Year 5/6 Maths W/C 1st June

Date	Monday 1st June	
Subject/s	Maths	
	To recall and use multiplication	m facts
1 × 4 =	3 × 11 =	10 × 7 =
4 × 5 =	10 × 2 =	9 × 5 =
10 × 6 =	3 × 2 =	2 × 10 =
2 × 5 =	7 × 3 =	10 × 9 =
7 × 4 =	4 × 3 =	9 × 10 =
1 × 6 =	7 × 7 =	12 × 6 =
3 × 7 =	3 × 12 =	7 × 9 =
5 × 1 =	2 × 9 =	6 × 10 =
11 × 4 =	11 × 6 =	4 × 2 =

Date	<u>01.06.20</u>								
Subject/s	Maths								
Learning Objective									
	To find ratio								
		SA	TA						
		X	Å ₩						
Success Criteria	I know ratio compares two or more objects that increase together								
✓! 📃	for every I can write ratios I can link ratios to fractions								
Support	Independent Adult Support () Group Work	,							
Pre-task:									
Complete the senten	ices.								
🜻 🌻									
For every two blue flower	owers there are pink flowers. There are pink flowers.								

What is ratio? <u>https://www.schoolsofkingedwardvi.co.uk/ks2-maths-year-6-6a-ratio-proportions-ratio/</u>

To work out the ratio—



Your turn- complete the ratios



Fluency—



Colour the counters so that they are in the correct ratio

Blue : Red = 2 : 1	$\bigcirc \bigcirc \bigcirc \bigcirc$
Red : Green = 1 : 3	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$
Yellow : Blue = 1 : 2	00000
Blue : Green = 2 : 3	$\bigcirc \bigcirc $
Red : Yellow = 3 : 2	000000000000000000000000000000000000000
Blue : Red = 4 : 1	000000000000000000000000000000000000000
Green : Red = 3 : 1	00000000

Date	2.06.20	
Subject/s	Maths	
Learning Objective		
80° ~	To recall and use multiplicatio	n and division facts
2 × 5 =	8 × 12 =	1 × 10 =
3 × 11 =	10 × 8 =	4 × 1 =
6 × 8 =	7 × 5 =	11 × 9 =
9 × 7 =	7 × 7 =	9 × 8 =
3 × 3 =	7 × 4 =	3 × 7 =
2 × 7 =	7 × 2 =	9 × 7 =
9 × 2 =	8 × 10 =	3 × 8 =
6 × 7 =	7 × 10 =	5 × 6 =
7 × 9 =	5 × 3 =	5 × 9 =
12 × 4 =	4 × 8 =	11 × 3 =
4 × 2 =	4 × 9 =	10 × 3 =
11 × 2 =	4 × 4 =	2 × 6 =
9 × 10 =	10 × 4 =	2 × 8 =

Date	02.06.20		
Subject/s	Maths		
Learning Objective	To simplify ratio		
		SA	TA
		S	
Success Criteria	I know ratio compares two or more objects that increase together		
	I hnow simplifying ratig doesn't change the amount		
V (<u>s</u>	I can link ratios to fractions		
Support	Independent Adult Support () Group Work		
Complete the sentences to For every 6 apples there a of the fruit are apples,	o compare the apples and oranges.		

Squared paper and a multiplication grid to help you, try to use the squared paper more than the multiplication grid.

The multiplication grid is only for support if you REALLY need it.

Х	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

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What is ratio? <u>https://www.schoolsofkingedwardvi.co.uk/ks2-maths-year-6-6a-ratio-proportions-ratio/</u>

Example video of simplifying ratios: <u>https://www.youtube.com/watch?v=cbjQWf41108</u>, <u>https://www.bbc.co.uk/bitesize/topics/zsq7hyc/articles/z8kfnbk</u>

If I have a ratio of 6 boys to every 8 girls, it could be written like 6:8. But I could simplify it further by dividing both sides by 2 (like fractions!). This will give me the ratio 3:4. The ratio has not changed. It has just been simplified.



Your turn:

You must show your working out like the ones above!

