Hampshire Services
HIAS SCHOOL IMPROVEMENT

SERVICES FOR SCHOOLS

Pathway to Progress

A Mathematics Intervention Programme

Year 1

Teachers' Guide

Number and Place Value - Overview

Learning progression	Counting- doing it daily counts!	Learning focus	Activity Cards	Resources
Session 1	Count to at least 100 forwards, beginning with 0 or 1, or from any given number	Given a number, identify one more within 100.	• I do/We do 1 • I do/We do 2 • Intelligent Practice • Next Steps	• Hundred square • Counters • Tens frames • Counting objects
Session 2	Count to at least 100 forwards, beginning with 0 or 1, or from any given number	Given a number, identify one less within 100.	• I do/We do 1 • I do/We do 2 • Intelligent Practice • Next Steps	• Counters • Tens frames • Counting objects
Session 3	Count to at least 100 forwards, beginning with 0 or 1, or from any given number	Use partitioning and part-whole diagrams to read, write and interpret mathematical statements to 10 when solving problems.	• Counting Starter • Intelligent Practice • Next Steps	• Digit cards • Counting objects • Counters • Part-whole model
Session 4	Count back from any given number up to 50.	Use partitioning and part-whole diagrams to read, write and interpret mathematical statements to 10 when solving problems.	• Intelligent Practice • Next Steps	• Number track to 20 • Counting objects • Counters • Tens frames • Bead strings

Number and Place Value: Session 1

Counting Starter

Count to at least 100 forwards, beginning with 0 or 1, or from any given number.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	42	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Key Questions

- Can you count forwards from 1 to 100, starting in different places on the 100 square?
- Can you say the 'teen' part of these numbers a little louder? *Thirteen, fourteen, fifteen….*
- Can you say the numbers which come after these numbers: 19….29….39….99…..
- Say them loudly and clearly: *twenty, thirty, forty….*

Main Learning Focus

Given a number, identify one more within 100.

Previous Experience

Verbally count beyond 20, recognising the pattern of the counting system.

Verbal Coding and Stem Sentences

One more than __ is __.

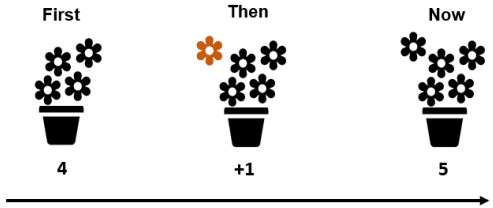
Watch Out For

- Pupils who are not able to add one more to the first number without re-counting (augmentation).
- Pupils who are not able to using counting skills to find a total.

Number and Place Value: Session 1

I do - Adult Modelling

Use concrete resources alongside the pictorial image to demonstrate the concept of adding one more.

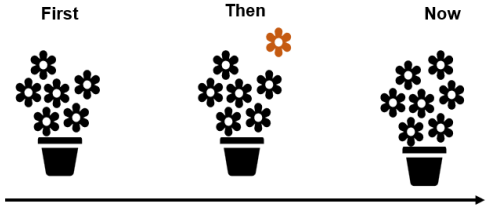


First I start with 4 flowers.
Then I add 1 more.
Now I have 5 flowers.

One more than 4 is ____

We do: Paired Example

Look at the image below and represent using concrete resources.

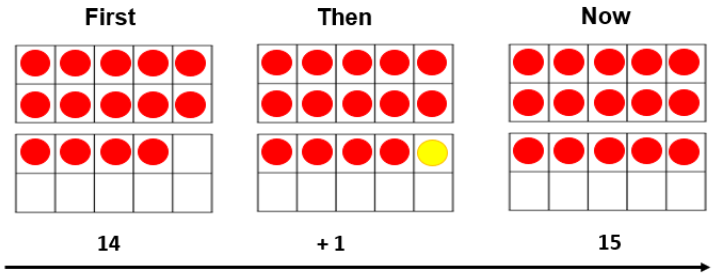


Complete the sentence stems.
First I start with ___ flowers.
Then I add ___ more.
Now I have ___ flowers.

One more than ___ is ___.

