Dr Fog Presents

Addition on an empty number line.

Year 3 (National Numeracy Strategy)
(Based on DFEE Sample Lessons)
Resources

- Number fans for each pair
- 0 - 100 number line
Mental Learning Objective

• I can estimate and work out differences between numbers.
Mental Learning Task

• Get into pairs.

• Each pair makes a two-digit number with the number fans and holds it up in front of the teacher.
Mental Learning Task

• The teacher will hold up a number

• Who has the closest number to your teachers number.

• How close is your number?
Mental Learning Task

• Play this game again and see if you can get the closest number this time....
Mental Learning Objective

- I can estimate and work out differences between numbers.
Main Learning Objective

• I can add first the tens and then the ones on an empty number line.

• I can add the ‘tens’ all in one go.

• I can add two-digit numbers together.
Key idea

I can add the tens in one go.
I can use an empty number line.
Main Learning Task

• Today you are going to learn how to use an empty number line to work out addition problems involving two-digit numbers.
Main Learning Task

• I want to do $32 + 57$.

• Which number shall I start with?
Main Learning Task

• I will start with 57 because it is bigger.
• How should I break down the 32?

\[
57 + 32 = ?
\]
Main Learning Task

• I could break the 30 into three jumps of 10 and a jump of 2
• Draw this on the board for me.
• How else could I do it?

57 + 32 = ?
Main Learning Task

• What is the quickest way I could have broken 32 into?

\[57 + 32 = ?\]
Main Learning Task

• Try to solve this problem.
• The next sum is 45 add 24.
• How do we solve it?
Main Learning Task

• We are now going to look at adding two two-digit numbers together.

• Remember to always start with the larger number.
Main Learning Task

- Choose a number from each of the circles and add them together.

\[
\begin{align*}
\text{Blue Circle:} & \quad 52 \quad 31 \quad 14 \\
\text{Yellow Circle:} & \quad 43 \quad 35 \quad 12
\end{align*}
\]
Main Learning Objective

• I can add first the tens and then the ones on an empty number line.

• I can add the 'tens' all in one go.

• I can add two-digit numbers together.
Plenary

- Invite one or two of the children to demonstrate an addition.
- How did you work it out?
- Remember to start with the larger number.
- Add on the tens all in one go.
I am now going to ask you to do a couple of additions in your head.

Close your eyes.

Imagine drawing jumps on an empty number line.
Plenary

• What is 45 and 21?

• How did you work it out?
Plenary

• What is 35 and 42?

• How did you solve?

• Did you add from the largest number?
Review of Key Idea

• I can add the tens in one go.
• I can use an empty number line.

• Did you learn how to do this in this lesson?
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