

# Year 3 - Autumn 1 - KIRF - Number Bonds up to 20

Number bonds show us how numbers join together. They are very important for addition and subtraction. This half term, the children will be learning number bonds for all the numbers up to 20; they should be able to recall these independently.

The children should know the number bonds to all numbers up to 20

e.g. Number bonds to 15:  $0 + 15 = 15$ ,

$1 + 14 = 15$ ,  $2 + 13 = 15$ , etc.

Number bonds to 16:  $0 + 16 = 16$ ,

$1 + 15 = 16$ ,  $2 + 14 = 16$ , etc.

The children should know all the number bonds that total 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20

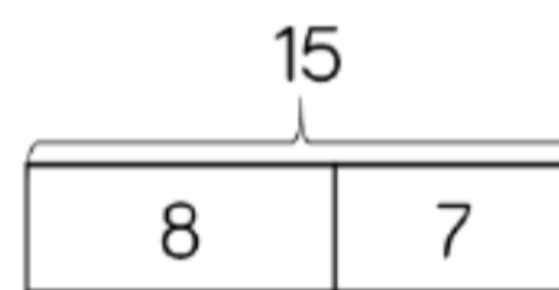
What can this look like? –

*Examples to 15*

Concrete:



Pictorial:



Abstract:

$$8 + 7 = 15$$

2      5

Questions to ask at home

What do we need to add to 7 to make 20?

If I have 15, how many more do I need to get to 18?

What is the difference between 19 and 7?

Key vocabulary

**2 add 11 equals 13**

**5 plus 12 is the same as 17**


**16 take away 7 equals 9**

**19 subtract 3 makes 16**

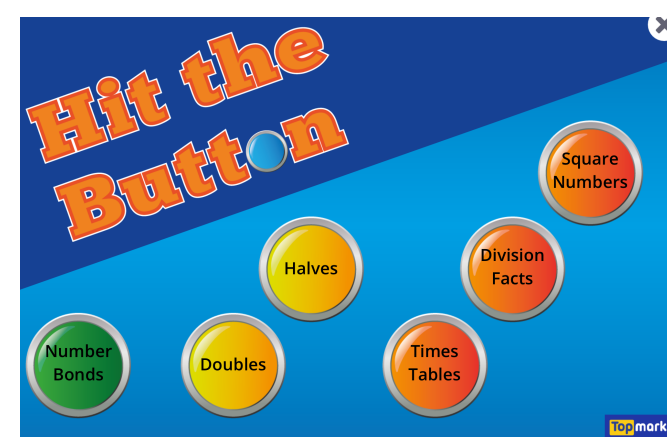
**18 minus 9 equals 9**

Things to Try at Home

Everyday Objects - Gather together objects and separate them in as many different ways as possible, write a calculation to match each one.

Pegs  - Put 20 pegs on to a coat hanger, split them in different ways and count how many pegs are on each side. E.g. 14 pegs + 6 pegs = 20 pegs.

Online Activities



# Year 3 - Autumn 2 - KIRF - 3 Times Table

A times table is a list of multiples of the given. They are very important for many calculations. This half term, the children will be learning their 3 times table including the division facts.

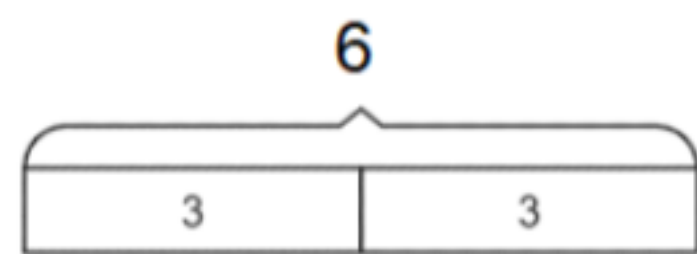
## What can this look like?

