Maths activities

I can find number bonds when there are missing parts. ©)

$$
3+\square=10 \quad 9+\square=10
$$

$$
4+\square=10 \quad 1+\square=10
$$

$$
10+\square=10 \quad 0+\square=10
$$



Now try these:


I can present number bonds to 10 in different ways. ©


## I can write the number bond to 10. .

Use the sentences to write a number bond sentence to 10 .


I can find number bonds to 20. ©

## $6+\square=20 \quad \square+15=20$

## $9+\square=20 \quad \square+8=20$

$10+\square=20 \quad \square+0=20$

Challenge:
How could you work out the answers to these number sentences?

$$
\begin{array}{ll}
20=13+\square & 20=2+\square \\
20=14+\square & 20=7+\square
\end{array}
$$

I can use different ways of presenting number bonds. ©


Challenge: Can you complete these pyramids for other number bonds to 20?


Noah has 20 pigs. He needs to put them into 2 fields. How many pigs could go in each field?


Can you use your number bond knowledge to help you to solve the problem? Use the space below to show your working out.

## Doubling

I) Complete the sentences.

Use the pictures to help you.
a)

b)

c)

d)


2 Match the doubles to the additions.


3 Fill in the gaps.
a) Double 15 is
b) Double 11 is


## Partitioning

Can you write the teen number in the empty part of the part-part whole?


Write how many groups of tens and ones there are.

|  | $\qquad$ tens $\qquad$ ones $\qquad$ $+$ $\qquad$ $=$ $\qquad$ |
| :---: | :---: |
|  | $\qquad$ tens $\qquad$ ones $\qquad$ $+$ $\qquad$ $=$ |
|  | $\qquad$ tens $\qquad$ ones $\qquad$ $+$ $\qquad$ $=$ $\qquad$ |
|  | $\qquad$ tens $\qquad$ ones $\qquad$ $+$ $\qquad$ $=$ |
|  | $\qquad$ tens $\qquad$ ones $\qquad$ $+\ldots=$ $\qquad$ |

I) Look at the picture.


Complete the part-whole model and fact family.


Can you write each number sentence a different way?
2. Complete the fact family for each bar model.

c) Draw your own bar models.

Ask a partner to write the fact family to match.

## Place Value

I can fill in missing numbers on a 100 square

|  | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 |  | 16 |  | 18 | 19 |  |
|  |  | 23 | 24 | 25 | 26 | 27 | 28 |  | 30 |
| 31 | 32 |  | 34 | 35 |  | 37 |  | 39 |  |
| 41 |  | 43 | 44 | 45 |  | 47 | 48 |  | 50 |
| 51 | 52 | 53 | 54 | 55 |  | 57 |  | 59 | 60 |
|  | 62 |  | 64 |  | 66 |  | 68 |  | 70 |
| 71 | 72 | 73 |  | 75 | 76 | 77 | 78 | 79 |  |
|  |  |  | 84 | 85 |  | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 |  | 95 |  |  |  | 99 |  |

Pick a number between 10 and 90 and write it in the middle box then using your knowledge of the 100 square find 1 more and 1 less and 10 more and 10 less


I can apply my knowledge of place value to solve a problem. ©


Use two of the cards to make a number bigger than 50. $\qquad$

Use two of the cards to make a number smaller than 50. $\qquad$

What is the smallest number you could make using 2 cards? $\qquad$

What is the largest number I could make? $\qquad$

I can use my knowledge of multiplication to complete sequences in $2 s, 5 s$ and 10s. ©
$0,2,4,6$, $\qquad$ $\underline{L}$ $\qquad$ 1 - 1


$0,5,10$


0,10 ,


Fill in the missing numbers.

| 15 | 25 | 30 |  | 40 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

| 6 | 8 |  | 12 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

|  |  |  | 50 |  |  | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in

I can sequence 2 's, 5's and 10's with missing numbers. :)

Fill in the missing numbers.
Counting in $\qquad$ .

| 10 |  |  | 16 | 18 |  | 22 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

|  | 6 | 8 | 12 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

| 5 | 15 |  | 25 | 30 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

| 25 | 30 |  |  | 45 |  | 55 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

| 30 |  | 60 |  | 80 | 90 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Counting in $\qquad$ .

|  | 10 | 20 |  |  |  | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

I can solve word problems involving $2 s, 5 s$ and $10 s$ ©

Billy has 3 boxes with 5 pencils in each box. How many pencils does he have altogether?

