



Learning Letter wb 20th April

Maths this week



This week you will be working on Place Value. This will include rounding, partitioning and counting larger numbers on number lines. You can print the sheets off, or use a pencil and paper. Good luck!

Year 4 - Jamie Noble's Maths group 4JN

Lesson 1

Learning question:

Can I round numbers to the nearest 10?

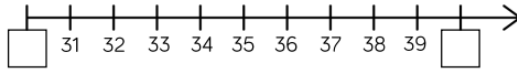
Success criteria:

- I can use multiples of 10 and describe which multiples numbers are closer to
- I can use a number line to help round
- I know that a 5 in the ones column rounds up
- I can explain how to round

Model and explanation:

Count in multiples of 10: 0, 10, 20, 30, 40, 50, 60 etc

Which multiples of 10 do the numbers sit between?



Use a number line to help e.g. **When rounding 38 to the nearest 10**

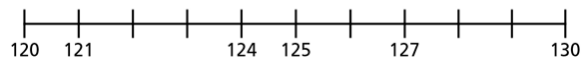
1) Which multiples of 10 does the number sit between (**here 30 and 40**)

2) Count to see which number it is nearer (**here 40**).

38 rounded to the nearest 10 is 40.

Repeat this with 3 digits. e.g

Are these numbers closer to 120 or 130?



e.g **121, 124 round to 120 and 125 and 127 round to 130.**

When you are confident, you can move towards these steps without a number line.

- What multiples of ten does the number sit between
- If the number in the ones column is 4 or below round down to the lower multiple. If it is 5 or above round up.

Activities

Task 1 & 2 – Round 2 digit numbers to the nearest 10. Firstly using a number line and then without.

Task 3 & 4 – Round 3 digit numbers to the nearest 10. Firstly using a number line and then without.

Task 5 – 6 – Problem Solving

5)

Whitney says:



847 to the nearest 10 is 840

Do you agree with Whitney?

Explain why.

6) Starting on a number (e.g 370). What numbers could round to this number?

Bonus Challenge:

- Two different two digit numbers round to 40 when rounded to the nearest 10.
- When they are added together they make 79.
- What could the two numbers be?

Can you find all the possibilities?

Lesson 2

Learning question:

Can I round numbers to the nearest hundred?

Model and explanation:

On a number line:

Use a similar system to yesterday, but this time

Activities:

Tasks 1 -2:

Using a number line round numbers to the nearest 100.

Success criteria:

- I can use multiples of 100 and describe which multiples numbers are closer to
- I can use a number line to help round
- I know that a 50 in the tens column rounds up
- I can solve inverse problems

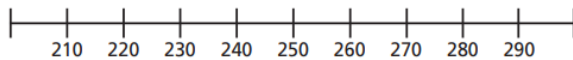
placing the number in between the multiples of hundreds.

e.g

Rounding 220 to the nearest hundred

Which multiples of 100 do the numbers sit between?

Complete the number line.



It sits between 200 and 300.

It is nearer 200. Therefore 220 rounds down to 200.

Not using a number line:

When you are confident, you can use these steps.

- 1) Which multiples of 100 does it sit between
- 2) If the value in the tens column is 40 or below round down to the lower multiple. If the value is 50 or above, round up to the higher multiple.

Task 3:

Without a number line, round tasks to the nearest 100.

Task 4:

Complete the table.

Rounded to	624	371	289	750	38
the nearest 10					

Round a group of numbers to the nearest 10 (using knowledge from previous lesson) and 100.

This can be tricky to change between the two so think carefully when do each one. Remember to look in the correct column (tens or ones) when deciding to round up or down.

Tasks 5 -6 Problem Solving

Reverse (inverse) problems. Starting on the number, what could have been rounded to make this number?

Bonus Challenge

When a whole number is rounded to the nearest 100, the answer is 200

When the same number is rounded to the nearest 10, the answer is 250

What could the number be?

Is there more than one possibility?

Lesson 3

Learning question:

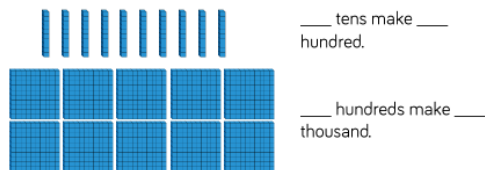
Can I count in thousands?

