CLASSROOM Secrets

#LIFEworkbalance

We have started a #LIFEworkbalance campaign and we need your help to complete our LIFE/work balance survey.

We hope to publish the results soon, so please give 15 minutes of your time to help us get a true picture of school life.

Want to be a part of this campaign? Take the survey on our website and share it with your colleagues!

Year 3 – Autumn Block 2 – Addition and Subtraction
2-Digit and 3-Digit Numbers

About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 3: (3C2) Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction

Mathematics Year 3: (3C4) Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
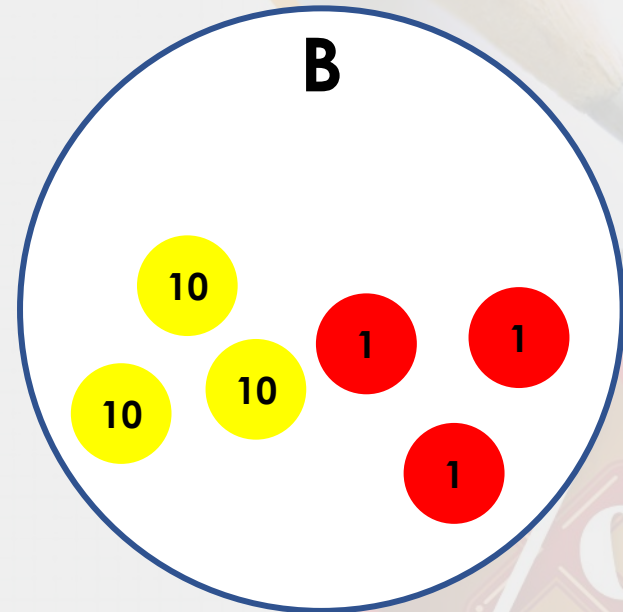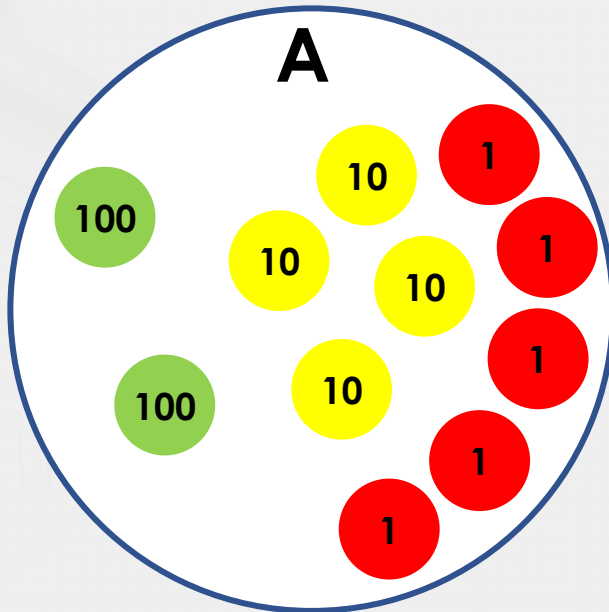
More **Year 3 Addition and Subtraction** resources.

Did you like this resource? Don't forget to review it on our website.
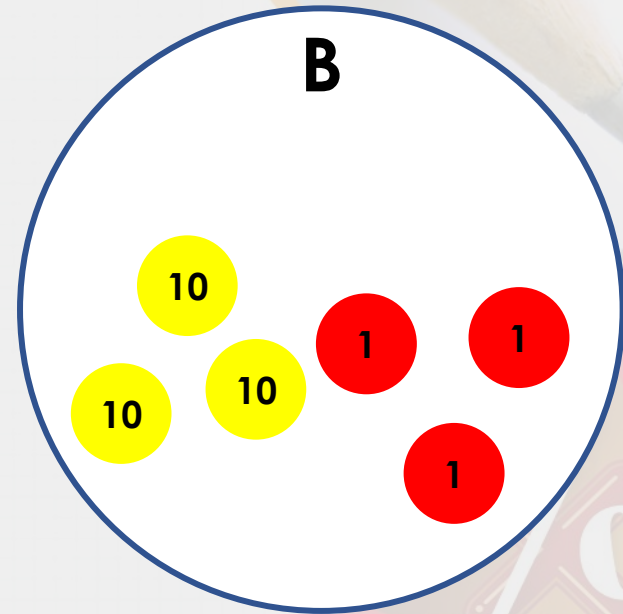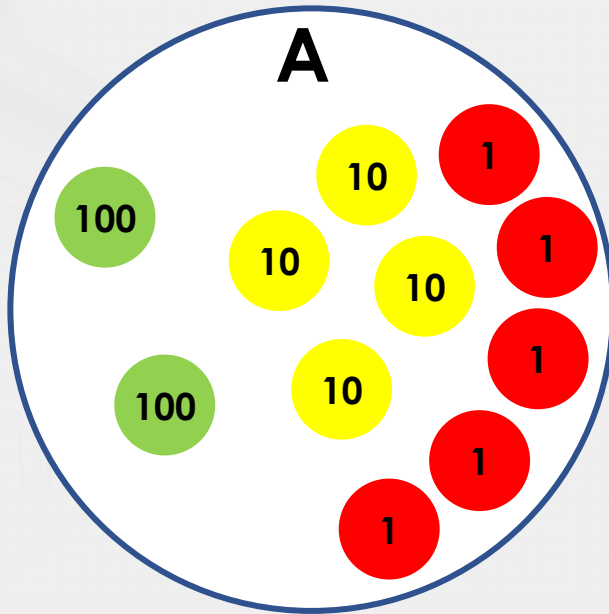
Step 10: 2-Digit and 3-Digit Numbers

Use the counters below to complete the question.

