## Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Children recognise patterns when adding and subtracting one without bridging beyond a multiple of ten.

What happens when we add/subtract one?
What pattern do you see in the addition list?
What is the same?
What is different?
What pattern do you see in the subtraction list?
What is the same?
What is different?
Can you make your own pattern like this?
Can you explain the pattern to your friend?

Continue these patterns.
$30+1=31 \quad 49-8=41$
$30+2=32 \quad 48-7=41$
$30+3=\square$
47-6 = $\square$


$+$



Can you create your own pattern by adding ones? Start with a multiple of 10 and write a list of nine calculations. Make sure you follow the order of the numbers!

## Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

Children will need base ten blocks for this activity. They use equipment to explain how a group of ones can be added to a multiple of ten, or subtracted, to target a multiple of ten. They could use the 'Tens and Ones Mat’ from the lesson resources.

What number has Jane made with her base ten blocks?
How do you know?
How many tens does her number have?
How many ones?
How can she get to 50 ?
Is she correct about taking away all the ones?
Why?
Show me with your base ten blocks.
What would Jane need to write in the ones column to show she had no ones?

Now show me how to do 38-8 with your base ten blocks.
What if we want to add?
Show me $50+2$ with base ten blocks.

Tens


Ones


Jane says,
To get to 50, I need to take away all the ones.

Is Jane correct?
Explain how you know.
Can you use equipment to show Jane what to do?

Show Jane how to solve these calculations:
$38-8=$ $\qquad$
$50+2=$ $\qquad$

## Diving into Mastery - Deepest

## Adult Guidance with Question Prompts

Children solve clues to find a phrase. They must add and subtract ones to find the answers. They could use practical apparatus if needed.

Can you add and subtract ones to find the answers?
Explain how you worked it out.
Do you need to calculate the answer?
Could you use the pattern of the numbers to help you?
How?
What letter does that number match with?
What words have you written?

## Add and Subtract Ones

Solve these calculations to break the code and find the phrase to do with racing.

| $45-5=$ |  |  |  | $60+3=$ |  |  |  |  | $59-9=$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $20+6=$ |  |  |  | 12-2 = |  |  |  |  | $54-4=$ |  |  |  |
| $40+8=$ |  |  |  | $55-5=$ |  |  |  |  | $37-7=$ |  |  |  |
| $90+9=$ |  |  |  | $71-1=$ |  |  |  |  | $80+5=$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| a | b | C | d | e | $f$ | g | h | i | j | k | l | m |
| 85 | 60 | 40 | 30 | 50 | 99 | 20 | 63 | 80 | 90 | 11 | 70 | 51 |


| $n$ | o | p | q | r | s | t | u | v | w | x | y | z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 82 | 29 | 44 | 26 | 48 | 87 | 62 | 10 | 77 | 89 | 18 | 21 | 36 |

Answer:


Can you use these letters and numbers to make a code for your friend?

