Year 4 Maths Learning for week beginning: Monday 18th January

Information

Maths lessons at home are planned for approximately 45 minutes and then an additional 15 minutes of times tables practise.

The online links we are using this week are:

www.activelearnprimary.co.uk

Login: Initial, surname eg. ssmith

Password: yr2016

School Code – BCCJ

The attached worksheets have been made to focus on what you are learning on each day – they are not the worksheets in the video, so please don't become confused if on the video they tell you to work through certain questions – you have not got these. Watch the whole video. When you have completed a worksheet, you can have a look at the answers attached as a separate document. Mark your work against these answers.

Mondays: times tables lesson

Tuesdays, Wednesdays and Thursdays: These 3 lessons will focus on place value

Fridays: Telling the Time and time problems.

If you complete your learning really quickly, make use of any additional time to practise your times tables as suggested in the times tables box.

DAILY – practicing times tables for 15 minutes.

Choose some ways to practice your 9 times tables today and throughout the week, but also remember to revise all the other tables you have learnt.

- We have made a folder of fun. timestable games using the Twinklgo website. To access these games you can follow this link.

Access this lesson using pin code: **CJ7980**
at Twinkl Go

- Use the following link and choose the table you want to practise: https://www.timestables.co.uk/
- BBC times tables songs: https://www.bbc.co.uk/teach/supermovers/times-table-collection/z4vv6v4
- Activelearn (Sandsearch, Scrapheap Scramble, Seaside Scuffle, Pesky Pets, Balloon Pop and Treetop Topple).
- Throw a dice and multiply this number by the table you are learning. You can throw 2 dice add these together and multiply so you practise all numbers up to the 12th multiple.
- www.TimesTables.me.uk
- Make a set of flash cards.
- On one side of the card write the table – e.g. 4 x 8 = and on the other side of the card write the answer. You can try working through the cards in order and then shuffling them. Or, you could make 2 sets of cards – one with questions and one with answers and match these up or play pairs games.

Monday

To Learn × and ÷ facts for the 9 times-table;

1. Warm up maths game – revise your 3 times tables. Play 'I say, you say' with somebody at home. Throw a ball to a partner and call a number (0–12), *I say four* . They multiply it by 3 and throw it back, *I say twelve* . Repeat, using multiples of 3 to 36. Divide the number by 3. Repeat this game for the 6s.

2. Today you will be learning the 9 times tables.

Can you remember the finger trick to help you to remember the nines? See below for a poster to remind you. Try out the finger trick.

3. Complete the worksheet below on the 9 times table and looking for patterns.

4. There is a new game for you on activelearn called 'Scrapheap Scramble' and this will help you to practise the 9 times tables.

Tuesday

To multiply by 10.

1. Maths warm up: follow this link to become a 9 times table super-mover.
KS2 Maths: The 9 Times Table - BBC Teach

2. Can you remember how to multiply a number by 10? The following video explains this to you. You will need a pencil and paper as there will be some questions for you to answer as you watch the video. Make sure you pause the video if you need to. Follow the link and select the 1st video 'multiplying by 10'.

There is a place value grid below which may help you with this. Towards the end of the video, you will see a place value grid. Do you remember to multiply by 10 you move ONE PLACE LEFT on the place value grid?

Autumn Week 10 - Number: Multiplication & Division | White Rose Maths

3. Complete the worksheet below (Tuesday) on multiplying by 10.

4. Try to complete 15 minutes of times tables practise using the suggestions on the first page.

Wednesday- To multiply by 100.

1. Maths warm up: practise counting in tens, starting from a range of different numbers.

2. Can you remember how to multiply a number by 100? We move TWO PLACES LEFT on our place value grid to multiply by 10. The following video explains this to you. You will need a pencil and paper as there will be some questions for you to answer

as you watch the video. Make sure you pause the video if you need to. Follow the link and select the 2nd video 'multiplying by 100'.

Autumn Week 10 - Number: Multiplication & Division | White Rose Maths

Here are some questions to talk about if you are able to:

How do the Base 10 help us to show multiplying by 100?

Can you think of a time when you would need to multiply by 100?

