## Morning Maths Activities



## To the Teacher:

- These activities require no preparation other than a minimum of basic classroom equipment - this is indicated on each slide.
- Slides are editable as for some of the activities you may wish to simplify the numbers or make them more challenging for your class.
- Many of the games can be used more than once as they will be different each time children play them.


## Select an Activity



Comparing Roman
Numerals


Word Problems: Scaling Up

Simple or Tricky?


Odd One Out 2


## Ordering Numbers

## Equipment

Whiteboard and pens
30-9 dice


Roll your die three times.
Use the numbers to create as many three-digit numbers as you can.

Answers will depend on the numbers the children generated with their dice.

Write your numbers in descending order.


## Estimating Numbers

Equipment

Whiteboard and pens


What numbers do you think each arrow is showing on each number line? How accurate can you be with your answers?


## Odd One Out

Equipment

Whiteboard and pens


What is the odd one out in each group and why? (You may think differently to other people!)


## What Would You Use?

## Equipment

Whiteboard and pens Examples of measuring equipment could be provided


What equipment and units of measurement would you use to measure each item? Match the correct ones.

Temperature of a cup of tea
trundle wheel or car odometer, and metres or kilometres or miles

Mass of an elephant scales or balance and grams
stopwatch and minutes

Distance from school to your house thermometer and degrees Celsius $\left({ }^{\circ} \mathrm{C}\right)$
Volume of water held in a paper cup measuring cylinder or jug and millilitres

Mass of a lump of playdough ruler and millimetres or centimetres

Width of your little finger scales and kilograms or tonnes

Time taken to swim five lengths of a swimming pool
metre-stick and metres

## Roll 5 Dice

Equipment
Whiteboard and pens Examples of measuring equipment could be provided


Home

Hide
Answers

Roll your dice.
Use the numbers and any of the four operations to try to make the target number. How close can you get? You can only use each number once in your calculations!


Answers will depend on the target number chosen and the numbers the children generated with their dice.

## Fact Family

## Equipment

Whiteboard and pens


Home Hide Answers

Use the number fact given to work out linked facts e.g. $70 \times 50=3500$.
Think about place value, inverse operations and facts that would come before or after the fact shown!


Answers will vary but could include the following: $70 \times 5=350,35 \div 5=7,6 \times 5=30,7 \times 0.5=3.5$

## Sorting Heights

Equipment

Whiteboard and pens


Can you sort these children into height order, from smallest to tallest?

| Name | Height (m) |
| :---: | :---: |
| Maddox | 1.41 |
| Kiera | 1.09 |
| Jake | 1.28 |
| Felix | 1.19 |
| Melody | 1.33 |
| Alex | 1.35 |
| Hamish | 1.39 |
| Elena | 1.04 |

## Flower Sale

## Equipment

Whiteboard and pens


I make 24 bunches of flowers to sell at the school fair.

Two thirds of the bunches are made using red flowers. How many red bunches do I have? One quarters of the bunches are made using blue flowers. How many blue bunches do I have? The rest of the bunches are made using pink flowers. How many pink bunches do I have?


## Guess the Number

## Equipment

Whiteboard and pens 100 squares may be useful to eliminate numbers.


Home

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Answers

My number is less than 100.
When rounded to the nearest 10, my number is 80 . My number has half as many ones as tens. Can you guess my number?

My number is less than 100.
When rounded to the nearest 100, my number is 0 . When rounded to the nearest 10, my number is 0 . My number is a multiple of 4.
Can you guess my number?


## Making 100

## Equipment

Whiteboard and pens


Each jar needs to contain 100 objects. How many more will you need to add to each container?


## Sequence

## Equipment

Whiteboard and pens
What goes next in each sequence?


8452, 7452, 6452, $\square$
$\square$ 873, 763, 653, $\square$
$\square$ $\square$, $\square$

Home Hide Answers

## Adding Fractions

## Equipment

Whiteboard and pens
3 0-9 dice per pair
 Hide

Home Answers

Roll one of the dice to fill in the denominator of the fractions.
Roll the remaining two dice to fill in the numerators of the fractions.
Add the fractions together. If the total is greater than one, you score a point!

Take turns - who has the highest score?


Answers will depend on the numbers the children generated with their dice.

## Make 36

Equipment

Whiteboard and pens


Home Hide Answers

How many different ways can you find to make 36 using the numbers below?
Can you find a way for each different operation?


## Odd One Out

Equipment

Whiteboard and pens


Home

Answers
Look at each row of shapes.
What is the odd one out in each group and why?
(You may think differently to other people!)


## Sorting Time

Equipment

Whiteboard and pens


Hide
Home Answers

Sort these periods of time from the shortest to the longest.


Can you think of a linked fact for each one? For example, how many hours in one day?

## Perimeters

Equipment

Centimetre squared paper and pencils


## Home

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Answers


Use squared paper. How many different shapes can you draw with a perimeter of 8 cm ?
What is the area of each shape?

How many different shapes can you draw with a perimeter of 20 cm ?
Which shape has the largest area?
Which has the smallest area?

## Answers will vary.

## Rounding Decimals

Equipment

Whiteboard and pens 20-9 dice


Home
Hide
Answers

Roll the two dice to create a decimal number. Round the number to the nearest whole one. Repeat this so that you have eight decimal numbers. List your decimal numbers in order from largest to smallest.


