rose Maths

Order FDP

- Write < , > or = to complete the statements.
 - a) 64% 0.46
- d) 0.8 () 80%
- b) 0.96 97
- e) 67% $\left(\right) \frac{7}{10}$
- c) $\frac{3}{5}$ 35%
- f) $\frac{7}{20}$ 0.3
- 2 Draw arrows to estimate the positions of the fractions, decimals and percentages on the number line.





b)
$$\frac{2}{5}$$
 0.52 45% 0.3



- Write the fractions, decimals and percentages in ascending order.
 - a) $\frac{7}{10}$ $\frac{13}{100}$
 - 21% 0.9
 - **b)** 0.6 61% $\frac{37}{50}$ 0.66
 - c) 47% 0.89 63 12%
 - d) Which part was easiest to order: a), b) or c)? _____ Why?
 - e) Which set was most difficult to order: a), b) or c)? _____ Why?
 - f) Compare answers with a partner.
 What is the same and what is different?



These fractions, decimals and percentages are in descending order.

99%

.

.7

49%

Tick the fractions, decimals and percentages that could fill the gap.

0.78

51%

3/5

0.6

4 10

5 Tommy scored $\frac{40}{50}$ on a Maths test.

Aisha got 78% of the test correct.

Aisha thinks she has done better because 78 is greater than 40

Do you agree with Aisha? _____

Explain your answer.

6 Huan, Nijah and Scott each started with a 1-litre bottle of juice.

Huan drank 0.55 litres.

Nijah drank 59% of her juice.

Scott has $\frac{4}{10}$ of his juice left.





Who drank the most? Show your working.

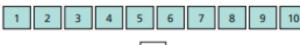
drank the most.

Who drank the least? Show your working.

drank the least.



a) Use the digit cards to make the statement correct.



How many different solutions can you find?

b) Use the digit cards to write a percentage greater than $\frac{2}{5}$ but less than 75%.

How many different percentages can you find?

Compare answers with a partner.

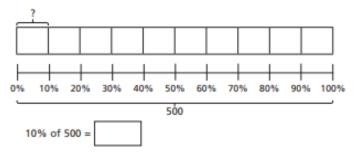




White Rose Maths

Percentage of an amount (2)

a) Use the bar model to find 10% of 500



b) Use your answer to part a) to help you complete the calculations.

2



To find 5% you can find 10% and then halve it.

		7	
	2	1	
١	Ē	1	

Use Dora's method to complete the calculations.

What do you notice about your answers?



Some children are asked to find 75% of 340



a) Use Dexter's method to find 75% of 340





I will find 10% and multiply it by 7, then find 5% and add them together.

b) Use Alex's method to find 75% of 340





I will find 25% and 50% and add them together.

c) Use Amir's method to find 75% of 340



d) Are there any other methods you could use?



Talk to a partner about different methods for finding these percentages.

20%

90%

60%

55%

15%

40%

Use your preferred method to calculate the percentages.

a) 20% of 1,000 =

d) 15% of 1,000 =

20% of 550 =

15% of 300 =

20% of 40 =

15% of 30 =

b) 90% of 1,000 =

e) 55% of 1,000 =

90% of 4,230 =

55% of 4,400 =

90% of 90 =

55% of 8 =

c) 60% of 1,000 =

f) 40% of 1,000 =

60% of 400 =

40% of 400 =

60% of 98 =

40% of 98 =



Ron is calculating these percentages.

10% of 20

20% of 10



20% is double 10%, and 10 is half of 20, so I know these will both have the same answer.

How does Ron know this?



a) Complete the calculations.

20% of 40 =

25% of 60 =

40% of 20 =

60% of 25 =

b) What do you notice about the answers?

- c) Does this always happen? Investigate with other examples.
- d) Talk about your findings with a partner.

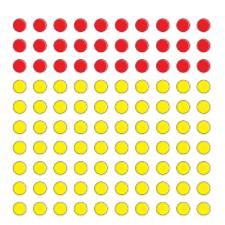




Fractions to percentages

White Rose Maths

1

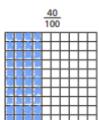


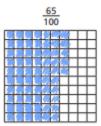
- a) What fraction of the array of counters is red?
- 10
- b) What fraction of the array of counters is yellow?
- 710
- c) What percentage of the array of counters is red?
- 30 %
- d) What percentage of the array of counters is yellow?
- 70 %
- e) What do you notice about the two percentages?

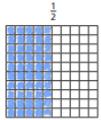


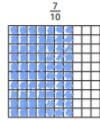
2

a) Shade the hundred squares to represent the fractions.









b) Write the fractions as percentages.

$$\frac{40}{100} = L_{10} %$$

c) Compare your shaded grids with a partner's. What is the same and what is different?



