

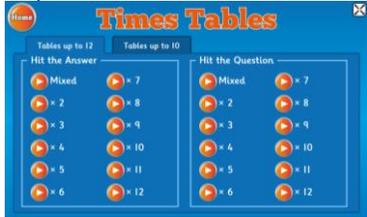
# Year 5 and 6 Maths Home Learning Grid

## Times Tables

Spend at least 15 minutes a day practising your times tables

<https://www.topmarks.co.uk/maths-games/hit-the-button>

<https://www.timestables.co.uk/>



## Column subtraction

Practice column subtraction with 3 digit and 4 digit numbers. Why don't you use a dice to generate your numbers and make some column subtraction questions of your own?

Can you create a word problem for the subtraction you have created? What could the numbers represent in the real world

Link to video for column subtraction of 2 2-digit numbers and apply this to more digits.

<https://www.youtube.com/watch?v=pADFYrGdyYE&list=PLWIJ2KbiNEyq1iZ36fRe-xTJ4NNZsmYz9&index>

$$\begin{array}{r} 6 \quad 1 \\ \cancel{7}45 \\ - 261 \\ \hline 484 \end{array}$$

## Maths Games

Choose a maths game to play each day. Have a go making up new rules or inventing your own maths game.

<https://matr.org/blog/fun-maths-games-activities-for-kids/>

Link to maths games videos:

[https://www.youtube.com/watch?v=foj6ujoT\\_HU&list=PLWIJ2KbiNEyqBDc5yLJ4PaiaY3o5E5xCB](https://www.youtube.com/watch?v=foj6ujoT_HU&list=PLWIJ2KbiNEyqBDc5yLJ4PaiaY3o5E5xCB)

## Short division – Using the bus stop method

Start by choosing some numbers to work with or find a resource online to give you some questions. Begin practising with numbers divisible by 2 and 5 to begin. Link to video:

<https://www.youtube.com/watch?v=trjepeOy2rc>

Link to video for dividing a 2-digit number by a 1-digit number:

<https://www.youtube.com/watch?v=4EcMON3F1yE&list=PLWIJ2KbiNEyq1iZ36fRe-xTJ4NNZsmYz9&index>

$$145 \div 5 = 29$$

$$\begin{array}{r} 0 \quad 2 \quad 9 \\ 5 \overline{) 145} \\ \underline{5} \phantom{0} \\ 10 \phantom{0} \\ \underline{10} \phantom{0} \\ 0 \phantom{0} \\ \underline{0} \\ 0 \end{array}$$

## Column addition

Why don't you use dice to generate your numbers and make some column addition questions of your own?

Can you create a word problem for the subtraction you have created? What could the numbers represent in the real world

Link to video for column addition of 2 3-digit numbers:

<https://www.youtube.com/watch?v=HBa8XBHnJ4U>

$$\begin{array}{r} 1 \\ 638 \\ + 445 \\ \hline 1083 \end{array}$$

## Grid method multiplication

Begin multiplying numbers together using the grid method by picking your own numbers. Ensure it is a multiple you can count in to begin with.

Link to video for multiplying a 2-digit number by a 2-digit number:

<https://www.youtube.com/watch?v=kGFZhdweTxI>

$$98 \times 23$$

	90	8	
20	1800	160	
3	270	24	

## Simplifying fractions

Find equivalent fractions by simplifying fractions. See example >

Link to video on simplifying fractions

<https://www.youtube.com/watch?v=aNQXhknSwrI>

Link to video on more equivalent fractions:

<https://www.youtube.com/watch?v=LUJ49WdgRyM&list=PLWIJ2KbiNEypSOzxt54Wez5X4gnQ-xxvu&index>

$$\frac{28}{42} \stackrel{\div 2}{=} \frac{14}{21} \stackrel{\div 7}{=}$$

## Time

Have a go at using the Topmarks clock to make the correct times.

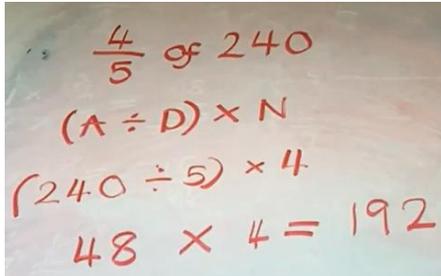
Find games below which allow you to work with times to 1 minute. Don't forget to think about the 24 hour clock and how this would look digitally. Think about time lapse questions using the tv schedule or train journeys.

[https://www.sheppardsoftware.com/mathgames/earlymath/on\\_time\\_game1.htm](https://www.sheppardsoftware.com/mathgames/earlymath/on_time_game1.htm)

1. Read time to the hour
2. Read time to the hour and half hour
3. Read time to the quarter hour
4. Read time to the nearest five minutes
5. Read time to the minute

<https://mathsframe.co.uk/en/resources/resource/116/telling-the-time>

**Fractions of amounts with remainders**



Could you investigate remainders? Choose an amount and an amount to share between; this could be done on plates, share the amount and find remainders. Record this using a piece of paper and making a table.