Will you produce a greater number if you multiply by 100 rather than 10? Why?

Can you use multiplying by 10 to help you multiply by 100? Explain why.

3. Complete the worksheet below (Wednesday) on multiplying by 100.

4. Try to complete 15 minutes of times tables practise using the suggestions on the first page.

Thursday - To divide by 10.

1. Can you remember how to divide a number by 10? We are now dividing not multiplying, so we go the opposite direction on a place value grid - WE MOVE ONE PLACE RIGHT to divide by ten. The following video explains this to you. You will need a pencil and paper as there will be some questions for you to answer as you watch the video. Make sure you pause the video if you need to. Follow the link and select the 3rd video 'divide by 10'.

Autumn Week 10 - Number: Multiplication & Division | White Rose Maths

Here are some questions to talk about if you are able to:

What has happened to the value of the digits?

Can you represent the calculation using manipulatives?
Why do we need to exchange tens for ones?

When dividing using a place value chart, in which direction do the digits move?

2. Complete the worksheet below (Thursday) on dividing by 10.

3. Try to complete 15 minutes of times tables practise using the suggestions on the first page.

Friday

To Solve problems involving converting from hours to minutes and minutes to seconds.

Mr. Brown has made a short video to help you with this lesson. Look in our Year 4 area on the website.

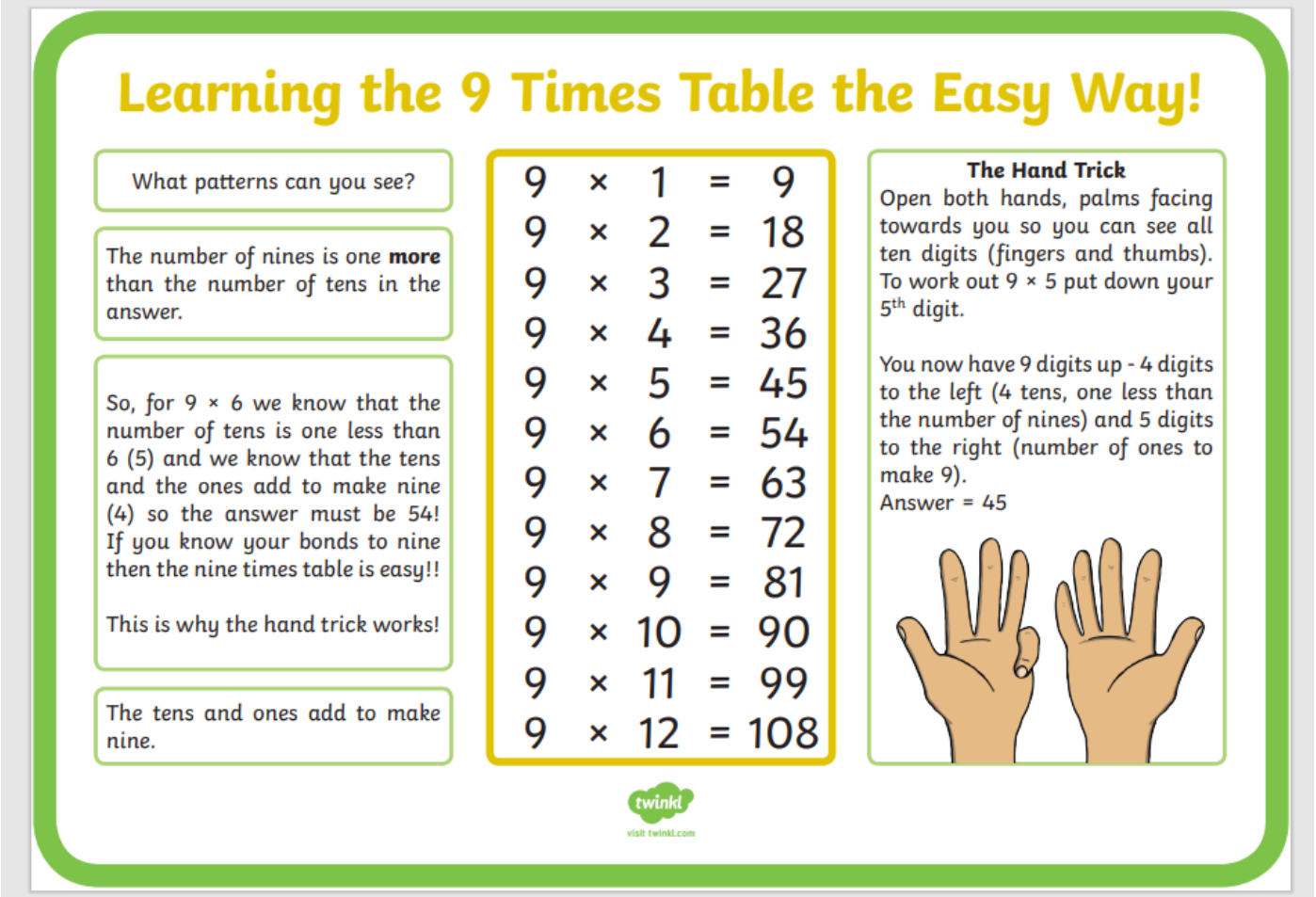
Today you will be learning about hours, minutes and seconds.

