

Week beginning: Friday 26<sup>th</sup> February 2021

To Do:

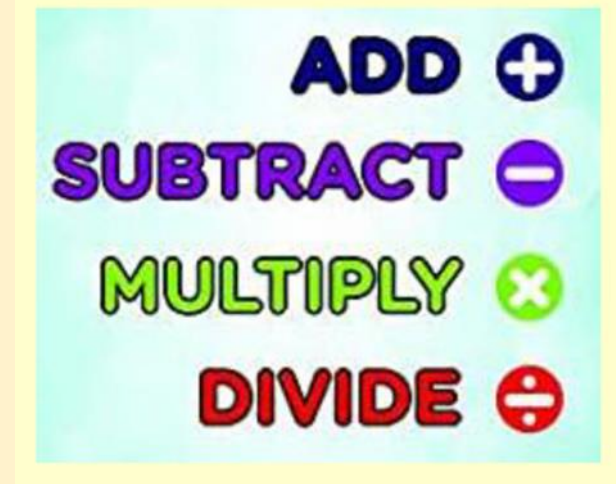
# Multiplication and Division

Watch the videos posted on the Class Story on Monday to help.

- Times Table Rockstars
- Countdown Challenge
- You need to ensure you are confident with your times tables up to 12x12 and including the division facts. Use TTRS and Hit the Button as well as written activities such as times table wheels.
- Complete the related facts questions. Show your working out.
- Watch the BBC Bitesize clip about factors: [What are factors? - BBC Bitesize](#)
- Play this game for both multiples and factors: [Multiples and Factors \(topmarks.co.uk\)](#)
- Complete the factors and multiples questions.
- Multiplying and dividing by multiple of 10. Complete the fluency questions.
- Spot the mistakes.

Use the numbers at the bottom to get as close to the target number as you can.

You can use multiplication, division, addition and subtraction. However, you can only use each number once.



You target is  
443

100

50

8

7

3

4

LO: I can confidently recall multiplication and division facts for multiplication tables up to 12 x 12.

You need to be confident with your times tables and the division facts.

Interactive websites:

TTRS - [Times Tables Rock Stars \(trockstars.com\)](http://trockstars.com)

Hit the Button - [Hit the Button - Quick fire maths practice for 5-11 year olds \(topmarks.co.uk\)](http://topmarks.co.uk)

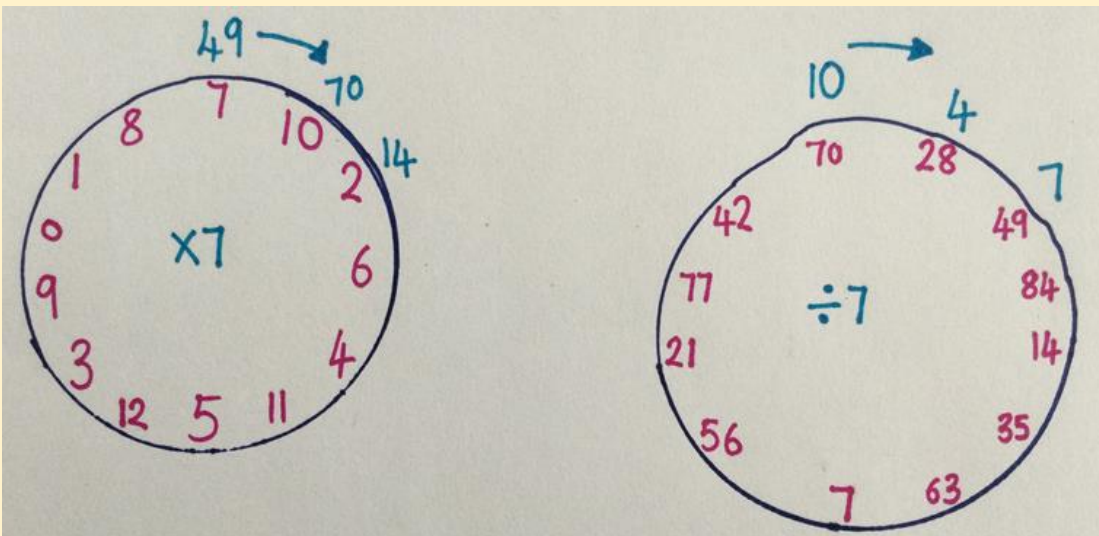


Playing Cards:

Use an ordinary pack of cards. Choose a times table a select a card at a time to multiply by your chosen times table. You could just select the cards 1 - 12 (use a Jack for 11, Queen for 12).