What numbers are represented in A and B?

Use the counters below to complete the question.

A

100   10   1
  10   1
     10   10   1
  100   10   1
                1
              1

B

10
   10
10   1   1
              1

What numbers are represented in A and B?

A = 245   B = 33

True or false? The place value grid below represents 254 + 24 = 278.

H	T	O
●●	●●●●● ●	●●●●
	●●●●	●●
●●	●●●● ●●●	●●●● ●●●●
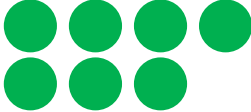
True or false? The place value grid below represents 254 + 24 = 278.

H	T	O
⚫⚫	⚫⚫⚫⚫⚫	⚫⚫⚫⚫
	🔴🔴	🔴🔴🔴🔴
⚫⚫	⚫⚫⚫⚫⚫⚫	⚫⚫⚫⚫⚫⚫⚫⚫

False, in the 2-digit number the tens and ones digits have been swapped over. It should be 2 tens and 4 ones.

Which number sentence matches the image?

H	T	O
	●● ●●	●
●	●●●	●●●● ●●●●

A. 137 + 41   **B. 41 + 137**   **C. 137 – 41**

Which number sentence matches the image?

H	T	O
	●● ●●	●
●	● ● ●	●●● ●●

A. 137 + 41

B. 41 + 137

C. 137 – 41

Write the number sentence that is represented in this place value grid.

H	T	O
●●	(6 counters, 3 crossed out)	(4 counters, 2 crossed out)

_____ – _____ = **212**

Write the number sentence that is represented in this place value grid.

H	T	O
●●	●● ●● ●● (crossed out)	●● ●● (crossed out on top row)

264   –   52   =   212

Does this column method match the calculation below?
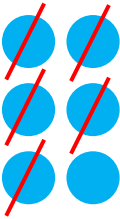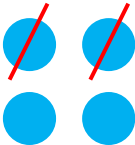
four hundred and ninety-seven subtract sixty-four equals four hundred and thirty-three

	H	T	O
	4	7	9
–		6	4
	4	3	3

Does this column method match the calculation below?

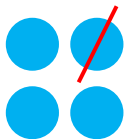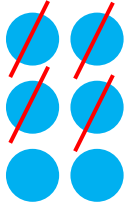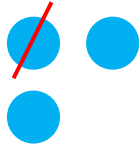**four hundred and ninety-seven subtract sixty-four equals four hundred and thirty-three**

	H	T	O
	4	9	7
–		6	4
	4	3	3

No. (In the 3-digit number the tens and the ones digits have been swapped over.)

Riley says the mistake in the representation below is that the wrong number of tens has been subtracted.

four hundred and sixty-three subtract fifty-one equals four hundred and twelve
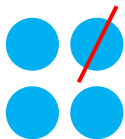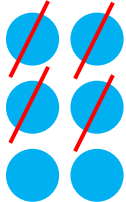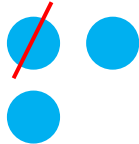
H	T	O

Do you agree? Explain.

Riley says the mistake in the representation below is that the wrong number of tens has been subtracted.

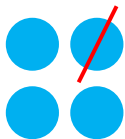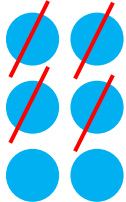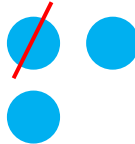**four hundred and sixty-three subtract fifty-one equals four hundred and twelve**

H	T	O

Do you agree? Explain.

Yes, one hundred, four tens and one one have been subtracted when it should have been …

Riley says the mistake in the representation below is that the wrong number of tens has been subtracted.

four hundred and sixty-three subtract fifty-one equals four hundred and twelve

H	T	O

Do you agree? Explain.

Yes, one hundred, four tens and one one have been subtracted when it should have been five tens and one one.

Create a word problem to match this column method representation.

	H	T	O
	3	2	6
+		6	3
	3	8	9

Create a word problem to match this column method representation.

	H	T	O
	3	2	6
+		6	3
	3	8	9

Various answers, for example: During a seaside holiday I collected 326 shells. My friend collected another 63 shells. Altogether we had 389 shells between us.

Morgan thinks that 74 + 124 = 198 is represented below.

H	T	O
	● ● ● ● ● ● ●	● ● ● ●
●	● ●	● ● ● ●
●	● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ●

Is she correct? Explain your answer.

Morgan thinks that 74 + 124 = 198 is represented below.

H	T	O
	●●●● ●●●	●●●●
●	●● ●	●●●●
●	●●●● ●●●●	●●●●● ●●●●●

Is she correct? Explain your answer.

No, in the answer (third row) the tens and ones digits have been swapped over. It shows …

Morgan thinks that 74 + 124 = 198 is represented below.

H	T	O
	●●●● ●●●	●●●●
●	●●●	●●●●
●	●●●● ●●●●	●●●●● ●●●●●

Is she correct? Explain your answer.

No, in the answer (third row) the tens and ones digits have been swapped over. It shows 189, not 198.