A1 Simplify the ratio 4:8	A2 Simplify the ratio 2:10	A3 Simplify the ratio 10:15	A4 Simplify the ratio 9:15
B1 Simplify the ratio 14:7	B2 Simplify the ratio 12:3	B3 Simplify the ratio 20:8	B4 Simplify the ratio 20:15

Fluency

A	B	C
8:4	9 : 27	49 : 28
9:3	30 : 18	45 : 40
12 : 6	30 : 6	63 : 36
2 : 10	45 : 36	70 : 60
6 : 18	35 : 15	36 : 81
15 : 3	8 : 48	80 : 8



Date	3.06.20
Subject/s	Maths
Learning Objective	To recall and use division facts

4)16	3)30	5)45	3)15	9)18
8)24	9)36	9)54	10) 20	2)4
6)48	4)36	5)35	7)42	7) 28
4) 40	3) 27	8) 80	10) 40	7) 63
2) 12	8) 32	3)9	10) 100	2) 18

Date	03.06.20		
Subject/s	Maths		
Learning Objective			
	To write ratio		
		SΔ	ТΔ
		37	
			Å ₩
Success Criteria	I can identify the parts in the word problem		
	I can identify/work out the whole		
✓! 📃	I can write the ratio as part: part = whole		
Support	Independent Adult Support () Group Work	, ,	
Pre-task: Emily has a packet of sr ratio. How many sweets	veets. For every 3 red sweets there are 5 purple sweets. Wr > does Emily have altogether?	rite this	, as a



Circles: Triangles = Total 15: 20 = 35 Lets simply the ratio Circles: Triangles

The simplified ratio of circles: triangles is 3:4

You need to write headings for the ratios (not just the numbers!) so you know what the ratios represent!

<u>Your turn:</u>

<u>1.</u>





Ratios can look like word problems too

Sam has new pencils, 5 of them are <u>blue</u> and 15 of them are <u>red</u>. What is the ratio of blue to red pencils? Then write it in its simplest form.

Blue: Red

5:30

Simplified

Your turn:

1. There are some fish in a fish tank, 12 are big and 32 are small, what is the ratio? Then simplify it.

2. A pattern has 4 blue triangles to every 12 yellow triangles. What is the ratio of blue triangles to all triangles?

Fluency

A:

- 1. A class has 8 boys and 24 girls. What is the ratio of girls to boys?
- 2. Ben has 5 yellow cars and 15 black cars. What is the ratio of yellow cars to black cars?
- 3. Sam is growing flowers, she has planted 9 purple and 18 pink. What is the ratio of purple to pink flowers?
- 4. Ash has 8 oranges and 16 apples. What is the ratio of oranges to apples?

B:

- 1. Jack bought 9 footballs and 27 tennis balls, what is the ratio?
- 2. Parked on the road are 30 black cars and 18 silver cars, what is the ratio?
- 3. At dinnertime 30 children had pizza and 6 had cheese rolls, what was the ratio ?
- 4. The ice cream man sold 45 chocolate ice creams and 36 strawberry, what was the ratio?

C:

- 1. Kevin buys 64 new pencils, 24 of them are broken, what is the ratio?
- 2. There are 49 children ordered chicken for dinner and 63 ordered pasta, what was the ratio of children ordering chicken to pizza?
- 3. Sofia makes a drink for every 6ml of orange you need 60ml of lemonade, what is the ratio of orange to lemonade to make the drink?
- 4. A shop sells 49 bags of apples and 70 bags of chips, what is the ratio of apples to chips sold at the shop?

Extra word problems for practice

In the zoo there are five giraffes for every two rhinos. Write this as a ratio	In a class there are three girls for every two boys. Write this as a ratio	A racing school has two Ferraris for every three Lamborghinis. Write the ratio of Ferrari to Lam- borghinis.	A theme park has four roller coasters for every three other types of ride. Write the ratio of coaster's to other rides.
There are 45 girls and 30 boys. Write in its simplest form the ratio of boys to girls.	In a tin of beans and sausages there are 8 sausages to 240 beans. Write in its sim- plest form sausages to beans.	Money taken at a school fair is in coins and notes. There are 550 coins and 150 notes. Write the ratio of coins to notes in its simplest form	A game of fortnite has 45 wins to 150 games. Write the ratio of wins to games in its sim- plest form
There are 6 eggs in each egg box. Write, in its simplest form, how many eggs there are to egg boxes if you have 72 eggs.	A student has been col- lecting coins. He has 20 50p's and 25 £1. Write in its simplest form the value of 50p to £1	A cake takes 360g of flour, the same amount of sugar, the same amount of butter, and 6 eggs. Write this ratio in its simplest form	A train takes 1 and a half hours to do a jour- ney, where as the bus takes three times this amount. Write the ratio of train time to bus times in minutes, as a ratio in its simplest form

Problem Solving and Reasoning						
Use it!						
Complete:						
•						
The ratio of re	ed counters to blue counters is 🗌 :					
The ratio of b	lue counters to red counters is					
Explain it!	Which is the odd one out?					
00	Explain your answer.					