Sarah has 6 bags with 10 sweets in each. How many sweets does she have altogether?

Jack has 8 pairs of socks in his drawer. How many socks are in his drawer?

A rocket has 2 fins. How many fins do 9 rockets have?

An astronaut collects 7 bags with 10 moon rocks in each bag. How many moon rocks does she have altogether?

Paul has 8 boxes of 5 lollipops. How many lollipops does he have altogether?

I How many muffins are there altogether?

2) How many apples are there altogether?


There are $\square$ apples on each ten frame.


There are $\square$ apples altogether.

3 How many counters are there altogether?


There are $\square$ counters altogether.
4. Complete the number tracks.

| 10 | 20 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 70 |  | 50 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

5 Tom has these balloons.


He needs 60 balloons for a party.
Does Tom have enough balloons? $\qquad$
How do you know?

Fill in the missing numbers on the number tracks

| 3 | 4 |  | 6 | 7 |  | 9 | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


7,8,

$$
3,4, \quad 6,7,8 \text {, }
$$

$$
6,7,8,9
$$

$$
3,4,5,6,7
$$

$$
13,14, \ldots, 16, \ldots \_, 18,19,20
$$

Addition-Write the addition number sentence and write the answer in the bottom box


## 13

## 6

| 2 | 17 |
| :--- | :--- |



I can add numbers to 20 on a number line. ©
$17+2=$

$6+13=$

$2+14=$

$5+12=$
Extension: Can you use your number bond knowledge to add three numbers?

```
5+5+6=
```




$$
1+9+3=
$$



## Addition word problems



Tom had 5 red sweets and 12 blue sweets. How many did he have altogether?


Sam had 15 pens and 4 pencils. How many did he have in total?


Sammy the giraffe has 5 spots. Tim the giraffe has 8 spots. How many spots are there in total?


A happy penguin ate 3 fish. His friend ate 9 fish. How many fish did they eat in total?


A red flower has 4 petals. A black flower has 11 petals. How many petals do the flowers have altogether?

I can use my addition knowledge to reason. ©
Tom has six cars and Sam has ten cars. Mum thinks there are nine cars altogether. Is she right?

I have 6 sweets and my sister has 6 sweets.
She thinks we have ten sweets. Is this true?

I can use my addition knowledge to reason. ©
There are five birds in the tree and seven more land. I can see ten birds altogether. Am I right?

I can see 17 bugs on the grass. 4 more jump on to the grass. How many altogether? How do you know?

Subtraction
Solve the subtraction sentence and write the answer in the empty box

$8-4=$

9-2 =
$18-3=$

$16-7=$

I can subtract numbers from 20 on a number line. ©

$17-2=$

$18-6=$

$14-10=$

$16-7=$


$20-9=$

$20-3=$


20-4 =


Tom had 15 red sweets and ate 12. How many sweets does he have left.


Sam has a pack of 20 pens, he lost 4 . How many pens does he have left?



Sammy the giraffe has 19 spots on his neck. 3 of the spots is covered with a scarf. How many spots can still be seen?


There were 15 fish in the tank. The happy penguin ate 7 fish. How many fish are left in the tank?


Amanda planted 19 red roses in her garden. 4 of the roses died. How many roses are left in her garden?


Abigail bought 20 candy canes form the shop. She gave 8 of her friends a candy cane. How many candy canes does she have left?

## Multiplication and Division

## Building Bricks Multiplication

Can you add the bumps on the building bricks to complete these multiplication calculations?
1.

2.

4.

5.

$\square$
6.

7.

8.

१.

10.