If you are more confident, split the pack in two and take a card from each pile. Multiply them together in your head.

Times Table or Division Wheels:



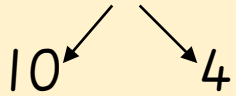
You do not need to print worksheets for these. Draw a circle and randomly place the numbers 1 - 12 inside it. Decide on a times table you need to work on and then answer the questions clockwise. You could time yourself to try and beat your score.

To work on division, count in that times table and place randomly around the circle. Then divide in a clockwise order.

# Using related facts

Show your working out

I can use my times table knowledge to help me solve  $14 \times 9$ :



$$10 \times 9 = 90$$

$$4 \times 9 = 36$$

$$\text{So } 14 \times 9 = 126 \text{ (} 90 + 36 \text{)}$$

$$19 \times 5 =$$

$$\text{I know } 20 \times 5 = 100$$

So  $19 \times 5$  is one less 5.

$$100 - 5 = 95$$

Consolidate:

$$1) 13 \times 6 =$$

$$2) 15 \times 4 =$$

$$3) 14 \times 5 =$$

$$4) 16 \times 3 =$$

$$5) 14 \times 4 =$$

$$6) 5 \times 13 =$$

$$7) 6 \times 16 =$$

$$8) 2 \times 16 =$$

$$9) 4 \times 13 =$$

$$10) 5 \times 15 =$$

Core:

$$1) 17 \times 8 =$$

$$2) 19 \times 4 =$$

$$3) 6 \times 17 =$$

$$4) 15 \times 9 =$$

$$5) 8 \times 16 =$$

$$6) 18 \times 9 =$$

$$7) 9 \times 17 =$$

$$8) 21 \times 6 =$$

$$9) 8 \times 22 =$$

$$10) 23 \times 5 =$$

Extend:

$$1) 23 \times 6 =$$

$$2) 26 \times 3 =$$

$$3) 7 \times 26 =$$

$$4) 8 \times 29 =$$

$$5) 9 \times 26 =$$

$$6) 24 \times 6 =$$

$$7) 31 \times 3 =$$

$$8) 29 \times 6 =$$

$$9) 32 \times 5 =$$

$$10) 7 \times 27 =$$

Choose either consolidate, core or extend.

# Factors & Multiples

Find the different factors of a number by working out which numbers divide into it evenly.

What are all the factors of 12?

$$12 \div 1 = 12$$

12



$$12 \div 2 = 6$$

6



$$12 \div 3 = 4$$

4



The factors of 12 are:  
1, 2, 3, 4, 6, 12

Remember:

A factor is a number that when multiplied with another, produces a given number.



Multiples appear in the number's multiplication table. You can calculate them by counting on by that number.

What are all the multiples of 12?

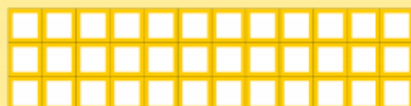
$$12 \times 1 = 12$$



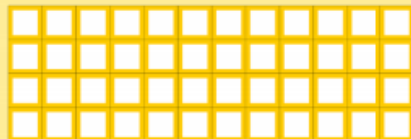
$$12 \times 2 = 24$$



$$12 \times 3 = 36$$



$$12 \times 4 = 48$$



The multiples of 12 include:  
12, 24, 36, 48...

Remember:

A multiple is a number that may be divided by another, a certain number of times, without a remainder.

Watch the BBC Bitesize clip about factors:  
[What are factors? - BBC Bitesize](#)

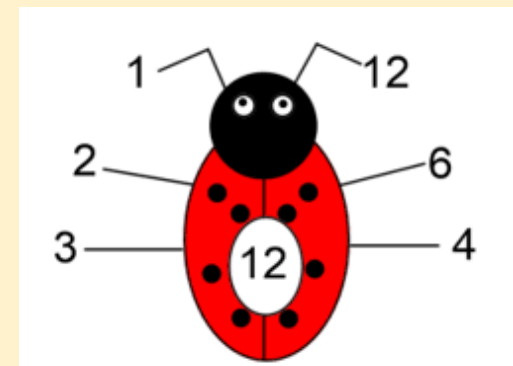
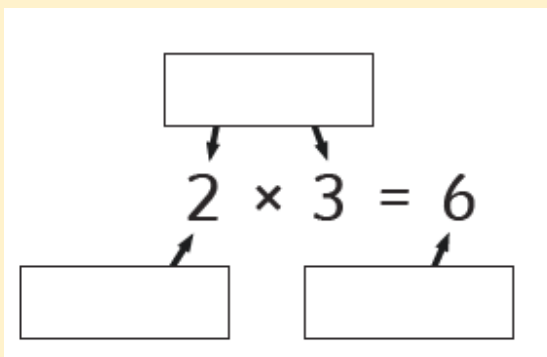
Play this game for both multiples and factors:  
[Multiples and Factors \(topmarks.co.uk\)](#)