### Concrete:



$$3 \times 2 = 6$$

### Pictorial:



$$3 \times 2 = 6$$

### Abstract:

$$3 \times \boxed{7} = 21$$

$$\boxed{7} \times 3 = 21$$

$$21 \div 3 = \boxed{7}$$

## Questions to ask at home

What is 3 multiplied by 8?

What is 8 times 3?

What is 24 divided by 3?

## Key vocabulary

3 multiplied by 6 is equal to 18

5 times 3 and 3 times 5 are equivalent

30 shared by 10 is equal to 3

27 divided by 9 equals 3

## Things to Try at Home

Chants 🎧 - Practice chanting the times table.

Everyday objects - Gather together objects and separate them into groups of 3.

## Online Activities

Step 2: Drag the right answer to the question

|          |    |
|----------|----|
| 1 x 3 =  | 12 |
| 2 x 3 =  | 30 |
| 3 x 3 =  | 36 |
| 4 x 3 =  | 27 |
| 5 x 3 =  | 15 |
| 6 x 3 =  | 9  |
| 7 x 3 =  | 6  |
| 8 x 3 =  | 24 |
| 9 x 3 =  | 18 |
| 10 x 3 = | 33 |
| 11 x 3 = | 3  |
| 12 x 3 = | 21 |



|             |             |             |             |
|-------------|-------------|-------------|-------------|
| 3 x 1 = 3   | 1 x 3 = 3   | 3 + 3 = 1   | 3 ÷ 1 = 3   |
| 3 x 2 = 6   | 2 x 3 = 6   | 6 ÷ 3 = 2   | 6 ÷ 2 = 3   |
| 3 x 3 = 9   | 3 x 3 = 9   | 9 ÷ 3 = 3   | 9 ÷ 3 = 3   |
| 3 x 4 = 12  | 4 x 3 = 12  | 12 ÷ 3 = 4  | 12 ÷ 4 = 3  |
| 3 x 5 = 15  | 5 x 3 = 15  | 15 ÷ 3 = 5  | 15 ÷ 5 = 3  |
| 3 x 6 = 18  | 6 x 3 = 18  | 18 ÷ 3 = 6  | 18 ÷ 6 = 3  |
| 3 x 7 = 21  | 7 x 3 = 21  | 21 ÷ 3 = 7  | 21 ÷ 7 = 3  |
| 3 x 8 = 24  | 8 x 3 = 24  | 24 ÷ 3 = 8  | 24 ÷ 8 = 3  |
| 3 x 9 = 27  | 9 x 3 = 27  | 27 ÷ 3 = 9  | 27 ÷ 9 = 3  |
| 3 x 10 = 30 | 10 x 3 = 30 | 30 ÷ 3 = 10 | 30 ÷ 10 = 3 |
| 3 x 11 = 33 | 11 x 3 = 33 | 33 ÷ 3 = 11 | 33 ÷ 11 = 3 |
| 3 x 12 = 36 | 12 x 3 = 36 | 36 ÷ 3 = 12 | 36 ÷ 12 = 3 |



# Year 3 - Spring 1 - KIRF - 4 Times Table

A times table is a list of multiples of the given. They are very important for many calculations. This half term, the children will be learning their 4 times table including the division facts.

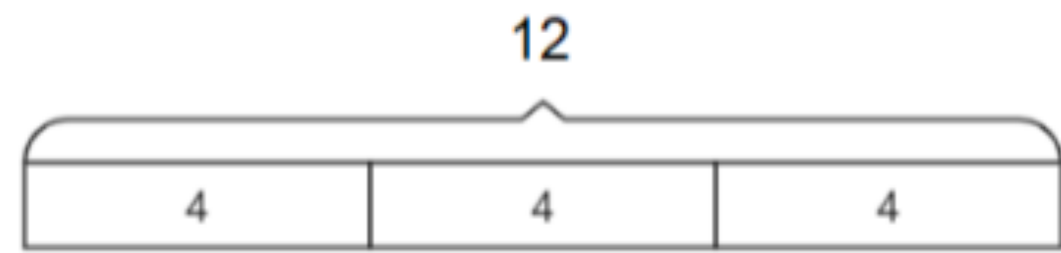
## What could this look like?

