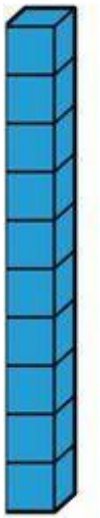
Year 2 Mathematics Strategies

Addition and Subtraction

Dienes

* Children are taught to partition a number into tens and ones. In order to visualise this, children use dienes where a unit/one is represented by one cube and ten is represented by a ten stick (made up on ten ones).

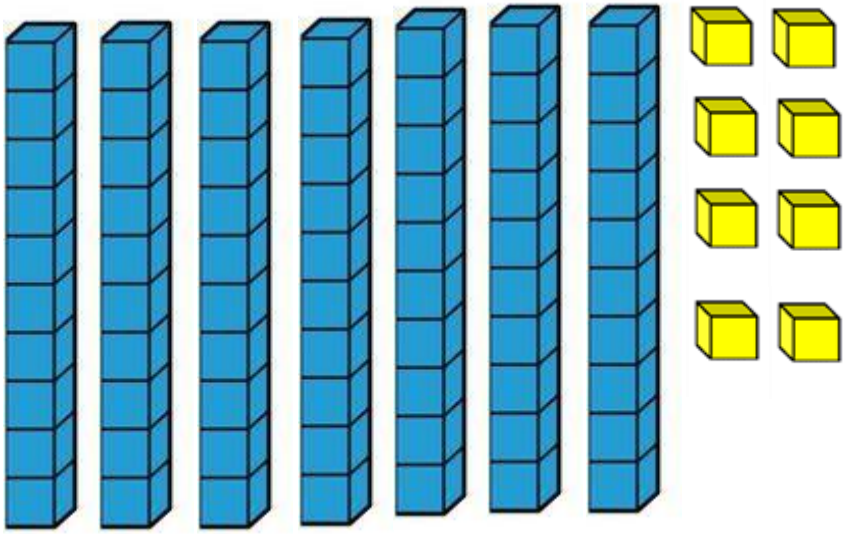


Ten Stick

One

Partitioning with Dienes

78



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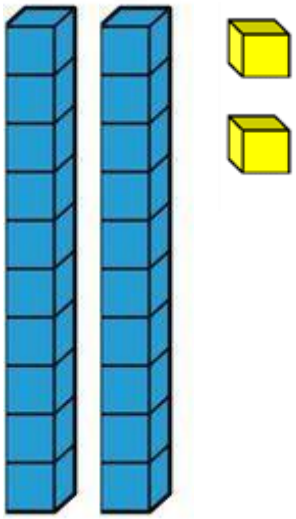
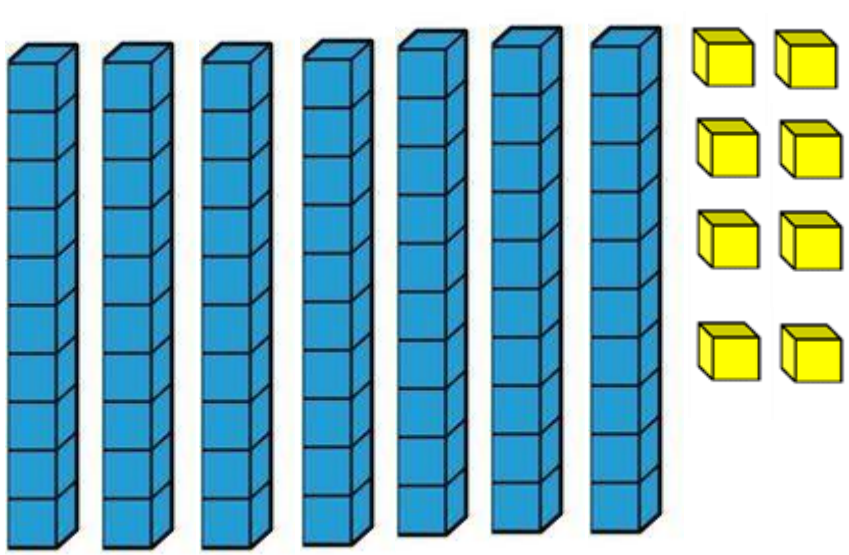
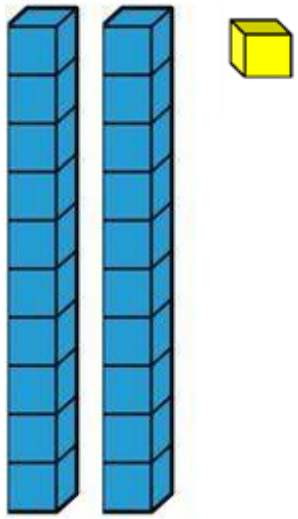