Task 1: Create factor bugs for the numbers 24, 32 and 18.

Task 2: Write down 4 multiples each for 24, 32 and 18.

Task 3: Place these words in the correct place on the example below.

*Factor*                      *Product*                      *Factor Pair*



**CONSOLIDATE:** I am thinking of a number. What is it?  
It has a digit sum of 6 and is less than 50.  
It is a multiple of 6 and 8.  
4 and 6 are factor pairs of this number.

**CORE:** There are three numbers between 25 and 45 that have 8 factors.  
Use these clues to identify each number then list all 8 factors of each number that you have found.

- 1) I am a multiple of 5 and one of my factors is 4.
- 2) I have four tens and one of my factors is 7.
- 3) One of my factors is 10.

**EXTEND:** There are three numbers between 0 and 100 that have 12 factors.  
Use these clues to identify each number then list all 12 factors of each number that you have found.

- 1) I am a multiple of 10 that is less than 75. One of my factors is 6.
- 2) I have a digit sum of 12 but I am not 39 or 48.
- 3) I am a multiple of 8.
- 4) I have nine tens and one of my factors is 12.
- 5) I am between 85 and 100.

*Choose  
either  
consolidate  
, core or  
extend.*

## Multiplying and Dividing by 10, 100 and 1000

10 000	1000	100	10	1	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					●			

### Multiplying

X 10  
X 100  
X 1000

digits move LEFT 1 space  
digits move LEFT 2 spaces  
digits move LEFT 3 spaces



### Dividing

÷ 10  
÷ 100  
÷ 1000

digits move RIGHT 1 space  
digits move RIGHT 2 spaces  
digits move RIGHT 3 spaces



### Consolidate:

- 1)  $435 \times 10 =$
- 2)  $520 \div 10 =$
- 3)  $48 \times 100 =$
- 4)  $3620 \div 10 =$
- 5)  $4600 \div 100 =$
- 6)  $64 \times 100 =$
- 7)  $46 \div 10 =$
- 8)  $7.2 \times 10 =$
- 9)  $482 \div 10 =$
- 10)  $12.4 \times 10 =$

### Core:

- 1)  $4682 \times 10 =$
- 2)  $4637 \div 10 =$
- 3)  $743 \div 100 =$
- 4)  $4736 \div 100 =$
- 5)  $3.49 \times 10 =$
- 6)  $345.4 \times 100 =$
- 7)  $0.02 \times 1000 =$
- 8)  $2341 \div 1000 =$
- 9)  $564.5 \div 1000 =$
- 10)  $3.42 \times 1000 =$

You can use a place value grid to help you with multiplying and dividing numbers by a multiple of ten. You can draw these in your book or on paper, just like we would do in school.

### *FLUENCY:*

*Choose either consolidate, core or extend.*

### Extend:

- 1)  $435 \times \underline{\quad} = 43500$
- 2)  $67 \div \underline{\quad} = 0.67$
- 3)  $567 \div \underline{\quad} = 0.567$
- 4)  $0.023 \times \underline{\quad} = 2.3$
- 5)  $45363 \div \underline{\quad} = 45.363$
- 6)  $0.0345 \times \underline{\quad} = 34.5$
- 7)  $745 \div \underline{\quad} = 7.45$
- 8)  $67854 \div \underline{\quad} = 678.54$
- 9)  $0.062 \times \underline{\quad} = 620$
- 10)  $5748 \div \underline{\quad} = 5.748$

# Spot the mistakes

*Choose either consolidate, core or extend.*

Some of these questions are incorrect but some of them are correct. Find the mistakes and correct them.