### Concrete:



$$4 \times 2 = 8$$

### Pictorial:



$$4 \times 3 = 12$$

### Abstract:

$$5 \times 4 = 20$$

$$4 \times 5 = 20$$

$$20 \div 4 = 5$$

## Questions to ask at home

What is 4 multiplied by 7?

What is 12 times 4?

What is 32 divided by 4?

## Key vocabulary

4 multiplied by 6 is equal to 24

2 times 4 and 4 times 2 are equivalent

24 shared by 6 is equal to 4

40 divided by 4 equals 10

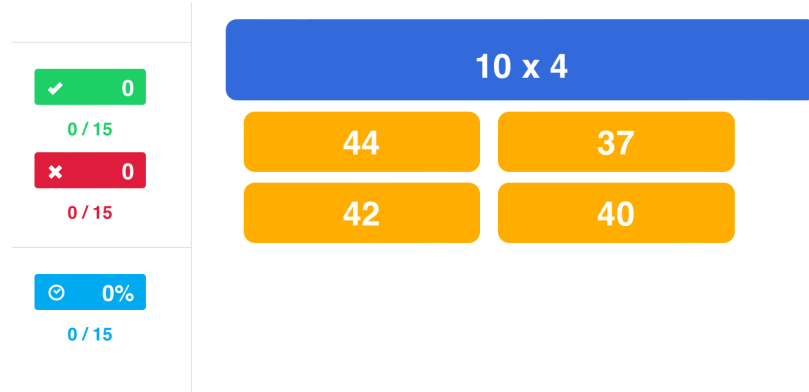
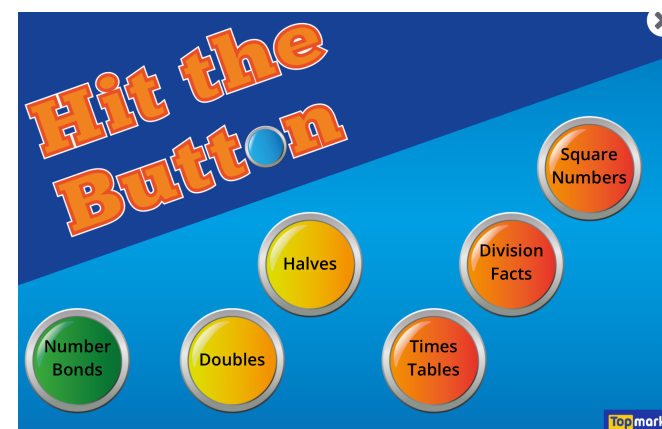
## Things to Try at Home

Chants 🗣️ - Practice chanting the times table.

Everyday objects - Gather together objects and separate them into groups of 4.

Double and double again - Multiplying by 4 is the same as doubling and doubling again. Double 6 is 12 and double 12 is 24, so  $6 \times 4 = 24$

## Online Activities



|                    |                    |               |               |
|--------------------|--------------------|---------------|---------------|
| $4 \times 1 = 4$   | $1 \times 4 = 4$   | $4 + 4 = 1$   | $4 + 1 = 4$   |
| $4 \times 2 = 8$   | $2 \times 4 = 8$   | $8 + 4 = 2$   | $8 + 2 = 4$   |
| $4 \times 3 = 12$  | $3 \times 4 = 12$  | $12 + 4 = 3$  | $12 + 3 = 4$  |
| $4 \times 4 = 16$  | $4 \times 4 = 16$  | $16 + 4 = 4$  | $16 + 4 = 4$  |
| $4 \times 5 = 20$  | $5 \times 4 = 20$  | $20 + 4 = 5$  | $20 + 5 = 4$  |
| $4 \times 6 = 24$  | $6 \times 4 = 24$  | $24 + 4 = 6$  | $24 + 6 = 4$  |
| $4 \times 7 = 28$  | $7 \times 4 = 28$  | $28 + 4 = 7$  | $28 + 7 = 4$  |
| $4 \times 8 = 32$  | $8 \times 4 = 32$  | $32 + 4 = 8$  | $32 + 8 = 4$  |
| $4 \times 9 = 36$  | $9 \times 4 = 36$  | $36 + 4 = 9$  | $36 + 9 = 4$  |
| $4 \times 10 = 40$ | $10 \times 4 = 40$ | $40 + 4 = 10$ | $40 + 10 = 4$ |
| $4 \times 11 = 44$ | $11 \times 4 = 44$ | $44 + 4 = 11$ | $44 + 11 = 4$ |
| $4 \times 12 = 48$ | $12 \times 4 = 48$ | $48 + 4 = 12$ | $48 + 12 = 4$ |