## Multiply by 3 on a Number Line



1. Join the dots to match the pictures to the number lines.

2. Can you draw jumps of 3 on the number line for the following?

3. How many $3 s$ are in 24 ? Can you draw the jumps?

4. What are 6 lots of 3 ? Can you draw the jumps? $\square$

5. Aliens have 3 eyes. There are 11 aliens. How many eyes are there altogether? $\square$

## Multiplication as Repeated Addition

| One ostrich has two legs. | 2 | $1 \times 2=2$ |
| :---: | :---: | :---: |
| How many legs do 2 ostriches have? | $2+2=$ | $2 \times 2=$ |
| How many legs do 3 ostriches have? | $2+2+2=$ | $3 \times 2=$ |
| How many legs do 4 ostriches have? | $-^{+}-^{+}+^{+}=$ | $4 \times 2=$ |
| How many legs do 5 ostriches have? $\Rightarrow \ggg \ggg \ggg \ggg \gg$ |  | $5 \times 2=$ |
| One lemur has 4 legs. | 4 | $1 \times 4=$ |
| How many legs do 2 lemurs have? | $4+4=$ | $2 \times 4=$ |
| How many legs do 3 lemurs have? | $-^{+}-^{+}-$ | $3 \times 4=$ |
| How many legs do 4 lemurs have? |  | $4 \times 4=$ |
| How many legs do 5 lemurs have? |  | $5 \times 4=$ |

## Division by Sharing

Use a pencil to share these tasty goodies equally between different numbers of people.
e.g.


1. Share between 2


How many does each person get?
$\begin{array}{lllll}\text { (1) } & 2 & 3 & 4 & 5\end{array}$

How many does each person get?

What does the calculation look like? $3 \div 3=1$

What does the calculation look like?

$$
8+2=
$$

2. Share between 4

$\begin{array}{llll}2 & 3 & 4 & 5\end{array}$
$12+4=$
3. Share between 3
 $\begin{array}{llll}2 & 3 & 4 & 5\end{array}$
$12+3=$

4. Share between 2
 $2 \quad 3 \quad 4$ $5 \quad 10+2=$
5. Shute between 4


## Representing Division

Des has 6 plates. If he shares
e.g. them out equally between 2 tables, how many will be on each?

$6 \div 2=3$

The mother blackbird has

1. caught 6 worms - how many will each of her three chicks get?

Julia has drawn 4 monsters and
2. has 12 googly eyes to share between them. How many will each one get?

Amina and her brothers are
3. given $£ 9$ to share. How much will each of them get?


Dan has 15 arrows. He shoots
4. at each target in turn. How many times does he hit each target?

Robyn cooks 16 eggs and shares
5. them between the 4 members of her family. How many eggs do they each get?

$16+4=$

NASA have 18 rocket engines
6. to divide between 6 rockets. How many engines will they build on each rocket?


## Greater Than or Less Than

Put the correct sign ( $<,>$ or $=$ ) between these numbers.
Remember - the crocodile always eats the bigger number!


## Time

I can read and match o'clock and half-past times. ©


I can write down the time for o'clock and half past. ©


## Challenge!



The time on this clock reads half past eight, how do you know this is correct?

I can solve questions about days of the week. © How many days of the week are there? $\qquad$

What comes after Wednesday? $\qquad$

What comes before Saturday? $\qquad$

How many days are there between Monday and Friday?
$\qquad$

How many days are there at the weekend? $\qquad$

How many days are there in two weeks? $\qquad$

How many days are there in three weeks? $\qquad$

I can answer questions about the months of the year $\cdot$ :

1 What is the $6^{\text {th }}$ month? $\qquad$

2 How many months begin with the letter S? $\qquad$

3 What month comes after February? $\qquad$

4 What month comes before July? $\qquad$

5 What is the $10^{\text {th }}$ month? $\qquad$

6 What month is Christmas in? $\qquad$

7 How many months come after September? $\qquad$

8 What month has 3 letters? $\qquad$

9 What month do we start school? $\qquad$

10 When is your birthday?

## Fractions

I Tick the cake that is cut in half.

2) Draw a line to split each shape in half.


3 Colour half of each rectangle.


4 Show one half in three different ways.


5 Tick the shapes that show one half.


6 Match the halves to make a whole.

I) a) Circle half of the pencils.

b) Complete the sentence.

Half of 6 is


2 Colour half of each group.
a)

b)


Did you do it the same way as your partner?

3 How many counters are there in each group?
Find half of each group.
a)

b)

c)


4 Complete the sentence.
7 is half of


1) Colour a quarter of each shape.

2) Show a quarter in four different ways.

3) Kim wants to show a quarter.


Do you agree with Kim? $\qquad$
Talk about your answer.

4 Tick the shapes that show one quarter.


## Money

## How much money is in my jar?



## Counting Mixed Coins

Count the coins and write your answers in pence or pounds and pence.


