| Curriculum Area: Maths | | Year Group: 1 | Term: Spring 1 | |
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| Key Areas of Learning: | Oak Academy Links | Around the home activities | Your Challenge |
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| Subtraction<br>Numbers to 20<br>Place value to 50<br><br>Key Questions<br><br>- What do you notice?<br>- How do you know?<br>- How many more?<br>- How many less?<br>- How many left?<br>- What is the difference?<br>- How many are there altogether?<br>- Why do you think this?<br>- What is the reason behind your answer? | Numbers to 20 and subtraction consolidating learning we have are learning in school<br><br>https://classroom.thenational.academy/lessons/to-identify-complete-and-continue-number-patterns-adding-and-subtracting-1-or-2-ccr38e<br><br>https://classroom.thenational.academy/lessons/to-consolidate-learning-crt3jd<br><br>https://classroom.thenational.academy/lessons/to-use-mathematical-models-and-strategies-for-subtraction-64tk4d<br><br>Place Value to 50 this is our new learning we are completing this term.<br><br>https://classroom.thenational.academy/lessons/sequencing-numbers-to-50-cmtkjt<br><br>https://classroom.thenational.academy/lessons/grouping-and-counting-in-tens-60t3ee<br><br>https://classroom.thenational.academy/lessons/exploring-tens-and-ones-cru38d | - Can you make your own set of counters or cubes using paper or card – use these as your counting objects to help you during your sessions.<br>- Can you make a set of number cards 0-20 and add pictures to represent each number?<br>- Practise counting forwards and backwards to twenty using a number track or number line that you can create by ordering your number cards from 0-20.<br>- Can you make your own bead string with 20 beads to help you practise number bonds to 20.<br>- Practice writing the number 0-50 in words. | **Challenge:**<br><br>Eva and Jack are making the same number.<br>Eva's number has these tens.<br><br>Jack's number has nine ones.<br>What number are Eva and Jack making? |

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| Suggested Learning Activities | Resources | Desired Outcome |
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| Each activity is either activity A or activity B. Activity A will include a year 1 recap video to refresh the children's memories of what has been taught so far plus activities to complete. Activity B will link to the objective of activity A. These sessions do not have supporting videos but are explained below. | | |
| **Activity A** – Subtracting by partitioning<br><br>Click the link here → and follow along with the lesson. | **Resources you will need:**<br>Paper<br>Pencil<br>Objects for counting<br><br>https://classroom.thenational.academy/lessons/subtracting-by-partitioning-crr3jr?step=2&activity=video | |
| **Activity B** – Subtracting by partitioning<br><br>**Input:**<br>In today's lesson, you are going to be practising subtraction using partitioning. You will need a blank part-whole model and 8 objects for counting. Place all 8 objects into the whole and then subtract some of the objects. How many are left? Can you write a subtraction sentence to show this? Practise this process 4 times and see what different subtraction sentences you can come up with when subtracting from 8 objects. Here is an example:<br><br><br><br>$8 - 3 = 5$ | **Resources you will need:**<br>Paper<br>Pencil<br>Objects for counting or a number line | To use the + , - and = symbols.<br><br>-To use partitioning to subtract.<br><br>-To write subtraction equations. |

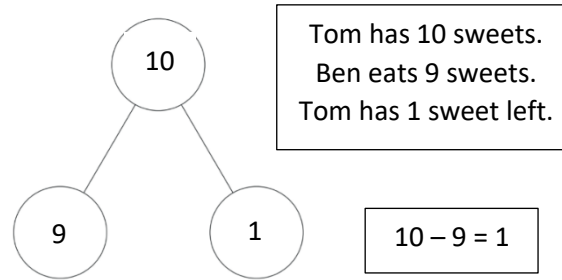| | | |
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| **Activity: Problem solving**<br><br>Tom has a bag of sweets. The bag has 10 sweets inside. He gives some to his friend Ben to eat. How many sweets does he have left in the bag? Find all possibilities and write a subtraction equation for each possibility. Can you think of a systematic way of working?<br><br>Challenge: Can you write a Maths story for each equation?<br><br>Here is an example to help you → | **Example**<br><br>Tom has 10 sweets.<br>Ben eats 9 sweets.<br>Tom has 1 sweet left.<br><br>10<br><br>9    1<br><br>10 – 9 = 1 | |
| **Activity A** – Counting back in ones to subtract.<br><br>Click the link here → and follow along with the lesson. | **Resources you will need:**<br>Paper<br>Pencil<br>Dice<br>Objects for counting<br><br>https://classroom.thenational.academy/lessons/counting-back-in-ones-to-subtract-6gu64r?step=2&activity=video | – To use the + , - and = symbols.<br><br>-To subtract by counting backwards.<br><br>-To write subtraction equations. |
| **Activity B** – Counting back in ones to subtract.<br><br>In today's lesson you will be practising subtracting by counting back in ones. First start by drawing out a number line 0-10 on paper. Start by pointing to the number 8, roll the dice and subtract that amount. Jump backwards on the number line and count as you do it. What number do you land on? Repeat this process a few times until you become comfortable with the process of subtracting by counting back in ones. Maybe your grown up can tell you which number to start on so you can switch it up a bit.<br><br>**Activity:** | **Resources you will need:**<br>Paper<br>Pencil<br>Number line<br>Dice or number cards 1-6 | |