Here are some things for you to discuss at home if you are unable to see the video.

What activity might last one hour/minute/second?
How many minutes are there in an hour?
How can we use a clock face to check? How could we count the minutes?
How many seconds are there in one minute? What could we use to check?
How many minutes in ____ hours? How many seconds in ____ minutes?

There is a worksheet for you to complete below.

Monday's maths



Monday 18th January

LO: Learn × and ÷ facts for the 9 times-table; identify patterns in the 9 times-table; describe and begin to explain patterns

Looking at patterns in the 9 times table.

1. Colour (lightly) over the multiples of 9.
2. What do you notice about what the digits add up to?_____
3. What pattern do you notice? _____
4. Write down the multiples of 9 to 108. Without writing more, predict the next few multiples using the pattern you have identified. _____

Tricky Challenge:

5. Log on to activelearnprimary website and use the random number generator tool to get some numbers (2 and 3 digit) or throw 2 or 3 die to get a 2 or 3 digit number. Sort the into multiples of 9 and not multiples of 9 by adding the digits to see if they make 9.

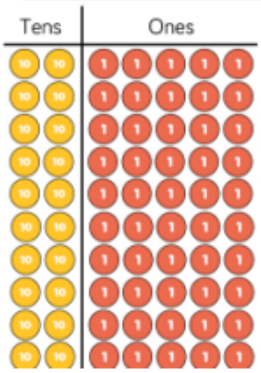
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Tuesday's maths

Tuesday 19th January

LO:to multiply by 10 and 100.

Fluency 1



Write the calculation shown by the place value counters.

Each row has ____ tens and ____ ones.

Each row has a value of ____.

There are ____ rows.

The calculation is ____ × ____ = ____.

Use place value counters to calculate:

10 × 3 4 × 10 12 × 10

Draw place value counters to help you if you need to as you won't have these at home.

Match each statement to the correct bar model.

5 buses have ten passengers.

10	10	10	10	10

8 pots each have ten pencils.

5	5	5	5	5	5	5	5	5	5

10 chickens lay 5 eggs each.

10	10	10	10	10	10	10	10

Reasoning and Problem Solving 1

Always, Sometimes, Never

If you write a whole number in a place value grid and multiply it by 10, all the digits move one column to the left.

Reasoning and Problem Solving 2

Annie has multiplied a whole number by 10

Her answer is between 440 and 540

What could her original calculation be?

How many possibilities can you find?

Wednesday's maths

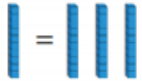
20.01.21

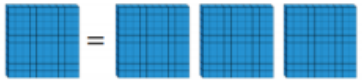
LO: To multiply by 100

Fluency 1

3 × ▪ = ▪▪▪ = 3 ones = 3

Complete:

3 ×  = ___ tens = ___

3 ×  = ___ hundreds = ___

Use a place value grid and counters to calculate:

7 × 10	63 × 10	80 × 10
7 × 100	63 × 100	80 × 100

What's the same and what's different comparing multiplying by 10 and 100? Write an explanation of what you notice.