(Amount ÷ denominator) x Numerator

Link to video on fractions of amounts by dividing the amount by the denominator:  
<https://www.youtube.com/watch?v=ayNzxJpTfo>

**Coordinates**

Draw out your own grid or print some squared paper and work out the coordinates of different items you place on your grid. You could look at a grid with 4 quadrants and translate a shape, reflect a shape or see the game below

Link to video on coordinates:

[https://www.youtube.com/watch?v=qR\\_8E6KzTo](https://www.youtube.com/watch?v=qR_8E6KzTo)

Coordinates games with varying ability levels

<https://www.topmarks.co.uk/Search.aspx?q=coordinates>

**Adding and subtracting Fractions**

Use coloured bricks / lego or print fraction circles from the internet. Have a go at adding fractions with the same denominator when they add up to less than one whole, then have a go at adding fractions which add to more than one whole.

$$\frac{2}{9} + \frac{5}{9} = \frac{7}{9}$$

See Bitesize for a guide for your child along with videos and games

<https://www.bbc.co.uk/bitesize/topics/zhdwxnb/articles/z9n4k7h>

Link to video on adding fractions with the same denominator:

<https://www.youtube.com/watch?v=5juto2ze8Lg>

**Decimals and Percentages**

$$\frac{1}{2} = 0.5 = 50\%$$

$$\frac{1}{4} = 0.25 = 25\%$$

$$\frac{1}{10} = 0.1 = 10\%$$

See grid added below. Can you add some of the fractions, decimals and percentages together? Could you find a fraction or percentage of a given number?

**Multiplying and dividing fractions**

Multiply by

Simplify the fractions if not in lowest terms.

•Multiply the numerators of the fractions to get the new numerator.

•Multiply the denominators of the fractions to get the new denominator.

Divide by

[https://www.mathsisfun.com/fractions\\_division.html](https://www.mathsisfun.com/fractions_division.html)

Multiplying fractions

<https://www.youtube.com/watch?v=qmFXyR7Z6Lk>

Dividing fractions

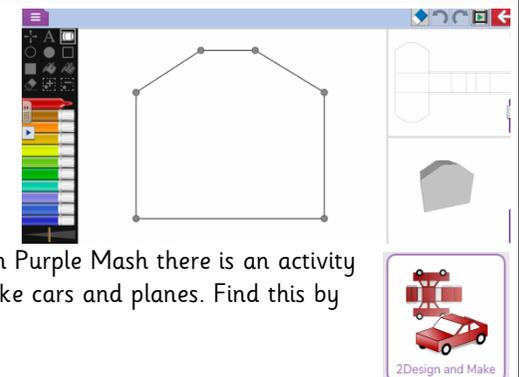
<https://www.youtube.com/watch?v=4lkq3DgvmJo>

**2D and 3D shapes**

Can you find some 2D and 3D shaped items within the home. Can you create a net for the 3D shape?

What shapes are the faces, how many of that face do you need? Could you use a ruler to draw and be more accurate?

Cut out your net and build your shape. On Purple Mash there is an activity which allows you to make nets of things like cars and planes. Find this by searching 2design and make.



**Money**

Work with all of the 4 calculations with money. Pretend you work at a shop and you need to add together items and find change using subtraction.

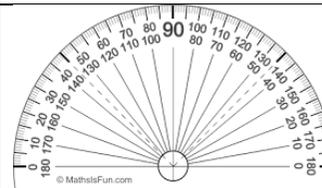
Remember to be careful when adding using the decimal point to show pounds and pence.

<https://www.topmarks.co.uk/Search.aspx?AgeGroup=2>

**Calculating Length and Angles**

Draw an angle using a ruler. Estimate whether an angle is acute, obtuse or a right angle before measuring.

Measure accurately using a protractor, which can be bought in a stationary shop. Use a ruler to accurately draw a shape and label the angles using the ° symbol.



# Multiplication Square

×	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

# Roman Numerals

Can you count by only using letters?

I	1	XXX	30
II	2	XL	40
III	3	L	50
IV	4	LX	60
V	5	LXX	70
VI	6	LXXX	80
VII	7	XC	90
VIII	8	C	100
IX	9	D	500
X	10	M	1,000
XX	20	MD	1,500

	=	1	=	1	=	100%	=	£1.00 or 100p	=	
	=	$\frac{1}{2}$	=	0.5	=	50%	=	£0.50 or 50p	=	
	=	$\frac{1}{3}$	=	0.3	=	33.3%	=	-	=	-
	=	$\frac{1}{4}$	=	0.25	=	25%	=	-	=	-
	=	$\frac{1}{5}$	=	0.2	=	20%	=	£0.20 or 20p	=	
	=	$\frac{1}{8}$	=	0.125	=	12.5%	=	-	=	-
	=	$\frac{1}{10}$	=	0.1	=	10%	=	£0.10 or 10p	=	
	=	$\frac{1}{20}$	=	0.05	=	5%	=	£0.05 or 5p	=	
	=	$\frac{1}{50}$	=	0.02	=	2%	=	£0.02 or 2p	=	
	=	$\frac{1}{100}$	=	0.01	=	1%	=	£0.01 or 1p	=	