## Maths

Addition and Subtraction

Need a coherently planned sequence of lessons to complement this resource?

Add and Smbtract a loDigit
Number and @ Multiple of 10


## Aim

- To add and subtract a multiple of 10 to and from any 2-digit number.


## Success Criteria

- I can use number facts to add a multiple of ten to any 2-digit number.
- I can use number facts to subtract a multiple of ten from any 2-digit number.
- I can use patterns to add a multiple of ten to any 2-digit number.
- I can use patterns to subtract a multiple of ten from any 2-digit number.


## Remember It

Spin the spinners to show multiples of ten.

The symbol will show you whether to add or subtract the numbers.


## Remember It

$$
10+10=20
$$



## Remember It

$$
20-10=10
$$



## Remember It

$$
20+10=30
$$



## Remember It

$$
30-10=20
$$



## Remember It

$$
30+10=40
$$



## Remember It

$$
40-10=30
$$



## Remember It

$$
40+10=50
$$



## Remember It

$$
50-10=40
$$



## Addition Pattern Builders

## What is the same about these calculations? What is different?



3 tens plus 1 ten equals 4 tens.
We can use number facts to help us add tens.

## Addition Pattern Builders

$$
\begin{aligned}
& 10+10=20 \\
& 20+10=30 \\
& 30+10=40 \\
& 40+10=50 \\
& 50+10=60 \\
& 60+10=70 \\
& 70+10=80 \\
& 80+10=90
\end{aligned}
$$

## Addition Pattern Builders

Use number facts and patterns to add tens.
Use equipment, jottings or calculations to help.

$$
\begin{gathered}
\text { If I know } 2+2=4 \text {, then } \\
\text { I know } 20+20=40
\end{gathered}
$$


$40+30=70$


## Subtraction Pattern Builders



4 tens subtract 1 ten equals 3 tens.
We can use number facts to help us subtract tens.

## Subtraction Pattern Builders

$$
\begin{aligned}
& 90-10=80 \\
& 80-10=70 \\
& 70-10=60 \\
& 60-10=50 \\
& 50-10=40 \\
& 40-10=30 \\
& 30-10=20 \\
& 20-10=10 \\
& 10-10=0
\end{aligned}
$$

## Subtraction Pattern Builders

Use number facts and patterns to subtract tens.
Use equipment, jottings or calculations to help.

> If I know $6-2=4$, then I know $60+20=40$.


## Counting in Tens

Count in 10s starting from the number 10.


Describe what you notice.
What changes and what stays the same? Why does this happen?

## Counting in Tens

Count in 10 s starting from the number 4.


Describe what you notice.
What changes and what stays the same? Why does this happen?

## Counting in Tens

Count back in steps of ten. Work your way back from right to left.

9
$19 \quad 29$
39
$49 \quad 59 \quad 69$ 79 89

99


Describe what you notice.
What changes and what stays the same? Why does this happen?

## Counting in Twenties



Can you explain or show the pattern?

## Counting in Twenties

Count forward in steps of 20 starting from the number 0.


What changes and what stays the same? Why does this happen?

## Counting in Twenties

Count forward in steps of 20 starting from the number 4.
4

84

Describe what you notice.

What changes and what stays the same? Why does this happen?

## Counting in Twenties

Count back in steps of 20 starting from the number 100. Work your way back from right to left.


100


Describe what you notice.
What changes and what stays the same? Why does this happen?

## Multiples Maze

## Multiples of Ten Maze

## I can add and subtracta mentitiple of 10 to and form any 2 -digit number.

Each player starts on the centre number. When it is your turn, move your counter one space in any direction. Add or subtract the number on the tile. Keep track of your total by writing number sentences on your whiteboard. You may not go above 100 or below 0 . The first person to land exactly on 0 or 100 is the winner.

| 100 | +10 | -10 | +20 | -10 | -20 | -10 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +10 | -20 | +20 | -20 | +20 | -20 | +20 | -10 |
| +20 | +10 | +10 | -10 | +10 | -20 | +20 | -10 |
| +20 | -20 | -10 |  | +10 | +20 | +10 |  |
| -20 | +20 | +10 | 60 | -10 | -20 | +20 |  |
| -10 | -20 | -10 | -10 | -10 | +10 | +20 | -10 |
| -10 | -10 | -20 | -10 | -20 | +20 | -20 | +20 |
| 0 | -10 | -10 | +10 | +20 | +10 | +10 | 100 |

## ultiples of Ten Maze

a multiple of 10 to and from any 2-digit number.
$n$ the centre number. When it is your turn, move your counter ction and colour the square. Keep track of your total by writing 1 your whiteboard. You may not go above 100 or below 0 and r a square which has been coloured. If you get stuck, go back - The first person to land exactly on 0 or 100 is the winner.

| , | -10 | +30 | -30 | -20 | -10 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | +20 | -20 | +20 | -20 | -10 | -30 |
|  | +10 | -10 | +10 | -10 | +10 | -20 |
|  | -10 |  | +10 | +20 | -30 |  |
|  | +10 |  |  | -10 | -20 | +40 |
|  | -20 | +10 | -10 | +10 | +20 | +10 |

## iples of Ten Maze

ple of 10 to and from any 2 -digit number
entre number. When it is your turn, move your counter ind colour the square. Keep track of your total by writing whiteboard. You may not go above 100 or below 0 and are which has been coloured. If you get stuck, go back irst person to land exactly on 0 or 100 is the winner.

| 0 | +30 | -30 | -10 | -40 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 20 | -30 | +50 | -20 | +20 | -40 |
| 60 | -40 | +20 | +40 | -10 | -20 |
| 20 |  | +30 | +30 | -30 |  |
| 50 | 46 | -10 | -20 | +40 |  |
| 10 | -10 | -20 | +30 | +20 | +60 |
| 30 | +50 | -20 | -40 | +30 | +20 |
| 30 | -30 | +20 | +10 | +60 | 96 |

## Diving into Mastery

Dive in by completing your own activity!


## One Hundred Square

Can you | 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 | 43 | 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 |

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- I can use patterns to subtract a multiple of ten from any 2-digit number.