Your task today is to play a game with your grown up. This game will enable you to practice subtracting by counting backwards. The more you practise the quicker you will become at this process. You may use your number line to support you if you want.

**Game**

Race to zero!

Start at 10 on a number line.

Roll a dice and subtract this amount.

The first person to land on 0 wins.

What would you like to roll? Why?

Why would you not want to roll a 1?

0  1  2  3  4  5  6  7  8  9  10

If you don't have any dice you could create number cards 1-6 and pick a card at random each time. Why not play with someone else and see who can get to zero first. Goodluck!
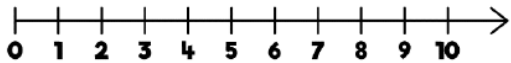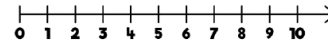
**Game**

Race to zero!

Start at 10 on a number line.

Roll a dice and subtract this amount.

The first person to land on 0 wins.

What would you like to roll? Why?

Why would you not want to roll a 1?

0  1  2  3  4  5  6  7  8  9  10

You might like to roll a 6 because it is a large amount to take away and so you would end up nearer to 0
You might not want to roll a 1 because it's a small amount and so it would take longer to get to 0

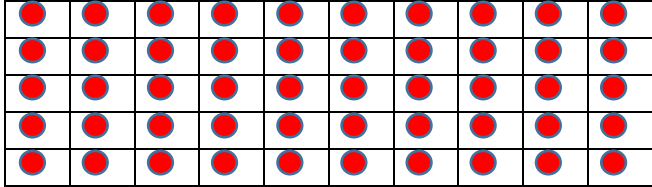| | | |
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| **Activity A** – Sequencing numbers to 50<br><br>Click the link here → and follow along with the lesson. | **Resources you will need:**<br>Pencil<br>Paper<br>Objects for counting | - Using numbers to 50 in sequences by putting them in order from smallest to biggest. |

| | | |
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| | | To count forwards and backwards within 50 using a number track |
| **Activity B** – Sequencing numbers to 50<br><br>**Input:**<br>In this lesson, you will sequence numbers from 1 – 50 by filling in the missing numbers on a number track. First you will do this by counting forwards and then by counting backwards.<br><br>Begin by counting in1's from 0 – 50 out loud. Ask an adult to help you if you need to or use counters, cars, toys as equipment to help you to count.<br>Now count back in 1's from 50 to 0..<br><br>**Activity:**<br>Using the grid attached (Appendix A) fill in the missing numbers from 1 – 50. It might be helpful to count out loud.<br><br>Now fill in the second grid on the same sheet but this time write the numbers counting back from 50 – 1<br><br>Now write the numbers 0 -50 in words.<br>Example:<br>0 zero<br>1 one<br>2 two<br>3 | **Resources you will need:**<br>Paper<br>Pencil<br>Objects for counting<br><br><br><br>Appendix A (attached) | To represent numbers 0 – 50 with pictures or objects.<br><br>To write the numbers 0-50 as words. |
| **Activity A** – Grouping and counting in 10s<br><br>Click the link here → and follow along with the lesson. | **Resources you will need:**<br>Pencil<br>Paper<br>Pasta or items to use as counters<br><br> | - To be able to group and count in 10's to 50<br><br>- To be able to count on using a number track.<br><br>- To count on in tens from a given number. |
| **Activity B** – Grouping and counting in 10's<br><br>In this session, we are going to use our previous learning of sequencing numbers to 50 to help us to begin counting in 10's. In order to do this, you will need to make 5 groups of 10 (this could be any small item you have permission to use around the home, a good idea is to use dried pasta.) | **Resources you will need:**<br>Paper<br>Pencil<br>Number track (Appendix A)<br>Counters/pasta | |

We count in tens to make counting a large number of objects easier and quicker. Take a look at the picture below.