- 3 Fill in the missing numbers.
 - a) $\frac{9}{10} = \frac{9}{100} = 90$
- c) $\frac{9}{50} = \frac{18}{100} = 18$ %
- b) $\frac{9}{20} = \frac{45}{100} = 45$
- d) $\frac{9}{25} = \frac{36}{100} = 36$ %
- $\frac{1}{10}$ is 10%, so $\frac{1}{20}$ must be 20%.

Explain the mistake that Ron has made.

What is the correct answer?

$$\frac{1}{20} = 5$$
 %

- Convert the fractions to percentages.
 - a) $\frac{1}{4} = 25\%$
- b) 1/5 = 20 %
- 1/2 = 50 %
- 2 = 40%

 $\frac{3}{4} = 75\%$

4 = 80%

- c) $\frac{16}{20} = 80\%$
- d) $\frac{45}{50} = 90\%$
- $\frac{8}{20} = L_1 \hat{O}\%$
 - 20%
- e) What do you notice?
- a) Shade the grid in the given proportions.
 - $\frac{3}{5}$ green
- 14% red
- 4/20 blue
- 14/0100

the rest yellow



b) What percentage of the grid is yellow?

a) Use each digit card once to make the statements correct.



- 1
- 2
- 3
- 4
- 5

- 1 > 4 0%
- 75% = 3
- 3 5 < 65%

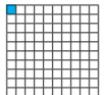
b) Are there any other solutions?



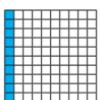


Equivalent FDP

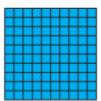
What fraction, decimal and percentage of each grid is shaded blue?



fraction =
$$\frac{1}{100}$$

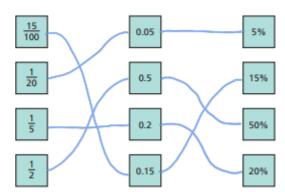


fraction =
$$\frac{1}{10}$$

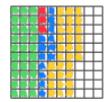


fraction =
$$\frac{100}{100}$$

Match the equivalent fractions, decimals and percentages.







- 3/10 green
- 0.03 red
- 13% blue
- 0.3 yellow

b) What proportion of the grid is unshaded?
Write your answer as a fraction, decimal and percentage.

fraction =
$$\frac{6}{25}$$
 decimal = 0.24 percentage = $24.\%$



Complete the table.

Fraction	Decimal	Percentage
2 <u>1</u>	0.21	21%
3 45	0-12	12%
2 10	0.2	20 7.
2 5	0.4	40 %
1 <u>1</u> 25	0.44	44 %
25	0-04	4%
3 4	0.75	75 %
99	0.99	99 %

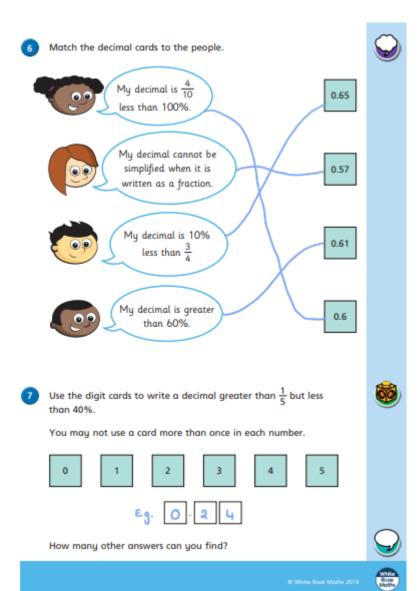
Amir was asked to complete the statement using <, > or =.



What mistake has Amir made?

He book compand them in the same form. 0.4=40 %

and 40% > 14% so 14% < 0.4





Order FDP

- 1) Write <, > or = to complete the statements.
 - a) 64% (>) 0.4
- d) 0.8 (=) 80%
- b) 0.96 (<) 97
- 67% (<) 7/10
- c) $\frac{3}{5}$ > 359
- f) $\frac{7}{20}$ > 0.3
- Draw arrows to estimate the positions of the fractions, decimals and percentages on the number line.



- a) 9% 9/10 0.99 19% 9/10 0.99 19% 0.99 100% 0.99 100% 0.99 100% 0.99 100% 0.99 100% 0.99 100% 0.99 100%
- b) $\frac{2}{5}$ 0.52 45% 0.2

- Write the fractions, decimals and percentages in ascending order.
 - a) $\frac{7}{10}$

00

21%

6 (

13 , 21%, 港, 0.9

b) 0.6 61% 37 0.60

0.6, 61%, 0.66, 50

c) 47% 0.89 63

12% 47% 100,0.89

d) Which part was easiest to order: a), b) or c)? _____ Why?

