Maths Planning

Week Commencing: 4.1.20

Year Group: Year6

Times Table Rockstars website - https://ttrockstars.com/

	Monday	Tuesday	Wednesday	Thursday	Friday
Area of Learning	CLOSED	CLOSED	LC: Can you multiply 2 digits by 1 digits?	LC: Can you multiply 3 digits by 1 digits?	LC Can you multiply 4 digits by 1 digits?
Activity			Starter – if you haven't already accessed TTRS as your activity for this morning, you might like to spend 10 minutes on TTRS as a starter activity. **Main Teaching** Follow the link below to enable you to access the video for today's lesson. Remember, an adult will be available on live chat throughout if you need any support as you are working. Week 1 - Number: Multiplication & Division | White Rose Maths You need to select the following video – Multiply 2 digits by 1 digit.	Starter – if you haven't already accessed TTRS as your activity for this morning, you might like to spend 10 minutes on TTRS as a starter activity. **Main Teaching** Follow the link below to enable you to access the video for today's lesson. Remember, an adult will be available on live chat throughout if you need any support as you are working. Week 1 - Number: Multiplication & Division | White Rose Maths You need to select the following video – Multiply 3 digits by 1 digit.	Starter – if you haven't already accessed TTRS as your activity for this morning, you might like to spend 10 minutes on TTRS as a starter activity. **Main Teaching** Follow the link below to enable you to access the video for today's lesson. Remember, an adult will be available on live chat throughout if you need any support as you are working. Week 1 - Number: Multiplication & Division | White Rose Maths You need to select the following video – Multiply 4 digits by 1 digit.

			Resources – Worksheets and answers are attached or these can be downloaded directly from the home learning link on the website.	Resources – Worksheets and answers are attached or these can be downloaded directly from the home learning link on the website.	Resources – Worksheets and answers are attached or these can be downloaded directly from the home learning link on the website.

WEDNESDAY

Multiply 2-digits by 1-digit

White Rose Maths

1. Brett uses a place value chart to work out 5 × 32

Hundreds	Tens	Ones
	10 10 10	1 1
	10 10 10	1 1
	10 10 10	1 1
	10 10 10	1 1
	10 10 10	1 1

100 ← 10 ←

Talk about Brett's method with a partner.

Work out the multiplication.

5 × 32

Use Brett's method to work out 6 × 34

2. Rosie works out 4 × 37 using a written method.

	H	T	O				
		3	7				
×			4				
		2	8	(7	×	4)	
	1	2	0	(3 0	×	4)	
	1	4	8				

Talk about Rosie's method with a partner.

Use Rosie's method to work out 6 × 28

3. Dani uses a different written method to work out 8 × 42

	H	T	O
		4	2
×			8
	3	3	6
		1	

Talk about Dani's method with a partner.

Use Dani's method to work out 3 × 27

4. Use a written method to complete the multiplications.

a) 38 × 6 = ☐   d) 52 × 5 = ☐

b) 71 × 3 = ☐   e) 29 × 8 = ☐

c) 45 × 9 = ☐   f) 17 × 4 = ☐

5. Class 4 is selling tickets for a play.

Tickets cost £5 per person.

56 tickets have been sold so far.

How much money has Class 4 collected?

6. Rosie buys 8 bunches of flowers. Each bunch has 17 flowers.
How many flowers does she have altogether?

Multiply 2-digits by 1-digit

White Rose Maths

1 Brett uses a place value chart to work out 5 × 32

Hundreds	Tens	Ones
	10 10 10	1 1
	10 10 10	1 1
	10 10 10	1 1
	10 10 10	1 1
	10 10 10	1 1

100   10

Talk about Brett's method with a partner.

Complete the multiplication.

5 × 32 = 160

Use Brett's method to work out 6 × 34

6 × 34 = 204

2 Rosie works out 4 × 37 using a written method.

	H	T	O				
		3	7				
×			4				
		2	8	(7	x	4)	
	1	2	0	(3 0	x	4)	
	1	4	8				

Talk about Rosie's method with a partner.

Use Rosie's method to work out 6 × 28

		2	8	
	×		6	
		4	8	(8×6)
	1	2	0	(20×6)
	1	6	8	

1 6 8

3 Dani uses a different written method to work out 8 × 42

	H	T	O
		4	2
×			8
	3	3	6
		1	

Talk about Dani's method with a partner.

Use Dani's method to work out 3 × 27

$$\begin{array}{r} 2\ 7 \\ \times\quad 3 \\ \hline 8\ 1 \\ {\scriptstyle 2} \end{array}$$

81

4 Use a written method to complete the multiplications.

a) 38 × 6 = 228

c) 45 × 9 = 405

b) 71 × 3 = 213

d) 52 × 5 = 260

e) 29 × 8 = 232

f) 17 × 4 = 68

5 Class 4 is selling tickets for a play.

Tickets cost £5 per person.

56 tickets have been sold so far.

How much money has Class 4 collected?