Addition with Dienes

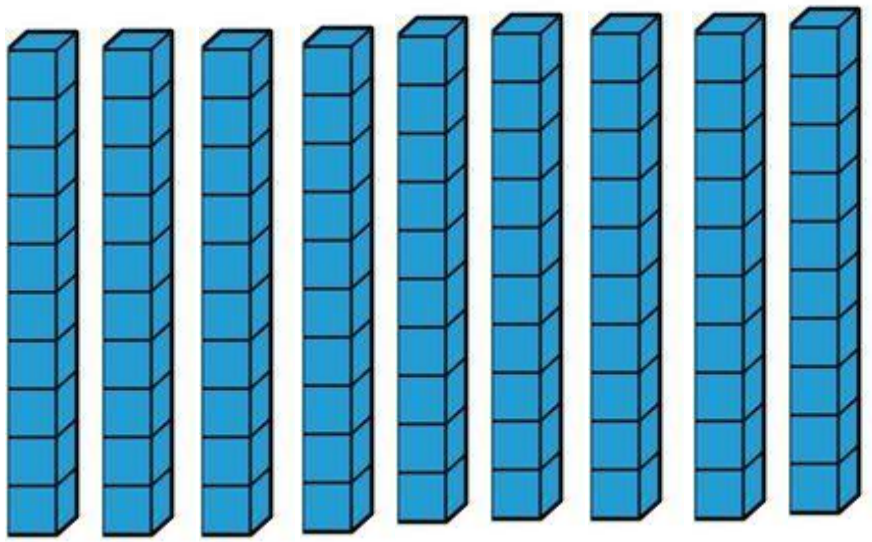
78 + 21 = 99

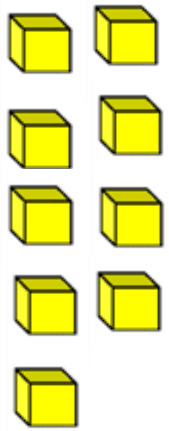




Addition with Dienes

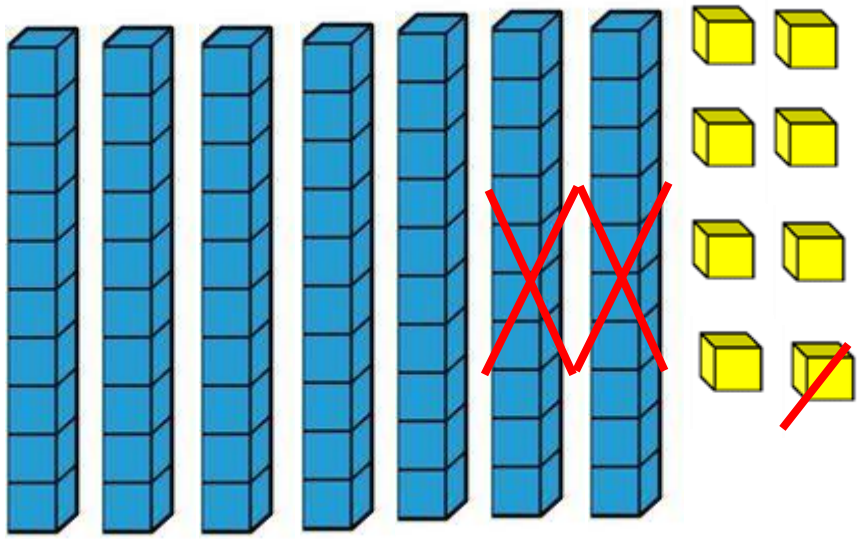
78 + 21 = 99





Subtraction with Dienes

78 - 21 = 57



Have a go!

* 25 + 32 =

* 47 – 22 =

Bubble Strategy

* This is another method in which children need to apply their knowledge of partitioning numbers. They partition the tens above the number sentence and work that out. They also partition the ones underneath and work this out.