Date	04.06.20	
Subject/s	Maths	
Learning Objective	Ta recall and use multiplication and division facts	
8	To recail and use multiplication and arriston Jacis	

3 × 3 =	4 × 4 =	11 × 10 =
6 × 8 =	7 × 5 =	10 × 2 =
12 × 5 =	8 × 12 =	3 × 12 =
8 × 6 =	10 × 11 =	4 × 9 =
10 × 12 =	4 x 2 =	5 × 7 =
11 × 2 =	10 × 3 =	9 x 8 =
3 × 9 =	6 x 8 =	10 × 7 =
4 × 11 =	12 × 10 =	7 × 8 =
2 × 5 =	2 × 11 =	4 × 3 =
6 × 10 =	8 × 3 =	12 × 4 =
10 × 9 =	3 × 4 =	5 × 8 =
2 × 12 =	4 × 5 =	8 × 8 =
5 × 3 =	7 × 8 =	12 × 2 =
9 × 4 =	8 × 10 =	5 × 4 =
5 × 5 =	2 × 8 =	9 × 5 =
8 × 8 =	8 × 0 =	8 × 11 =
9 × 10 =	4 × 12 =	2 × 10 =
5 × 2 =	12 × 8 =	4 × 7 =
6 × 3 =	3 × 6 =	11 × 5 =
6 × 4 =	5 × 10 =	2 × 3 =
5 × 11 =	8 × 2 =	8 × 9 =
2 × 6 =	3 × 7 =	8 × 4 =
3 × 10 =	11 × 4 =	11 × 8 =
2 × 7 =	5 × 12 =	12 × 3 =
3 x 8 =	0 × 4 =	8 × 7 =
	$3 \times 3 =$ $6 \times 8 =$ $12 \times 5 =$ $8 \times 6 =$ $10 \times 12 =$ $11 \times 2 =$ $3 \times 9 =$ $4 \times 11 =$ $2 \times 5 =$ $6 \times 10 =$ $10 \times 9 =$ $2 \times 12 =$ $5 \times 3 =$ $9 \times 4 =$ $5 \times 5 =$ $8 \times 8 =$ $9 \times 10 =$ $5 \times 2 =$ $6 \times 3 =$ $6 \times 4 =$ $5 \times 11 =$ $2 \times 6 =$ $3 \times 10 =$ $2 \times 7 =$ $3 \times 8 =$	$3 \times 3 =$ $4 \times 4 =$ $6 \times 8 =$ $7 \times 5 =$ $12 \times 5 =$ $8 \times 12 =$ $8 \times 6 =$ $10 \times 11 =$ $10 \times 12 =$ $4 \times 2 =$ $11 \times 2 =$ $10 \times 3 =$ $3 \times 9 =$ $6 \times 8 =$ $4 \times 11 =$ $12 \times 10 =$ $2 \times 5 =$ $2 \times 11 =$ $6 \times 10 =$ $8 \times 3 =$ $10 \times 9 =$ $3 \times 4 =$ $2 \times 12 =$ $4 \times 5 =$ $5 \times 3 =$ $7 \times 8 =$ $9 \times 4 =$ $8 \times 10 =$ $5 \times 5 =$ $2 \times 8 =$ $8 \times 8 =$ $8 \times 0 =$ $9 \times 10 =$ $4 \times 12 =$ $5 \times 2 =$ $12 \times 8 =$ $6 \times 3 =$ $3 \times 6 =$ $6 \times 4 =$ $5 \times 10 =$ $5 \times 11 =$ $8 \times 2 =$ $2 \times 6 =$ $3 \times 7 =$ $3 \times 10 =$ $11 \times 4 =$ $2 \times 7 =$ $5 \times 12 =$ $3 \times 8 =$ $0 \times 4 =$

Date	04.06.20					
Subject/s	Maths					
Learning Objective						
	To calculate with ratios					
		SA	TA			
		A				
Success Criteria	I can write the ratio as part: part = whole					
✓! 📃	I can use my knowledge of multiples					
Support	I know that what happens to one "part" must happen to the other					
Due-tach.						
A farmer plants <mark>20</mark> c does he plant? Write	rops in the field. He plants <mark>5</mark> potatoes. How many , it as a ratio.	carrot	Έs			

There are 5 girls for every 6 boys at the swimming pool There are 18 boys at the pool. How many girls are there ?