These images both show the same number of counters.
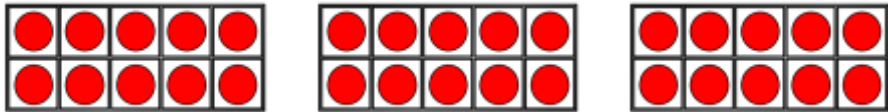Which counters are easier to count? Why?
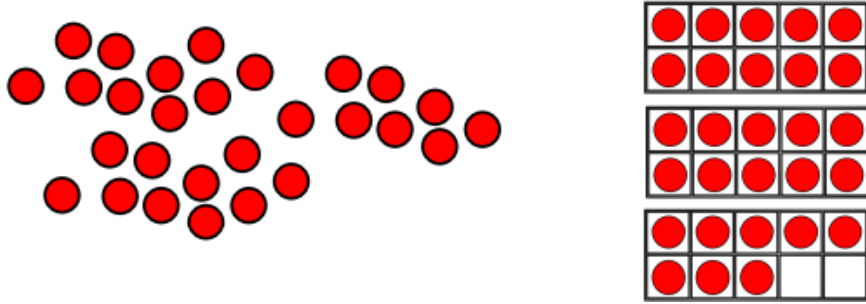


Discuss your thoughts with an adult.

**Task**
Begin by recapping on what you did in Activity A, counting in 10's out loud 10, 20, 30, 40, 50
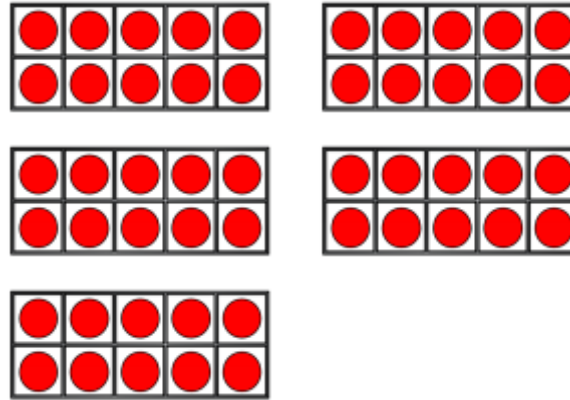Now look at the tense frames below. Can you complete the sentence?



There are _____ones in 1 ten.

The picture shows _____ groups of ten.

There are _____ counters altogether because 10, 20, _____

See the example opposite ⟶

Use the picture below to answer the next questions:

**Example:**

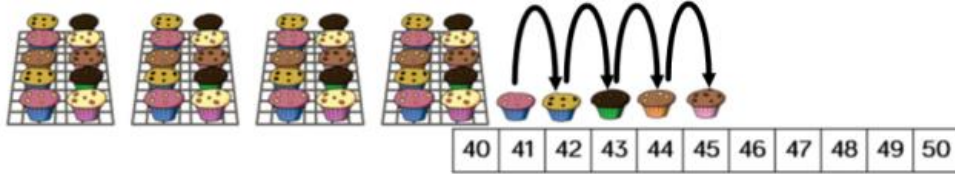

There are 10 ones in 1 ten.