Answers will vary.

## Estimating Calculations

Equipment

Whiteboard and pens


Home Hide
Answers

Sort these calculations into two lists: those with answers greater than 50 and those with answers smaller than 50.
Don't work out the calculations - just estimate the answers!

| $100-63$ | $23 \times 8$ |  | Smaller than 50 |
| :---: | :---: | :---: | :---: |
|  | Greater than 50 |  |  |
| $500 \div 2$ | $14 \times 3$ |  |  |
| $18 \times 6$ | $72 \div 9$ |  |  |
| $268-199$ | $\frac{2}{3}$ of 120 |  |  |
| $843-789$ | $\frac{1}{2}$ of 96 |  |  |

## Darts

Equipment

Whiteboard and pens


Home Hide Answers

What is the highest total you could score with three darts?

150
What is the lowest total you could score With three darts?15

How many ways can you find to score 100?
Three ways: (50, 25 and 25), (40, 40 and 20 ) and (50, 40 and 10).

How many different ways can you find to make a score with a ' 3 ' in the ones column?
There are 12 different ways: Each using a multiple of 10 and either 8 and 5, 8 and 25 or 7 and 6 .


## All the Numbers

## Equipment

Whiteboard and pens 4 0-9 dice


Home

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Answers

Roll four dice. Use the numbers to create as many four-digit numbers as you can.

What is the largest number you can make? What is the smallest number?
What is the number closest to 5000 that you can make?
How many odd numbers can you make?
Write your numbers in ascending order.


Answers will vary.


## Label It

Equipment

Whiteboard and pens


Home

Hide
Answers

What do you think this bar chart is showing? What information could have been collected from the children?
What labels would each axis need? What should the title be?


## Area

## Equipment

Centimetre squared paper and pencils


Home
Hide Answers

Draw as many different shapes as you can with an area of $24 \mathrm{~cm}^{2}$.

What is the perimeter of each shape? Which shapes have at least one line of symmetry?


Answers will vary depending on the shapes drawn, but could include the following:

Rectangles 8 cm by $3 \mathrm{~cm}, 12 \mathrm{~cm}$ by $2 \mathrm{~cm}, 24 \mathrm{~cm}$ by 1 cm .

## Roll the Dice: Fractions

## Equipment

Whiteboard and pens 2 0-9 dice per pair


Answers

Roll the die to fill in the numerator and denominator of a fraction.

If your fraction is greater than one, you score a point!

Take turns - who has the highest score?


## Comparing Roman Numerals

Equipment

Whiteboard and pens


Use the signs < and > between each set of Roman numerals.


## Word Problems: Scaling Up

Equipment

Whiteboard and pens


Home Hide Answers

I need 3 eggs to make a batch of 12 cakes. How many eggs will I need to make 60 cakes?

One litre of fruit squash is made using 50 ml of cordial. How much cordial will I need to make 10 litres of squash?

Each child needs 6 sticks to make a puppet. How many sticks will a class of 32 children need altogether?

There are 8 pencils in a packet. How many pencils are there in 25 packets?

A set of 8 books costs $£ 6.50$. How much will 12 sets of books cost? How many books will I have? 200 pencils

## Simple or Tricky

## Equipment

Whiteboard and pens


$$
\begin{array}{r|r|l|l|l|l|}
\hline 127 & 43 & 250 & 98 & 142 & 67 \\
\hline 33 & 199 & 140 & 258 & 349
\end{array}
$$

Which pairs of numbers would be easy to add and why?
Which would be tricky to add? How would you make adding them easier?

Home

Answers
Look at the numbers below.

## Zeroes in the Middle

## Equipment

Whiteboard and pens
Write the subtraction calculation needed to give the answer zeroes in the tens place holder.


$$
478-70
$$

$$
292-90
$$

$$
657-50
$$

$$
657-50
$$

$$
3581-580 \quad 955-50 \quad 244-40
$$

$$
\begin{array}{llll}
9214-210 & 7506-0 & 8916-910 & 4856-850
\end{array}
$$

Hide
Answers

## It's Not Fair!

Equipment

Whiteboard and pens


Home Hide Answers

Some stickers have not been shared equally between Alesha and Hayden. Work out how many more stickers Hayden has in each case.

Hayden: 134
Alesha: 120

Hayden: 143
Alesha: 125

Hayden: 90
Alesha: 30

Hayden: 304
Alesha: 186

Hayden: 310
Alesha: 296

Hayden: 525
Alesha: 495

Can you work out how many stickers each child should receive if each set of stickers were shared out fairly?

## Buying Beetles

Equipment

Whiteboard and pens


Home Hide
Answers

Calculate how much it would be to buy a complete beetle.

Adult Beetle

Body - £2.20
Leg - 14p
Head - £2.15
Wings - £1.55
Antennae - 11p
$\square$


## Word Problems: Division

## Equipment

Whiteboard and pens


Hide Answers

I have 60 pencils in my desk.
I share them equally between my friends. There are no pencils left over. How many friends might I have?


Answers will vary, but should be one of the following numbers: $1,2,3,4,5,6,10,12,15,20,30,60$.