£280

6 Rosie buys 8 bunches of flowers. Each bunch has 17 flowers.
How many flowers does she have altogether?

136

Multiply 3-digits by 1-digit

White Rose Maths

1 Filip uses a place value chart to help him multiply a 3-digit number by a 1-digit number.

Hundreds	Tens	Ones
100	10 10	1 1 1 1
100	10 10	1 1 1 1
100	10 10	1 1 1 1

a) What multiplication is Filip working out?

b) What is the answer to Filip's multiplication?

2 Use place value counters to complete the multiplications.

a) 3 × 213   d) 6 × 106

b) 4 × 216   e) 4 × 209

c) 5 × 106   f) 317 × 3

3 Complete the multiplication.

Use the place value chart to help you.

H	T	O
100 100	10	1 1 1 1 1
100 100	10	1 1 1 1 1
100 100	10	1 1 1 1 1

	H	T	O
	2	1	5
×			3

4 Work out the multiplications.

a)

	H	T	O
	2	1	7
×			4

b)

	H	T	O
	4	3	9
×			2

c)

	H	T	O
	1	0	8
×			6

d) 163 × 5   e) 3 × 240   f) 7 × 131

5 A lorry driver travels 156 km per day.

How many kilometres will the lorry driver have travelled after 3 days?

6 Ron and Teddy are working out 5 × 245

> I know the answer will be greater than 1,000 because I know 5 × 200 is 1,000

Ron

> I know the answer should end in 5 because I know 5 × 5 is 25

Teddy

a) Who is correct?

    Ron   Teddy   both   neither

b) Use a written method to work out 5 × 245

Thursday Answers

Multiply 3-digits by 1-digit

White Rose Maths

1 Filip uses a place value chart to help him multiply a 3-digit number by a 1-digit number.

Hundreds	Tens	Ones
100	10 10	1 1 1 1
100	10 10	1 1 1 1
100	10 10	1 1 1 1

a) What multiplication is Filip working out?

124 × 3

b) What is the answer to Filip's multiplication? 372

2 Use place value counters to complete the multiplications.

a) 3 × 213 = 639

b) 4 × 216 = 864

c) 5 × 106 = 530

d) 6 × 106 = 636

e) 4 × 209 = 836

f) 317 × 3 = 951

3 Complete the multiplication.

Use the place value chart to help you.

H	T	O
100 100	10	1 1 1 / 1 1
100 100	10	1 1 1 / 1 1
100 100	10	1 1 1 / 1 1

	H	T	O
		2	1	5
×			3
	6	4	5
		1	

4 Complete the multiplications.

a)

	H	T	O
	2	1	7
×			4
8	6	8
		2	

c)

	H	T	O
	1	0	8
×			6
6	4	8
		4	

b)

	H	T	O
	4	3	9
×			2
8	7	8
		1	

d) 163 × 5

	H	T	O
	1	6	3
×			5
8	1	5
	3	1	

e) 3 × 240

H	T	O
2	4	0
×		3
7	2	0
1		

f) 7 × 131

H	T	O
1	3	1
×		7
9	1	7
	2	

5 A lorry driver travels 156 km per day.

How many kilometres will the lorry driver have travelled after 3 days?

468km

6 Ron and Teddy are working out 5 × 245

I know the answer will be greater than 1,000 because I know 5 × 200 is 1,000

Ron

I know the answer should end in 5 because I know 5 × 5 is 25

Teddy

a) Who is correct? Circle your answer.

Ron   Teddy   (both)   neither

b) Use a written method to work out 5 × 245

1,225

7 There are 7 year groups in a school.

There are 112 children in each year group.

How many children are there in the whole school?

784

8 A banana weighs 140 g

A pineapple weighs 345 g

140 g   345 g

Bag **A** contains 8 bananas and bag **B** contains 3 pineapples.

Which bag weighs more and by how much?
Show your working.

Bag __A__ weighs 85 g more than bag __B__ .

Friday

1 Complete the sentences to describe the multiplication.

Th	H	T	O
1,000 1,000	100 100	10	1 1 1
1,000 1,000	100 100	10	1 1 1
1,000 1,000	100 100	10	1 1 1

There are ☐ ones altogether.

There are ☐ tens altogether.

There are ☐ hundreds altogether.

There are ☐ thousands altogether.

2,213 × 3 = ☐

2 Complete the multiplication.

Use a place value chart to help you.

	2	1	0	2
×				4

3 A football stadium holds 2,214 people.

The stadium is full for 4 matches in a row.

What was the attendance for all 4 matches?

4 Nijah is calculating 2,430 × 3

She makes this place value chart to help her.

Th	H	T	O
	100 100	10 10 10	1 1
		10	1
	100 100	10 10	1 1
		10 10	1
	100 100	10 10	1 1
		10 10	1

She gets the answer 729

What mistake has Nijah made?

What is the correct answer?

5 Complete the multiplications.

a) 3,126 × 3 = ☐

b) 4,812 × 2 = ☐

c) 4,132 × 6 = ☐

d) 1,502 × 5 = ☐

6 Ron is working out 7,423 × 0

```
    7  4  2  3
×            0
    7  4  2  3
```

The answer is 7,423

Do you agree with Ron?

Did Ron have to use a column method? Is there a quicker way?