# Year 3 - Spring 2 - KIRF - 8 Times table

A times table is a list of multiples of the given. They are very important for many calculations. This half term, the children will be learning their 8 times table including the division facts.

## Key vocabulary

8 multiplied by 3 is equal to 24  
 2 times 8 and 8 times 2 are equivalent  
 32 shared by 4 is equal to 8  
 40 divided by 8 equals 5

## Questions to ask at home

What is 8 multiplied by 7?  
 What is 9 times 8?  
 What is 32 divided by 8?

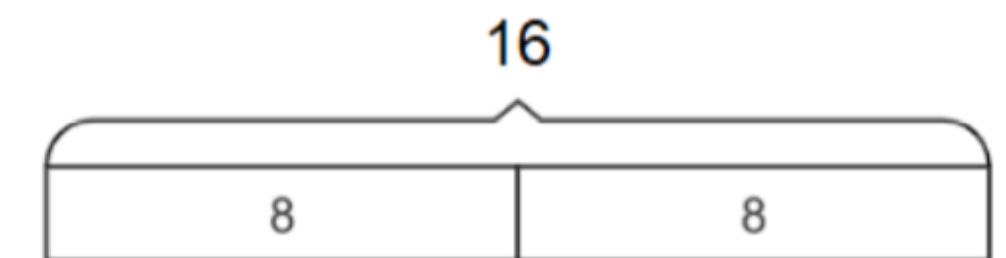
## What can this look like? –

### Concrete:



$$8 \times 2 = 16$$

### Pictorial:



$$8 \times 2 = 16$$

### Things to challenge

If your child becomes confident with these multiplications try them with missing number questions e.g.

$$8 \times \bigcirc = 24 \quad \text{or} \quad \bigcirc \div 8 = 7$$

### Abstract:

$$4 \times 8 = 32 \quad 32 \div 8 = 4$$

$$5 \times 8 = 40 \quad 40 \div 8 = 5$$

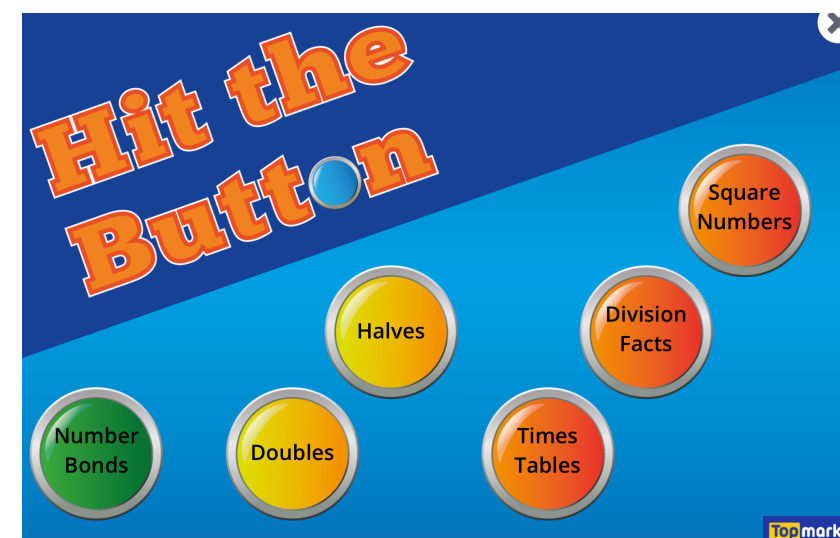
## Things to Try at Home

Chants 🗣️ - Practice chanting the times table.