First you need to write out the simplified ratio with the correct heading.

Girls: Boys

5:6

I then know what there are actually 18 boys, so I line this up underneath the boys column.

Girls : Boys



For every five adults on the bus there are 2 children. There are 18 children on the bus. How many adults are there?

Write the simplified ratio with the correct heading:

Adults : Children

5:2

There are 18 children so I can line this up and work out what it has been multiplied by

Adults : Children

5:2

_ : 18



Your turn—use the same method

In a bag of sweets there are 3 green ones for every 2 red ones. There are 12 green sweets in the bag. How many red ones?

-	-							 	 	 			
-						 		 	 	 			
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-							-						

<u>Fluency</u>

- 1. A math club has 27 boy members. The ratio of boys to girls is 3 : 6 . How many girl members does the math club have?
- 2. A school has 8 boys for every 9 girls. There are 56 boys. How many girls are there?
- 3. A pattern has 4 blue triangles to every 12 yellow triangles. There are 48 yellow triangles. How many blue triangles are there?
- 4. A football club has a range of members, for every 13 under 10's there are 2 over 15's. If there are 12 people over 15's, how many under 10's are there?
- 5. There is a bus with people on, for every 5 adults there are 2 children. There are 18 children on the bus, how many adults are there?
- 6. There are 5 girls for every 6 boys at the swimming pool There are 18 boys at the pool. How many girls are there ?
- 7. In a box of buttons there are 6 silver ones for every 4 gold ones. There are 24 silver buttons in the box. How many gold ones?
- 8. A ice cream man has 5 chocolate ice creams for every 3 strawberry. He has 30 chocolate, how many strawberry does he have?
- 9. A pattern has 8 red squares for every 6 blue squares. The pattern has 48 red squares, how many blue squares does it have?
- 10. Jess has 7 black cubes for every 9 green cubes. She has 56 black cubes, how many green cubes does she have?



	Date	5.6.30		
	Subject/s	Maths		
	Learning Objective	To recall and use multiplicati	on facts	
1 ×	< 4 =	3 × 11 =	10 × 7 =	
4 ×	< 5 =	10 × 2 =	9 × 5 =	
10	× 6 =	3 × 2 =	2 × 10 =	
2 ×	< 5 =	7 × 3 =	10 × 9 =	
7 ×	< 4 =	4 × 3 =	9 × 10 =	
1 ×	< 6 =	7 × 7 =	12 × 6 =	
3 ×	< 7 =	3 × 12 =	7 × 9 =	
5 ×	< 1 =	2 × 9 =	6 × 10 =	
11	× 4 =	11 × 6 =	4 × 2 =	

Date		<u>05.06.20</u>	0			
Subject/s						
Learning Objective	Learning Objective To calculate with ratios					
				SA	TA	
				×		
Success Criteria	I can write the ratio	ras part: part = whole				
✓! 📃	I can use my knowl	edge of multiples				
Support	I know that what he Independent	appens to one "part" must Adult Support (t happen to the other	,		
Pre-task:			, ,			
The ratio of red to gree Draw an image to repr	en marbles is 3 : esent the marble	7 s.				

Jess has squares, triangles, and circles in the ratio of 3 : 1 : 2. If 20 of Jess' shapes are circles how many triangles and squares does Jess have?



Squares: tringles : circles

30:10:20

Your turn—

A truck is carrying pear juice, cherry juice, and apple juice bottles in a ratio of 3 : 1 : 3. If there are 16 cherry juice bottles, then how many juice bottles in total are there?

Remember to write your ratios with headings so you know which number represents what.