The picture shows 5 groups of 10

There are _____ counters altogether because 10, 20, 30, 40, 50

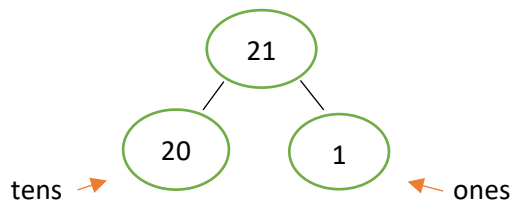| How many muffins are there? <br><br>There are _____ muffins | | |
|---|---|---|
| **Activity A** – Exploring tens and ones.<br><br>Click the link here → and follow along with the lesson. | **Resources you will need:**<br>Paper<br>Pencil<br>Objects for counting<br><br>https://classroom.thenational.academy/lessons/exploring-tens-and-ones-cru38d | – to understand there are 10 ones on one 10.<br><br>To be able to split a two digit number into it's tens and ones.<br><br>To understand that it is easier to group large numbers of items into groups of 10 to find the whole amount. |
| **Activity B** –Exploring tens and ones<br><br>**Input:**<br>In this lesson, we will consolidate our understanding that ten ones = 1 ten. We look at two-digit numbers and how they are made up of tens and ones.  For example, 21 is made from 2 tens and 1 one.  It can also be shown using a part, part whole model like this:<br><br><br>tens ➔                    ← ones<br><br>We will also use our reasoning problem solving skills to answer questions.<br><br>**Activity**<br>Firstly, take a look at this question and complete the sentences using the pictures and any equipment you have available to you to help. | **Resources you will need:**<br>Paper<br>Pencil<br>Objects for counting. | |

Count out 23 straws. How many bundles of 10 can you make?
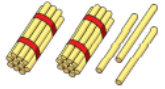


There are ___ tens and ___ ones.

___ tens + ___ ones = 23

(23)
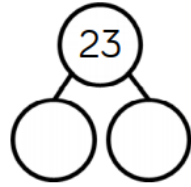
Now try these questions.

Match the pictures and words.

How many?

- Four tens and three ones

- Two tens and five ones

- Three tens and four ones

- Three ones and five tens

Now it's time to have a go at reasoning and problem solving. It might help if you complete the questions yourself. Remember to write your answer in a full sentence.

I know that................

The children are completing the part whole models.

Tommy

32

3     2

Rosie

29

9     20

27

10        7
   10

Jack

Are they correct?
Explain why.

**Possible answers**

The children are completing the part whole models.

Tommy

32

3     2

Rosie

29

9     20

27

10        7
   10

Jack

Are they correct?
Explain why.

Tommy is wrong. He has wrote 3 which should be 30 or 3 tens.

Rosie is correct – she has just recorded the ones first.

Jack is correct. 10 + 10 = 20 Two tens is the same as twenty.

*Appendix A*

**Counting forwards from 1 to 50**

| 1 | | | 4 | 5 | | 7 | 8 | | 10 |
|---|---|---|---|---|---|---|---|---|---|
| 11 | 12 | | | 15 | | | 18 | 19 | |
| 21 | | 23 | 24 | | 26 | 27 | | 29 | |
| | 32 | 33 | | | 36 | | 38 | | 40 |
| 41 | | 43 | 44 | 45 | | 47 | | 49 | |

**Counting backwards from 50 to 1**

| 50 | | 48 | 47 | 46 | | 44 | 43 | | 41 |
|---|---|---|---|---|---|---|---|---|---|
| 40 | | | 37 | 36 | | 34 | | 32 | |
| | 29 | 28 | | | 25 | 24 | 23 | | |
| | 19 | 18 | 17 | | 15 | | | 12 | 11 |
| | 9 | | | 6 | 5 | 4 | | | 1 |

**Write the numbers 1 to 50 as words.**

| 1 | ____ | 26 | ____ |
|---|---|---|---|
| 2 | ____ | 27 | ____ |
| 3 | ____ | 28 | ____ |
| 4 | ____ | 29 | ____ |
| 5 | ____ | 30 | ____ |
| 6 | ____ | 31 | ____ |
| 7 | ____ | 32 | ____ |
| 8 | ____ | 33 | ____ |
| 9 | ____ | 34 | ____ |
| 10 | ____ | 35 | ____ |
| 11 | ____ | 36 | ____ |
| 12 | ____ | 37 | ____ |
| 13 | ____ | 38 | ____ |
| 14 | ____ | 39 | ____ |
| 15 | ____ | 40 | ____ |
| 16 | ____ | 41 | ____ |
| 17 | ____ | 42 | ____ |
| 18 | ____ | 43 | ____ |
| 19 | ____ | 44 | ____ |
| 20 | ____ | 45 | ____ |
| 21 | ____ | 46 | ____ |
| 22 | ____ | 47 | ____ |
| 23 | ____ | 48 | ____ |
| 24 | ____ | 49 | ____ |
| 25 | ____ | 50 | ____ |