Double your 4's - Multiplying a numbers by 8 is like multiplying by 4 and then doubling.  $8 \times 4 = 32$  so double  $32 = 64$ , therefore  $8 \times 8 = 64$ .

Five, Six, Seven, Eight - Fifty six is seven times eight ( $56 = 7 \times 8$ )

## Online Activities



|                    |                    |                  |                  |
|--------------------|--------------------|------------------|------------------|
| $8 \times 1 = 8$   | $1 \times 8 = 8$   | $8 \div 8 = 1$   | $8 \div 1 = 8$   |
| $8 \times 2 = 16$  | $2 \times 8 = 16$  | $16 \div 8 = 2$  | $16 \div 2 = 8$  |
| $8 \times 3 = 24$  | $3 \times 8 = 24$  | $24 \div 8 = 3$  | $24 \div 3 = 8$  |
| $8 \times 4 = 32$  | $4 \times 8 = 32$  | $32 \div 8 = 4$  | $32 \div 4 = 8$  |
| $8 \times 5 = 40$  | $5 \times 8 = 40$  | $40 \div 8 = 5$  | $40 \div 5 = 8$  |
| $8 \times 6 = 48$  | $6 \times 8 = 48$  | $48 \div 8 = 6$  | $48 \div 6 = 8$  |
| $8 \times 7 = 56$  | $7 \times 8 = 56$  | $56 \div 8 = 7$  | $56 \div 7 = 8$  |
| $8 \times 8 = 64$  | $8 \times 8 = 64$  | $64 \div 8 = 8$  | $64 \div 8 = 8$  |
| $8 \times 9 = 72$  | $9 \times 8 = 72$  | $72 \div 8 = 9$  | $72 \div 9 = 8$  |
| $8 \times 10 = 80$ | $10 \times 8 = 80$ | $80 \div 8 = 10$ | $80 \div 10 = 8$ |
| $8 \times 11 = 88$ | $11 \times 8 = 88$ | $88 \div 8 = 11$ | $88 \div 11 = 8$ |
| $8 \times 12 = 96$ | $12 \times 8 = 96$ | $96 \div 8 = 12$ | $96 \div 12 = 8$ |



# Year 3 - Summer 1 - Durations of Time

A duration of time is a measurement between two given times. This could be seconds, minutes, hours, days or even months. This half term, the children will be learning durations of time facts. The aim is for them to recall them instantly.

## Questions to ask at home

- How many days are in **one year**?
- How many days are in a **leap year**?
- What day comes before **February 1st**?
- What day comes after **March 31st**?

## Key vocabulary

- There are **24 hours** in a day
- In a **leap year** there is an **extra day in February**
- August is the **month after** July
- There are **60 minutes in an hour** and **120 minutes in two hours**.