## Diving into Mastery - Diving <br> Adult Guidance with Question Prompts

Children may need coins to help with this activity. They can touch the coins as they count in ones, fives and tens to find the total in each purse.

How many coins are in this purse?
What is the value of each coin?
Are they all the same?
How much money is in this purse?
Can you count in fives/tens to help you?
How much are these sweets? Can you read the value on the label?

Which sweet could we buy with this money?

What other coins could you use to pay?
Could you pay for the lollipop with one coin? Which one?
How could you pay for the chocolate with two coins?
How could you pay for the sweet with two coins?

## Counting in Coins

Match the purses to the items in the sweet shop.


Which other coins could you use to pay for these sweets? How many different ways can you think of?

## Counting in Coins

Asma bought a candy cane from the sweet shop.


Which coins could she have paid with? How many different ways of doing this can you find?

## Shape

## Name the 2D Shape



Number of sides $\qquad$ Number of sides $\qquad$ Number of sides $\qquad$ Number of sides $\qquad$
Name $\qquad$ Name $\qquad$ Name $\qquad$ Name $\qquad$


Number of sides $\qquad$ Number of sides $\qquad$ Number of sides $\qquad$ Number of sides $\qquad$ Name $\qquad$ Name $\qquad$ Name $\qquad$ Name $\qquad$

## 3D Shapes


edges $\qquad$
faces/surfaces $\qquad$
vertices $\qquad$

edges $\qquad$
faces/surfaces $\qquad$ vertices $\qquad$

edges $\qquad$
faces/surfaces $\qquad$
vertices $\qquad$

edges $\qquad$
faces/surfaces $\qquad$
vertices $\qquad$

edges $\qquad$
faces/surfaces $\qquad$
vertices $\qquad$

edges $\qquad$
faces/surfaces $\qquad$
vertices $\qquad$

## Length

Compare Lengths and Heights
Adult Guidance with Question Prompts

Children use and understand the language of length and height such as longer, shorter and taller. They should also investigate lengths and heights that are equal to one another. When comparing length and height, children should measure from the same starting point. Make sure children use the correct terms when describing height, e.g. taller instead of longer.

Who is taller/shorter out of the lion and the tiger?
Why do you think the lion and tiger are standing on a line?
Can you find a friend that is taller/shorter/the same height as you?
Which pencil is the longest/shortest?
Would it be fair if one of the pencils wasn't touching the pink line? Explain why.
Can you find something longer/shorter/the same length as the yellow pencil?

Can you think of things that you could say about each pair.
Continue to compare heights and lengths of objects in your classroom.


## Compare Lengths and Heights

Adult Guidance with Question Prompts


Children use and understand the language of length and height such as longer, shorter and taller. They should also investigate lengths and heights that are equal to one another. When comparing length and height, children should measure from the same starting point. Make sure children use the correct terms when describing height, e.g. taller instead of longer.

Are the elephants correct?
Can you think of better words we can use to compare their heights?
Find two things that are different heights. Which is the tallest and which is the shortest?

Do you think the carrots are the same length?
How could we find out?
Can you find two things that are the same length?

## Pick a vehicle.

What can you tell me about its length/height compared to the others? What can you tell me about the height and length of the cement mixer compared to the dump truck and the front loader? Can you find three things and compare their heights and lengths?

## Compare Lengths and Heights

Use these words to compare the heights.


Compare these pairs.


## Compare Lengths and Heights

Could the elephants use better words to compare their heights?


These carrots are


What could you do to find out?


Compare the length and height of these vehicles.

## Weight

I Which object is heavier?
Tick your answer.


How do you know?
2. Which object is lighter?

Tick your answer.


How do you know?

3 The ball is lighter than the bottle.
Tick the picture that shows this.


4 Choose a phrase to complete the sentences.

## more than

 the same as
a)


The cube weighs $\qquad$ the cylinder.
b)


The cuboid weighs $\qquad$ the sphere.

1 How much does each object weigh?
a)

b)

c)


The slice of cake weighs $\square$ cubes.

2 Draw cubes to balance the scales.
a) The toy car weighs 6 cubes.

b) The sweets weigh 4 cubes.


3 Use cubes to weigh objects in your classroom.
Complete this sentence for each object.


Compare answers with a partner.