12%

Various anowers.

e) Which set was most difficult to order: a), b) or c)? _____ Why?

Various answers.

f) Compare answers with a partner.

What is the same and what is different?





99%

89

0.7

49%

Tick the fractions, decimals and percentages that could fill the gap.

0.78

51%

 $\frac{3}{5}$

0.6

4 10

5 Tommy scored $\frac{40}{50}$ on a Maths test.

Aisha got 78% of the test correct.

Aisha thinks she has done better because 78 is greater than 40

Do you agree with Aisha? No

Explain your answer.

40 50%

and

80% 7 78°

% so Tommy

bekter.

6 Huan, Nijah and Scott each started with a 1-litre bottle of juice.

Huan drank 0.55 litres.

Nijah drank 59% of her juice.

Scott has $\frac{4}{10}$ of his juice left.







Who drank the most? Show your working.

Scott drank the most.

Who drank the least? Show your working.

_______ drank the least.



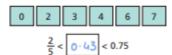




How many different solutions can you find?

Various answers.

b) Use the digit cards to write a percentage greater than $\frac{2}{5}$ but less than 75%.



How many different percentages can you find?

Various answers.

Compare answers with a partner.

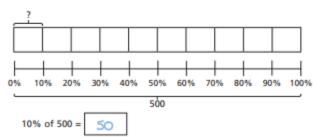




White Rose Maths

Percentage of an amount (2)

a) Use the bar model to find 10% of 500



b) Use your answer to part a) to help you complete the calculations.

2



To find 5% you can find 10% and then halve it.

Use Dora's method to complete the calculations.

What do you notice about your answers?



Some children are asked to find 75% of 340



a) Use Dexter's method to find 75% of 340





I will find 10% and multiply it by 7, then find 5% and add them together.

b) Use Alex's method to find 75% of 340



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I will find 25% and 50% and add them together.

c) Use Amir's method to find 75% of 340

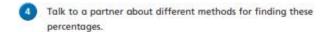
255

40%

150

45

d) Are there any other methods you could use?



20%

15% Use your preferred method to calculate the percentages.

a) 20% of 1,000 = d) 15% of 1,000 =

20% of 550 = 15% of 300 =

4.5 20% of 40 = 15% of 30 =

b) 90% of 1,000 = 900

550 e) 55% of 1,000 =

90% of 4,230 = 3,807 55% of 4,400 = 2,420

55%

90% of 90 =

55% of 8 =

c) 60% of 1,000 = 600 f) 40% of 1,000 = 400

60% of 400 = 240 40% of 400 = 160

60% of 98 = 58.8

39.2 40% of 98 =

Ron is calculating these percentages.

10% of 20

20% of 10



20% is double 10%, and 10 is half of 20, so I know these will both have the same answer.

How does Ron know this?



a) Complete the calculations.

20% of 40 = 25% of 60 =

40% of 20 =

60% of 25 =

b) What do you notice about the answers?

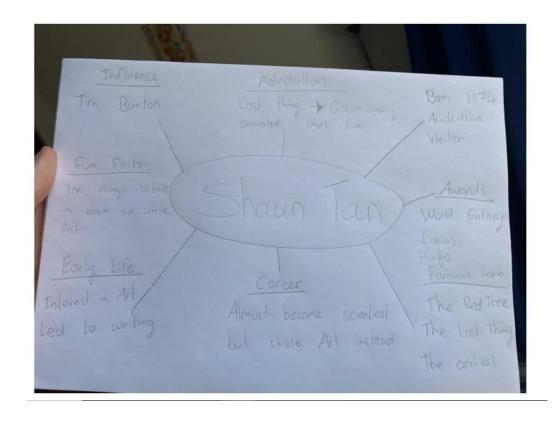
Each column is the same

- c) Does this always happen? Investigate with other examples.
- d) Talk about your findings with a partner.



English Resources

Day 1: Example Mind Map



Day 2 – Planning Format

Introduction	General specific Viewpoint	
Early Life		
travels/inspiration		
Career/famous		
Conclusion	Viewpoint specific General	

ay 2: Plan that you can make yourself

David Walliams is a comedian, actor and author. He has also been a judge on TV talent shows and written scripts for TV.

David's Childhood

David was born in Merton, London. His dad, Peter, was an engineer and his mum, Kathleen, was a lab technician. He went to school in Surrey, where he started acting and had to dress up in a wedding dress which made people laugh.