4 Nijah is calculating 2,430 × 3

She makes this place value chart to help her.

Th	H	T	O
	100 100	10 10 10 10	1 1 1
	100 100	10 10 10 10	1 1 1
	100 100	10 10 10 10	1 1 1

She gets the answer 729

What mistake has Nijah made?

What is the correct answer?

5 Complete the multiplications.

a) 3,126 × 3 = ☐   c) 4,132 × 6 = ☐

b) 4,812 × 2 = ☐   d) 1,502 × 5 = ☐

6 Ron is working out 7,423 × 0

```
    7  4  2  3
 ×           0
 ─────────────
    7  4  2  3
```

The answer is 7,423

Do you agree with Ron?

Did Ron have to use a column method? Is there a quicker way?

7 Work out these multiplications.

2,846 × 2

2,846 × 4

2,846 × 8

What do you notice about the answers?

8
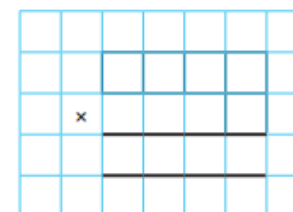
248 × 10 = 2,480

Without using the formal method, how could you use this fact to calculate 248 × 9?

Check your answer using the formal method.

Which method was easier?

9 Use each digit card once to write a multiplication.

| 1 | 2 | 3 | 4 | 5 |

How many different products can you find?

What is the closest product to 8,000?

Multiply 4-digits by 1-digit

1 Complete the sentences to describe the multiplication.

Th	H	T	O
1,000 1,000	100 100	10	1 1 1
1,000 1,000	100 100	10	1 1 1
1,000 1,000	100 100	10	1 1 1

There are [9] ones altogether.

There are [3] tens altogether.

There are [6] hundreds altogether.

There are [6] thousands altogether.

$2{,}213 \times 3 =$ [6,639]

2 Complete the multiplication.

Use the place value chart to help you.

Th	H	T	O
OO	O		OO
OO	O		OO
OO	O		OO
OO	O		OO

	2	1	0	2
×				4
	8	4	0	8

3 A football stadium holds 2,214 people.

The stadium is full for 4 matches in a row.

What was the attendance for all 4 matches?

Th	H	T	O
1,000 1,000	100 100	10	1 1 / 1 1
1,000 1,000	100 100	10	1 1 / 1 1
1,000 1,000	100 100	10	1 1 / 1 1
1,000 1,000	100 100	10	1 1 / 1 1

	2	2	1	4
×				4
	8	8	5	6
			1	

The attendance for all 4 matches was [8,856]

4 Nijah is calculating $2{,}430 \times 3$

She makes this place value chart to help her.

Th	H	T	O
	100 100	10 10 / 10 10	1 1 / 1
	100 100	10 10 / 10 10	1 1 / 1
	100 100	10 10 / 10 10	1 1 / 1

She gets the answer 729

What mistake has Nijah made?

She hasn't put her counters in the correct column.

What is the correct answer? [7,290]

5 Complete the multiplications.

a) $3,126 \times 3 =$ `9,378`   c) $4,132 \times 6 =$ `24,792`

b) $4,812 \times 2 =$ `9,624`   d) $1,502 \times 5 =$ `7,510`

6 Ron is working out $7,423 \times 0$

```
    7  4  2  3
  ×          0
  _____
    7  4  2  3
```

The answer is 7,423

Do you agree with Ron? ___No___

Did Ron have to use a column method? Is there a quicker way?

7 Work out these multiplications.

$2,846 \times 2 =$ `5,692`

$2,846 \times 4 =$ `11,384`

$2,846 \times 8 =$ `22,768`

What do you notice about the answers?

8

$$248 \times 10 = 2,480$$

Without using the formal method, how could you use this fact to calculate 248×9?

$248 \times 9 = 248 \times 10 - 248 \times 1 = 2,480 - 248, = 2,232$

Check your answer using the formal method.

```
    2  4  8
  ×        9
  _____
  2  2  3  2
     4  7
```

Which method was easier?

9 Use each digit card once to write a multiplication.

| 1 | 2 | 3 | 4 | 5 |

How many different products can you find?

Various answers.

What is the closest product to 8,000?   `8,270`

THURSDAY

THURSDAY ANSWERS

FRIDAY

Where can I complete further work?

Twinkl – Subscription service used by schools is offering a free premium service for teachers, parents and children to use whilst schools are closed. Enter the code **UKTWINKLHELPS** for access to worksheets, powerpoints and interactive games to support all areas of learning.

Classroom Secrets – Free Maths, Reading and Grammar home learning packs and interactive resources for all ages.

White Rose Maths – Free Maths home learning resources for all ages. Watch the videos and try the questions.

Primary Stars – Free Maths home learning packs for Year 1 and 2.

BBC Bitesize Primary – Free learning resources available for KS1 and KS2 across all subjects.

I See Maths – Free daily home maths lessons hosted by Gareth Metcalfe. Follow the link for videos, information and resources.

Top Marks – Free educational resources and games for English and Maths.

ICT Games – Free educational resources and games for English and Maths.