A truck is carrying grape juice, passion fruit juice, and pear juice bottles in a ratio of 2 : 1 : 2. If there are 20 grape juice bottles, then how many passion fruit juice bottles are there?	A boy has blue, red and yellow pencils in a ratio of 3:2:2. If he has 12 blue pencils how many red and yellow pencils does he have?	If there are children, teenagers and adults on a bus at the ratio 3:5:2 and there are 15 teenagers how many children and adults are there on the bus?
A shop has chocolate, strawberry and vanilla ice cream at the ratio of 6:4:3. If there is 30 chocolate ice creams how many strawberry and vanilla ice creams are there?	A shop has apple juice, passion fruit juice, and orange juice bottles in a ratio of 4 : 1 : 2. If there are 32 orange juice bottles, then how many passion fruit juice bottles are there?	A girl has black, red and orange pencils in a ratio of 6:4:3. If he has 42 black pencils how many red and orange pencils does he have?
In a zoo there are monkeys, fish and penguins with a ratio of 7:6:8. If there are 64 penguins how many monkeys and fish are there at the zoo?	A girl has black, green and blue pencils in a ratio of 6:8:9. If he has 36 blue pencils how many black and green pencils does he have?	A shop has mint, strawberry and cherry ice cream at the ratio of 8:8:9. If there is 54 cherry ice creams how many strawberry and mint ice creams are there?



Answer page

Blue : Red = 4 : 1

Green : Red = 3 : 1

1.6.20



A1 Simplify the ratio 4:8	A2 Simplify the ratio 2:10	A3 Simplify the ratio 10:15	A4 Simplify the ratio 9:15
1:2	1:5	2:3	3:5
B1 Simplify the ratio 14:7	B2 Simplify the ratio 12:3	B3 Simplify the ratio 20:8	B4 Simplify the ratio 20:15
2:1	4:1	5:2	4:3

A	В	С
8 : 4 = 2 : 1	9 : 27 = 1 : 3	5 : 40 = 1 : 8
9:3=3:1	30 : 18 = 5 : 3	49 : 28 = 7 : 4
12 : 6 = 2 : 1	30 : 6 = 5 : 1	45 : 40 = 9 : 8
2 : 10 = 1 : 5	45 : 36 = 5 : 4	63 : 36 = 7 : 4
6 : 18 = 1 : 3	35 : 15 = 7 : 3	70 : 60 = 7 : 6
15 : 3 = 5 : 1	8:48 = 1:6	36 : 81 = 4 : 9
Droplam colving and read	mina	

Problem solving and reasoning <u>Use it</u>

16:8

<u>Prove it</u>

False

True

True

3.06.20

4 4) 16	3) 30	5 9 5 1 45	3) 15	9) 18
8) 24	9) 36	9) 54	10) 20	2 2) 4
6) 48	4) 36	5) 35	7)42	7) 28
4) 40	3) 27	8) 80	10 4	7) 63
2) 12	8) 32	3 3) 9	10 10)100	9 2) 18

Your turn answers



Circles: squares 6:8 Simplified Your turn answers



Apples: pears 6: 3 Simplified 2:1

3: 4

Your turn

- 1. 12:32 = 3:8
- 2. 4:12 = 1:3

Fluency

А	В	С
 3:4 1:3 3:6 4. 2:4 	 1:3 5:3 5:1 5:4 	 3:8 7:9 1:10 7:10

Problem solving and reasoning

Use it— 4:5 5:4

Explain it — Because it only 1:2



<u>Answers-4.6.20</u>

- 1. Boys: Girls 3:6 27 : 54
- 2. Boys : Girls 8 : 9 56: 63
- 3. Blue : Yellow 4 : 12 16: 48
- 4. Under 10's : over 15's 13: 2 78: 12
- 5. 45:18
- 6. 15:18
- 7. 24:16
- 8. 30:21
- 9. 48:36
- 10. 56:72

Problem solving and reasoning

Prove it + explain it

True

False

True

False

Prove it—yes because 2:5 = 18:45

5.4.20 answers-

Grape:passion fruit: pear	Blue:red:yellow	Children:Teenagers:adults
20:10:20	12:8:8	
		9:15:6
Chocolate:strawberry:vanilla	Apple:passion fruit: orange	Black:red:orange
30:20:15	64:16:32	42:28:21
Monkeys:fish:penguins	Black:green:blue	Mint: strawberry: cherry
56:48:64	24:32:36	48:48:54