I do - Adult Modelling

Use tens frames and counters alongside the pictorial image to support the concept of adding one more.



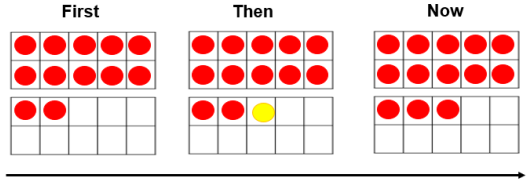
First I start with 14.
Then I add 1.
Now I have 15.

One more than 14 is ____

We do: Paired Example

Use tens frames and counters alongside the pictorial image to support the concept of adding one more.

Look at the tens frame image below and complete the sentence stems.



First, I start with ___ .
Then I add ___ more.
Now I have ___ .

One more than ___ is ___.

Number and Place Value: Session 1

You do: Intelligent Practice

Within 20
Ask pupils to use tens frames to represent the following statements:

One more than 9 is ___

One more than 11 is ___

One more than 16 is ___

One more than 19 is ___

Can pupils link this to their knowledge of counting in 1s on a hundred square?

Within 50 and within 100
Ask pupils to use a hundred square to help them complete the following statements.

One more than 35 is ___

One more than 51 is ___

One more than 78 is ___

One more than 89 is ___

Can pupils explain why a tens frame would not be an efficient resource to help them?

Assessment Opportunities

- Check accurate object counting.
- Check one-to-one correspondence.
- Check pupils are subitizing when appropriate to do so (image of flowers/ tens frames).
- Check pupils are beginning from the first number without re-counting them (augmentation).
- Check if pupils can use their counting skills to find a total.
- Check if pupils can use a tens frame and relate this to a quantity of objects, then adding one of those objects to see how many altogether.
- Check if pupils are spotting a repeated pattern within the number system to 20, which they could then begin to apply beyond 20.

Next Steps

Fill in the missing numbers.

18		**20**		**22**

Explain how you found the missing numbers.

What did you notice?

Addition and Subtraction - Overview

Learning progression	Counting- doing it daily counts!	Learning focus	Activity Cards	Resources
Session 1	Count back from any given number up to 50.	Given a total, identify one penny more and one penny less.	• I do/We do 1 • I do/We do 2 • Intelligent Practice • Next Steps	• Counting stick • Hundred square • Tens frame • Counters • Coins
Session 2	Count back from any given number up to 50.	Represent and use number bonds and related subtraction facts within 20.	• I do/We do 1 • I do/We do 2 • Intelligent Practice 1 • Intelligent Practice 2 • Next Steps	• Structured number line • Counters
Session 3	Count reliably in 2s.	Represent and use number bonds and related subtraction facts within 20.	• Intelligent Practice • Next Steps	• Counting stick • Tens frame • Counters • Diennes
Session 4	Count reliably in 2s.	Solve one-step problems that involve subtraction, using concrete objects and pictorial representations.	• I do/We do 1 • I do/We do 2 • Intelligent Practice • Next Steps	• Counting stick • 2p coins/Numicon • Number track • Tens frame • Counters

Multiplication and Division - Overview

Learning progression	Counting - doing it daily counts!	Learning focus	Activity Cards	Resources
Session 1	Count in 2p.	Solve one-step problems involving multiplication, focussing on groups of 2, using concrete objects, pictorial representations, and arrays with the support of the teacher	• Counting Starter • I do/We do 1 • I do/ We do 2 • Intelligent Practice • Next Steps	• 2p coins • Counters • Structured number line
Session 2	Count reliably in 10s.	Solve one-step problems involving multiplication, focussing on groups of 10, using concrete objects, pictorial representations, and arrays with the support of the teacher	• I do/We do 1 • I do/We do 2 • Intelligent Practice • Next Steps	• Number track • Diennes • Counters • Structured number line
Session 3	Count reliably in 10s.	Making equal groups by sharing and recording pictorially.	• I do/We do 1 • I do/We do 2 • Intelligent Practice • Next Steps	• Hundred square • Counters
Session 4	Count in 10p.	Making equal groups by grouping and recording pictorially.	• I do/We do • Intelligent Practice • Next Steps	• 10p coins • Counters