## CONSOLIDATE:

- 1)  $34 \times 10 = 340$
- 2)  $0.6 \times 10 = 60$
- 3)  $5.7 \times 10 = 57$
- 4)  $0.003 \times 10 = 0.3$
- 5)  $8900 \times 10 = 890$
- 6)  $902 \times 10 = 9200$
- 7)  $50.3 \times 10 = 503$
- 8)  $0.52 \times 10 = 52$
- 9)  $8.03 \times 10 = 80.3$

## CORE:

- 1)  $6 \div 100 = 0.06$
- 2)  $34 \div 100 = 0.034$
- 3)  $5.7 \div 100 = 0.057$
- 4)  $0.3 \div 100 = 0.03$
- 5)  $8900 \div 100 = 89$
- 6)  $902 \div 100 = 0.92$
- 7)  $8.03 \div 100 = 0.083$
- 8)  $9.09 \div 100 = 0.099$
- 9)  $71\ 000 \div 100 = 71$

## EXTEND:

- 1)  $212 \div 100 = 2.12$
- 2)  $212 \times 10 = 2120$
- 3)  $500 \div 100 = 5$
- 4)  $71\ 000 \times 10 = 710\ 000$
- 5)  $34.91 \div 100 = 0.349$
- 6)  $50.3 \div 100 = 0.5003$
- 7)  $0.05 \times 10 = 5$
- 8)  $9.09 \times 10 = 99$
- 9)  $34.91 \times 10 = 349.1$
- 10)  $520 \div 100 = 5.2$



# Answers

## Related facts:

# Answers

## $\times \div 10/100/1000$ :

### Consolidate:

- 1)  $13 \times 6 = 78$
- 2)  $15 \times 4 = 60$
- 3)  $14 \times 5 = 70$
- 4)  $16 \times 3 = 48$
- 5)  $14 \times 4 = 56$
- 6)  $5 \times 13 = 65$
- 7)  $6 \times 16 = 96$
- 8)  $2 \times 16 = 32$
- 9)  $4 \times 13 = 52$
- 10)  $5 \times 15 = 75$

### Core:

- 1)  $17 \times 8 = 136$
- 2)  $19 \times 4 = 76$
- 3)  $6 \times 17 = 102$
- 4)  $15 \times 9 = 135$
- 5)  $8 \times 16 = 128$
- 6)  $18 \times 9 = 162$
- 7)  $9 \times 17 = 153$
- 8)  $21 \times 6 = 126$
- 9)  $8 \times 22 = 176$
- 10)  $23 \times 5 = 115$

### Extend:

- 1)  $23 \times 6 = 138$
- 2)  $26 \times 3 = 78$
- 3)  $7 \times 26 = 182$
- 4)  $8 \times 29 = 232$
- 5)  $9 \times 26 = 234$
- 6)  $24 \times 6 = 144$
- 7)  $31 \times 3 = 93$
- 8)  $29 \times 6 = 174$
- 9)  $32 \times 5 = 160$
- 10)  $7 \times 27 = 189$

### Consolidate:

- 1)  $435 \times 10 = 4350$
- 2)  $520 \div 10 = 52$
- 3)  $48 \times 100 = 4800$
- 4)  $3620 \div 10 = 362$
- 5)  $4600 \div 100 = 46$
- 6)  $64 \times 100 = 6400$
- 7)  $46 \div 10 = 4.6$
- 8)  $7.2 \times 10 = 72$
- 9)  $482 \div 10 = 48.2$
- 10)  $12.4 \times 10 = 124$

### Core:

- 1)  $4682 \times 10 = 46820$
- 2)  $4637 \div 10 = 463.7$
- 3)  $743 \div 100 = 7.43$
- 4)  $4736 \div 100 = 47.36$
- 5)  $3.49 \times 10 = 34.9$
- 6)  $345.4 \times 100 = 34540$
- 7)  $0.02 \times 1000 = 20$
- 8)  $2341 \div 1000 = 2.341$
- 9)  $564.5 \div 1000 = 0.5645$
- 10)  $3.42 \times 1000 = 3420$

### Extend:

- 1)  $435 \times 100 = 43500$
- 2)  $67 \div 100 = 0.67$
- 3)  $567 \div 1000 = 0.567$
- 4)  $0.023 \times 100 = 2.3$
- 5)  $45363 \div 1000 = 45.363$
- 6)  $0.0345 \times 1000 = 34.5$
- 7)  $745 \div 100 = 7.45$
- 8)  $67854 \div 100 = 678.54$
- 9)  $0.062 \times 1000 = 620$
- 10)  $5748 \div 1000 = 5.748$