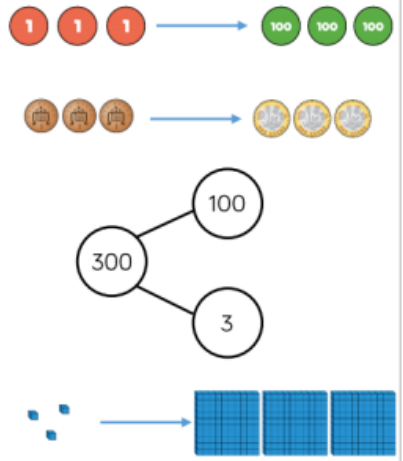
Use <, > or = to make the statements correct.

75 × 100	◯	75 × 10
39 × 100	◯	39 × 10 × 10
460 × 10	◯	100 × 47

5

Reasoning and Problem Solving 1

Which representation does **not** show multiplying by 100?
Explain your answer.

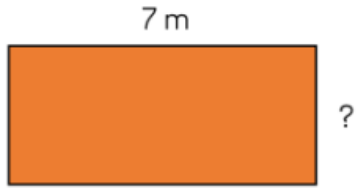


Reasoning and Problem Solving 2

The perimeter of the rectangle is 26 m.

Find the length of the missing side.

Give your answer in cm.



Thursday's maths:

21.01.21

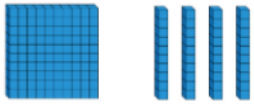
LO: Divide a number by 10.

Fluency 1

Use place value counters to show the steps to divide 30 by 10

Can you use the same steps to divide a 3-digit number like 210 by 10?

Use Base 10 to divide 140 by 10
Explain what you have done.



Ten friends empty a money box. They share the money equally between them. How much would they have each if the box contained:

- 20 £1 coins?
- £120
- £24?

After emptying the box and sharing the contents equally, each friend has 90 p.
How much money was in the box?

Reasoning and Problem Solving 1

Four children are in a race. The numbers on their vests are:

350	35
3,500	53

Use the clues to match each vest number to a child.

- Jack's number is ten times smaller than Mo's.
- Alex's number is not ten times smaller than Jack's or Dora's or Mo's.
- Dora's number is ten times smaller than Jack's.

Reasoning and Problem Solving 2

While in Wonderland, Alice drank a potion and everything shrank. All the items around her became ten times smaller! Are these measurements correct?

Item	Original measurement	After shrinking
Height of a door	220 cm	2,200 cm
Her height	160 cm	16 cm
Length of a book	340 mm	43 mm
Height of a mug	220 mm	?

Can you fill in the missing measurement?

Can you explain what Alice did wrong?

Write a calculation to help you explain each item.

Friday's maths:

LO: Solve problems involving converting from hours to minutes and minutes to seconds.

Fluency 1

Sort the activities under the headings depending on the approximate length of time they take to complete.

One hour	One minute	One second
Clap	Run around the playground	Blink
Swimming lesson	PE lesson	Tie your shoe laces

One hour = ___ minutes

Two hours = ___ minutes

Half an hour = ___ minutes

One minute = ___ seconds.

Three minutes = ___ seconds.

___ minutes = 240 seconds

Josh reads a chapter of his book in 5 minutes and 28 seconds.
Tom reads a chapter of his book in 300 seconds.
Who reads their chapter the quickest?

Reasoning and Problem Solving 1

Jack takes part in a sponsored silence.

He says,

If I am silent for five hours at 10p per minute, I will raise £50

Do you agree with Jack?
Explain why you agree or disagree.

Dora says,

To convert hours to minutes, I multiply the number of hours by 60

Is she correct? Can you explain why?

Reasoning and Problem Solving 2

Five friends run a race.
Their times are shown in the table.

Name	Time
Eva	114 seconds
Dexter	199 seconds
Teddy	100 seconds
Whitney	202 seconds
Ron	119 seconds

Which child finished the race the closest to two minutes?

What was the difference between the fastest time and the slowest time?
Give your answer in minutes and seconds.