## Key facts

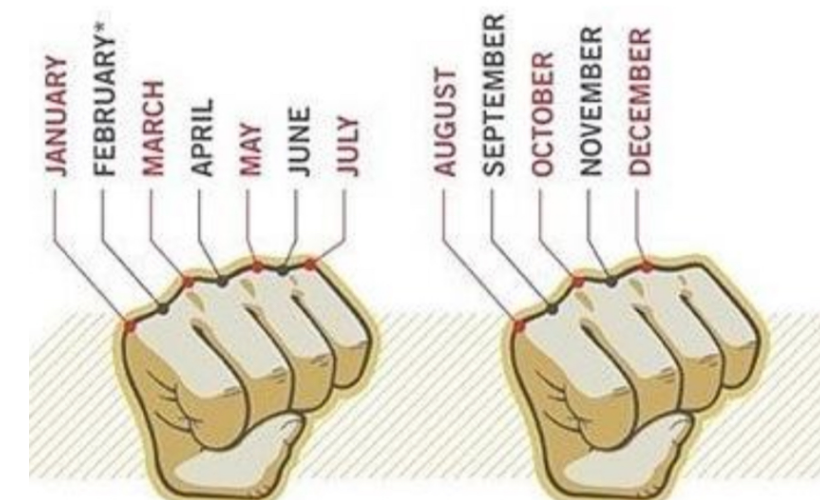
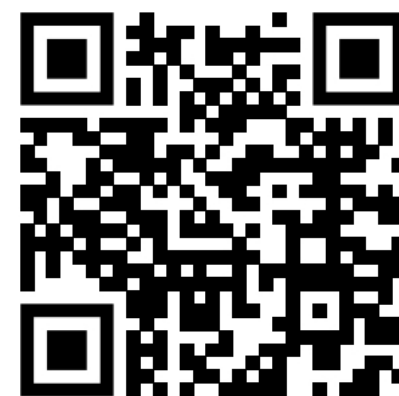
- There are 60 seconds in a minute.
- There are 60 minutes in an hour.
- There are 24 hours in a day.
- There are 7 days in a week.
- There are 12 months in a year.
- There are 365 days in a year.
- There are 366 days in a leap year.

## Things to Try at Home

Rhymes and Memory Games - '30 days has September, April, June and November. All the rest have 31, except February, it's the one which only has 28 days and 29 in each leap year.'

When's your Birthday - What month is your mums/dads/brothers/sisters birthday? How many days are there in it? What month comes before? What months comes afterwards? How many days are in those months?

## Online Activities



- **KNUCKLE BUMPS = 31 DAYS**
- **KNUCKLE GAPS = 30 DAYS** \* EXCEPT FEBRUARY = 29/28 DAYS

## Number of days in each month

|          |       |           |    |
|----------|-------|-----------|----|
| January  | 31    | July      | 31 |
| February | 28/29 | August    | 31 |
| March    | 31    | September | 30 |
| April    | 30    | October   | 31 |
| May      | 31    | November  | 30 |
| June     | 30    | December  | 31 |

Children also need to know the order of the months in a year.



# Year 3 - Summer 2 - KIRF - Time to the Nearest Minute

This half term, the children will be learning how to tell the time on an analogue clock (a clock with hands) to the nearest minute. The aim is for them to be able to read the time instantly.

## Things to Try at Home

Wear a Watch - Practice is important with telling the time and a watch is an easy way to practice those newly learnt skills.

## Online Activities

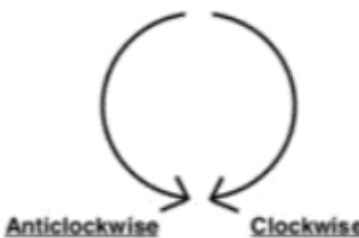


## Analogue Clocks

The longer hand on a clock tells us the **minutes**.

The shorter hand tells us the **hours**.

Which way do the hands of a clock go round?



## Talk about time

Discuss what time things happen. Try to make sure an analogue clock is visible at home or the child can use a watch throughout the day.

## Breaking it down

Children need to be able to tell the time using a clock with hands. This target can be broken into several steps:

- I can tell the time to the nearest hour.
- I can tell the time to the nearest half hour.
- I can tell the time to the nearest quarter hour.
- I can tell the time to the nearest 5 minutes.
- I can tell the time to the nearest minute.

## Questions to ask at home

What **hour** is it?

Where does the **minute hand point** to when it is **quarter past the hour**?

What time is it **now**?

What would an **analogue clock** look like in **6 minutes time**?

## Key vocabulary

The time is 12 **o'clock**

It is **half past** two

It is **quarter to** five

It is **twelve minutes past** one

It is **thirty six minutes past** four.