Addition with Bubble Strategy

50 + 20 = 70

54 + 21 = 75

4 + 1 = 5

Subtraction with Bubble Strategy

50 - 20 = 30

54 - 21 = 33

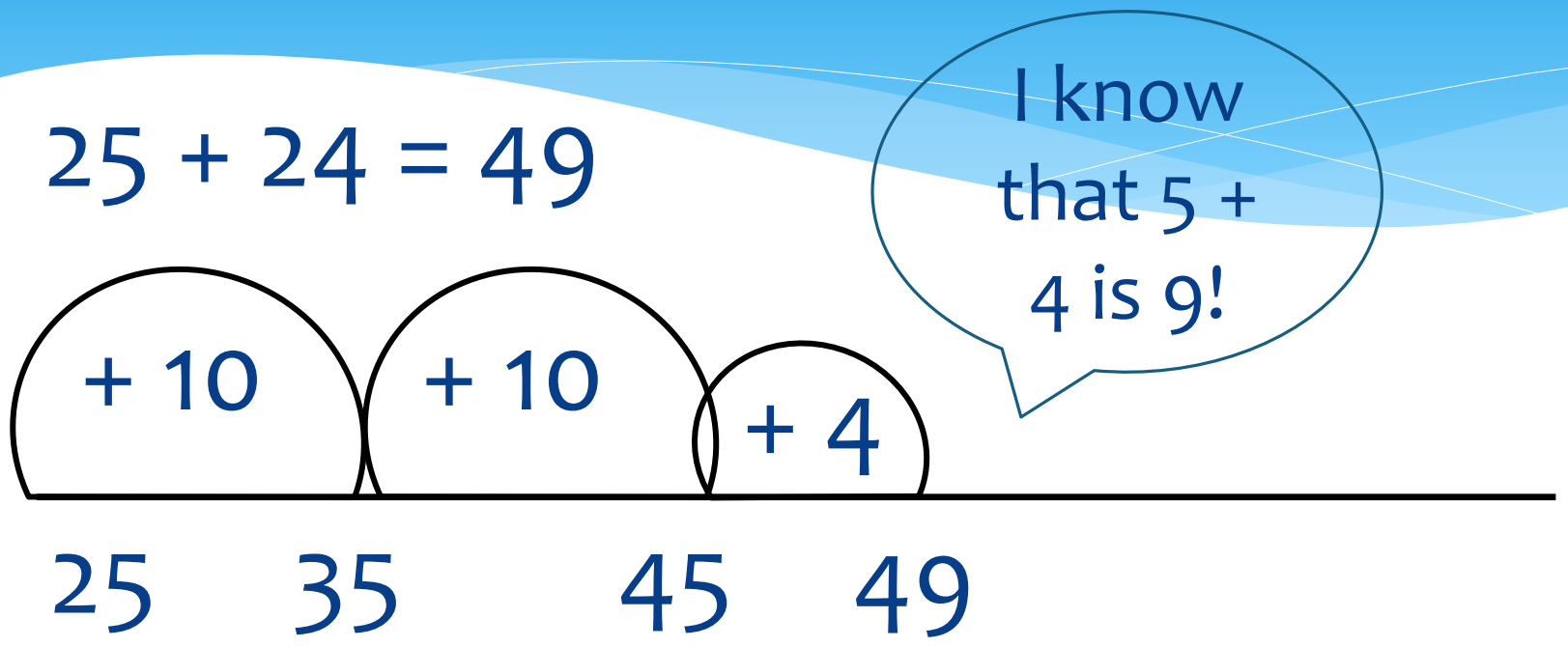
4 - 1 = 3

Empty Number Line

* This one is a little bit more complicated. Children use their knowledge of partitioning for this one but they may also use their known number facts to choose their jumps. Children draw a blank line to start with. They are then asked to write their first number on the number line (different for addition and subtraction). Children then need to jump forwards/backwards in tens and then the ones.