David the Author

David was a famous comedian and had his own TV show with his friend Matt Lucas, but he had always wanted to be an author. David wanted to write a book with the message that it's OK to



be different. In 2008, he published The Boy in the Dress - a story about a boy who loves football and wearing dresses. The book sold over half a million copies.

> David has now written twelve chapter books for children and six picture books for

> > younger readers. His books are illustrated by the famous illustrators Quentin Blake or Tony Ross.

Did You Know...?

David changed his surname from
Williams to Walliams because there
was already an actor called
David Williams!

Many of his books have been turned into films, and David often appears in them as an actor! His most famous books include Mr Stink, Billionaire Boy, Gangsta Granny and Ratburger.

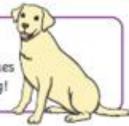
Amazing Charity Work

David has raised lots of money for charity. In 2006, David swam the English Channel to raise money for Sport Relief. It took him 10 hours and 34 minutes to swim 22 miles. This is the same distance as 700 lengths of an Olympic-sized swimming pool!



given by The Queen.

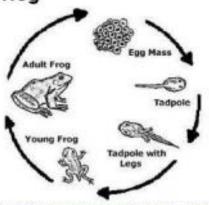
Did You Know...? When David was swimming the river Thames for charity, he saved a dog from drowning!



Resources Science:

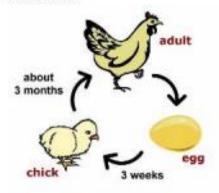
Life Cycles

Frog



for http://somnocartechomasdencetook.com/ortice/field/cla-hog/

Chicken

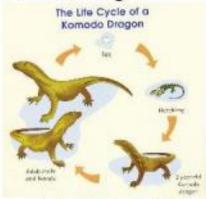


Non-Intra-Viscounistanas opusions/1887/4/7/8898/889

Butterfly



Komodo Dragon



from https://www.nerterach.co.uc/nin/as/14/140755 (55048)

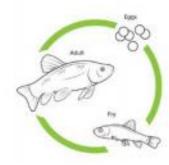
Dog



Non titras (inchi com/accelent) leson/compatito lite cycles of mammas leson for litas (inc

Fish

Life Cycle of a Fish

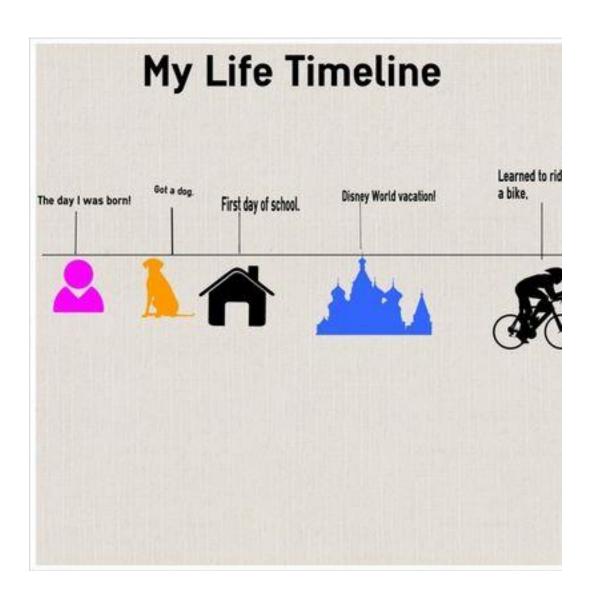


Art

When filling in the space around the object, look for simple shapes that you can see – circles, triangle, squares and fill them in (see fig i)- this will help you to create the right shape for your object.

Always keep your mind on the shape of the space.





RE – Example of My Life Timeline

Mrs T's Maths Groups - Year 6

Week beginning: 11th May 2020

Day 1.) LO: Trial & Improvement/Problem Solving

Click on the following link: https://nrich.maths.org/1005

Task: Use Trial and Improvement to solve the problem. Answers can be found on this link, as well.

Day 2.) LO: Trial & Improvement/Problem Solving

Click on the following link: https://nrich.maths.org/6342

Task: Use Trial and Improvement to solve the problem. Answers can be found on this link, as well.

Day 3.) LO: Trial & Improvement/Problem Solving

Click on the following link: https://nrich.maths.org/7506

Task: Use Trial and Improvement to solve the problem. Answers can be found on this link, as well.

Days 4.) LO: Ratio

Click on the following link:

https://nrich.maths.org/11685

Task: Use Trial and Improvement to solve the problem. Answers can be found on this link, as well.

Days 5.) LO: Trial & Improvement/Problem Solving

Click on the following link: https://nrich.maths.org/11718#

Task: Use Trial and Improvement to solve the problem. Answers can be found on this link, as well.