Diving into Mastery – Diving

Adult Guidance with Question Prompts

Children look at the pattern in the tens column. When adding and subtracting ten they should focus on the tens digit. Emphasise that the tens digit is changing, the ones digit is not. Children will need practical equipment for this activity, for example base ten blocks.

What's the same about the numbers in each column?

What's different?

How can you use this to help you work out the missing numbers?

What's ten more than 13?

What's ten less than 83?

Can you use equipment to show 34?

What do you need to do to make ten more?

What number have you made?

Show me 34 again, what do you need to do to show me ten less?

What number have you made?

10 More and 10 Less

Complete the columns in the hundred square.

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

Use your equipment to show:

10 less ← 34 → 10 more

10 less ← 79 → 10 more

Diving into Mastery – Deeper

Adult Guidance with Question Prompts

Children will need base ten blocks for this activity. Children reason about place value when adding and subtracting ten. They will need to work in pairs for the last part.

What does each stick represent?

What does each small cube represent?

What is Ria's starting number?

What is Ben's starting number?

Who has the greatest number?

If Ria gives one ten away, what will she have left?

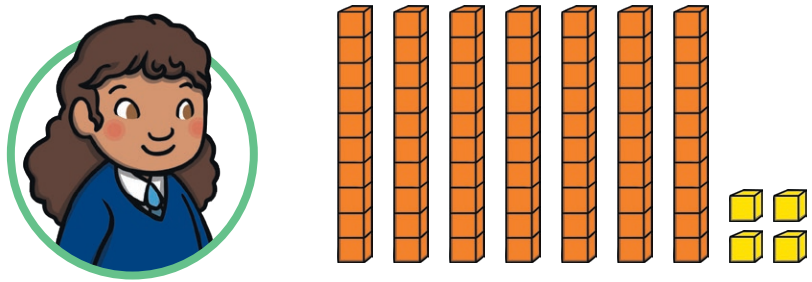
If Sam gets one more ten, how many will he have?

Who has the greatest number now?

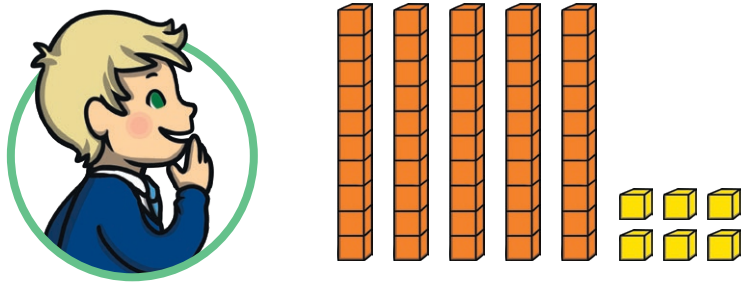
Use your equipment to show what Ria and Ben have done.

10 More and 10 Less

Ria has this number:



Sam has this number:



Ria gives one 10 to Sam.

Now Sam's number is greater than mine.

Is Ria correct? Explain your reasoning.

Use equipment to act out this problem with a friend.

Diving into Mastery – Deepest

Adult Guidance with Question Prompts

Children could use a hundred square or practical equipment for this activity. They will need to work in pairs for the last part.

Can you solve the problems using the pattern we have learnt about? What happens to the tens number when we add/ subtract ten?

Could you use equipment or a hundred square to help you?

Explain how.

What number is each child thinking of?

Can you think of your own puzzles like this?

Can you solve a friend's puzzle?

10 More and 10 Less

Solve these children's puzzles.

I am thinking of a number.

It is 10 more than 41.

I am thinking of a number

It is 10 less than 15.

I am thinking of a number.

It is 10 more than 65.

I am thinking of a number.

It is 10 less than 98.

Make up your own clues for your friend.

Use '10 more' or '10 less' in your clues.

Can they guess your numbers?