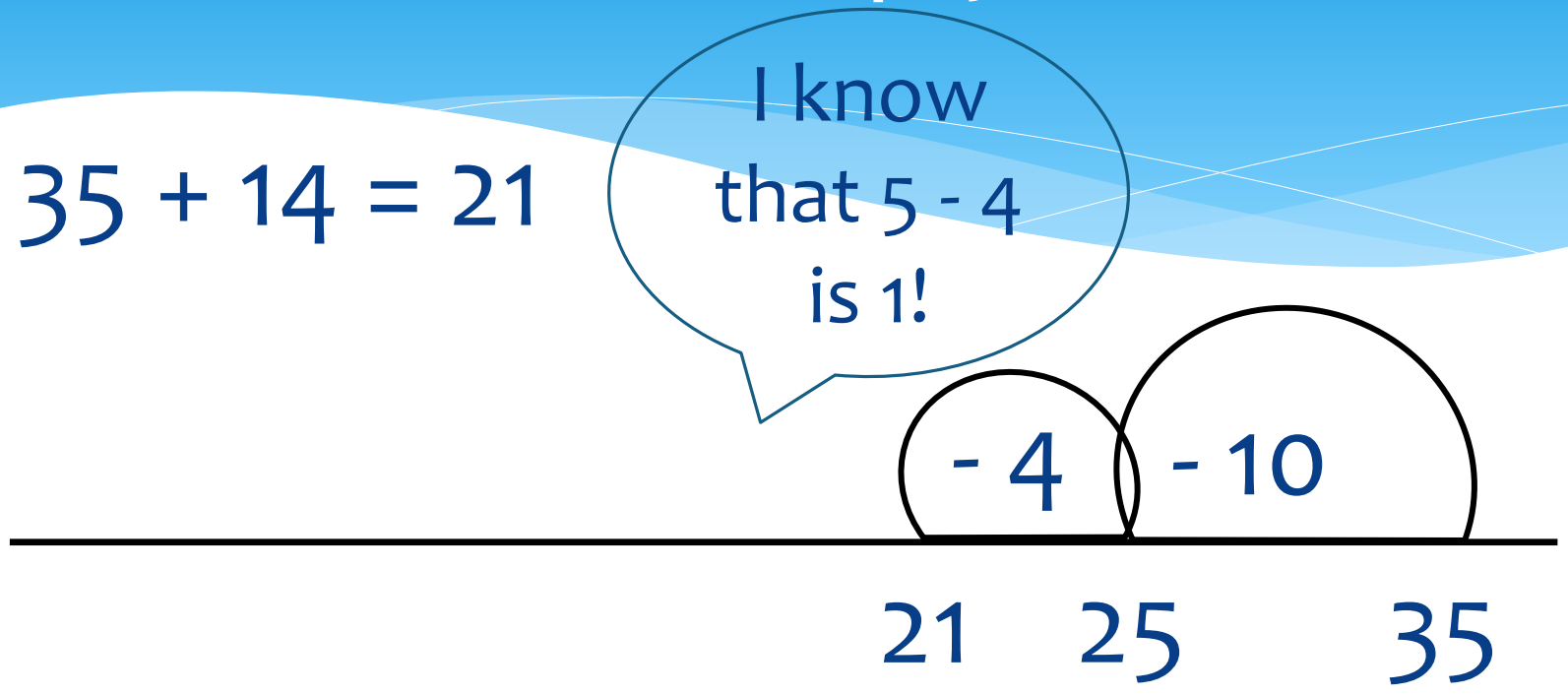
Addition with Empty Number Line

25 + 24 = 49



Subtraction with Empty Number Line

35 + 14 = 21



Bar Model

* The Bar Model can be used to help children to add/subtraction numbers and to use the inverse relationship of addition and subtraction. There are plenty of other ways that the Bar Model can be used but today we are focusing on addition and subtraction.

Bar Model

This bar represents the whole	
This bar represents part	This bar represents part

25 + 24 =

?	
25	24

Bar Model

25 + 24 = 49

49	
25	24

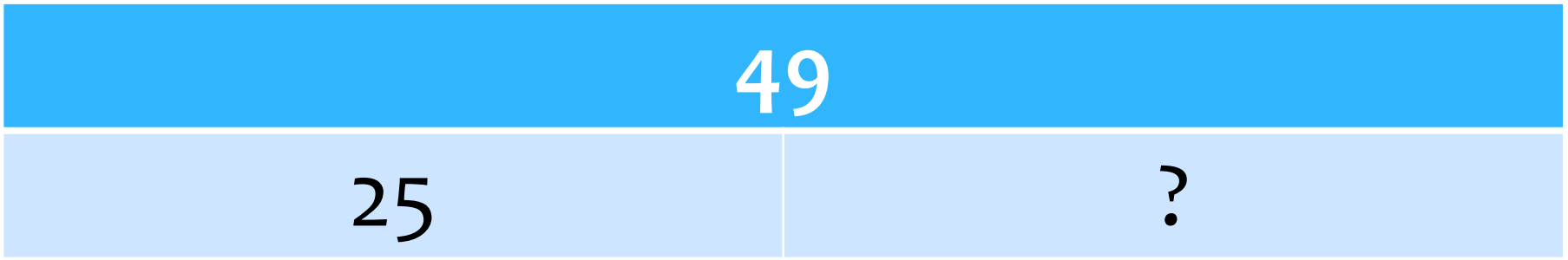
24 + 25 = 49

49 – 25 = 24

49 – 24 = 25

Bar Model

25 + ? = 49



To work this out:

49 – 25 = ?