Success criteria:

- I know there are 10 hundreds in a thousand
- I can count forwards and backwards in multiples of a thousand
- I can solve problems adding and subtracting thousands

Model and explanation:

There are 10 hundreds in a thousand. We will look at representations to help us understand this. E.g

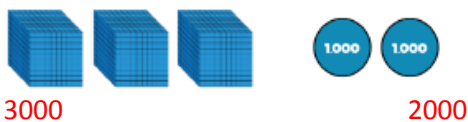


You will use pictures to count in thousands e.g.

How many sweets are there altogether?

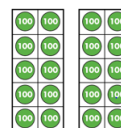


There are 3 jars with a 1000 sweets. There are 3,000 sweets altogether.



Tasks 1 – 3: You will use the pictures and representations to count backwards and forwards in thousands. As shown to the left.

Task 4: Using your knowledge that there are 10 one hundreds in a thousand, you will be shown different amounts of hundreds and will calculate how many thousands they equal.



Task 5: Count in thousands to add and subtract

Task 6: Are the statements about counting in thousands always, sometimes or never true

- When counting in hundreds, the ones digit changes.
- The thousands column changes every time you count in thousands.
- To count in thousands, we use 4-digit numbers.

Lesson 4

Learning question:

Can I represent and use 4 digit numbers?

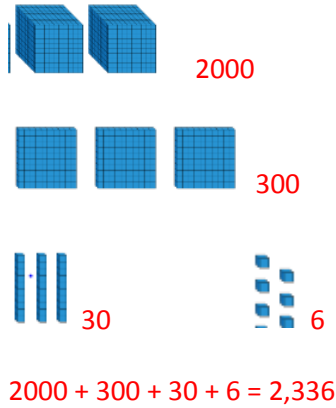
Success criteria:

- I can partition numbers into values
- I understand 4 digit numbers are made up of thousands, hundreds, tens and ones
- I can use 0 in a column as place holder

Model and explanation:

In this lesson, we will look at numbers with different values in each column. So not just 2000, 3000, 4000 but numbers such **4,321**

As shown in the picture below.



Tasks 1 -4: You will look at various pictures to see which number is represented.

Th	H	T	O

(Don't forget the 0 in the hundreds column – each number should have 4 digits).

Task 5

Circle the right counters needed to make numbers

Task 6 and Bonus challenge

Create mystery numbers by following the clues.

Lesson 5

Learning question:

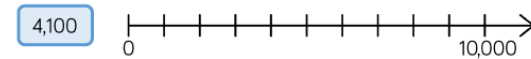
Can I use a number line to 10,000?

Success criteria:

- I can calculate intervals by dividing by 10
- I can use my place value knowledge to estimate positions on the number line
- I can use number lines with no given start or finish

Model and explanation:

(A) Today you will estimate, label and draw numbers on a number line to 10,000.

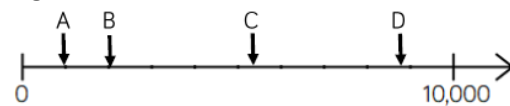


E.g. Draw an arrow to show 4100 on this number line.

You will need work out how much line (interval) is worth. **E.g. Here there is 10,000 split into 10 lines, therefore each line is worth 1,000.** You can count to check.

Then you need to draw the arrow on the line. **E.g. The arrow here should be just after the 4th line.**

(B) You will also use estimation to place numbers on a number line without intervals. E.g.



Here it is helpful to work out that C is halfway. Halfway between 0 and 10,000 is 5,000. This should help with other answers.

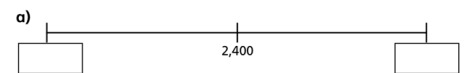
Tasks 1 -3: Children will place arrows and numbers or numbers number lines with marked intervals (lines) as shown opposite (A)

Task 4: Children will make estimates on an empty number line.

Task 5 -6 Problem solving

Task 5; a number line whereby there is more than one possibility

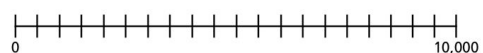
What could the missing numbers be?



Task 6



This number line goes up in thousands.



Use a clear explanation to prove whether Annie is correct or not