Addition and Subtraction Facts

Counting

Counting on 1, 2, 3

The count-on strategy means students **count on** from a given number without having to recount the entire group. The count-on strategy may be used when one of the numbers is 1, 2, or 3. The students are encouraged to identify the larger number and quickly count on to arrive at the answer.

- Reminder: Start at the bigger number and count on 1.
  e.g. 1 + 6 (think …6 is the bigger number, count on 1) …7
  so   1 + 6 = 7

Count back 1, 2, 3

- e.g. 7 – 1 = ☐
  Count back when the part you take is small, that is 3 or smaller.
  Begin at 7, count back 1,   7…6   that's 6.

e.g. 7 – 6 =
Count on quickly from the smaller number to the larger number when the numbers are close.
How many numbers did you count?   I have 6 ..7. That's 1

Doubles

Doubles
Use objects (e.g. bottle tops) to show children two lots of the same number.

Use double addition knowledge to teach unknown subtraction facts.
- Associate first with pictures to help recall and understanding.
Continue to practise until these number facts are instantly recalled.
10 – 5   e.g. I know…5 + 5 = 10, so   10 – 5 = 5

Doubles plus 1
Remember your doubles.

Use your knowledge of doubles and add on one more.
e.g. 6 + 7   think… I know 6 + 6 is 12, so 6 + 7 is 13.
      7 + 6   think… I know 6 + 6 is 12, so 7 + 6 is 13

Use double subtraction knowledge to teach unknown subtraction facts.

e.g. 13 - 6   think… I know 12 – 6 = 6, so 13 – 6 (is one more) = 7.
      11 – 6   think… I know 12 – 6 = 6, so 11 – 6 (is one less) = 5.

__Use 10__

Plus 10

Adding 10 is thoroughly explored during place value work.
Simple addition of '+ 10' can be achieved by visualising adding a '1' in the tens house.

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   2        3        4
+ 10     + 10     + 10
_____   _____  _____
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Take 10

Subtracting 10 is thoroughly explored during place value work.
Simple subtraction of – 10 can be achieved by visualising taking 1 from the tens house.

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e.g.   11       12       13       14
      – 10     – 10     – 10     – 10
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Plus 9

Discuss the idea that the result of adding 9 is one less than adding 10 because 9 is one less than 10.

e.g. $9 + 7$ think… I know $10 + 7$ is 17, so,
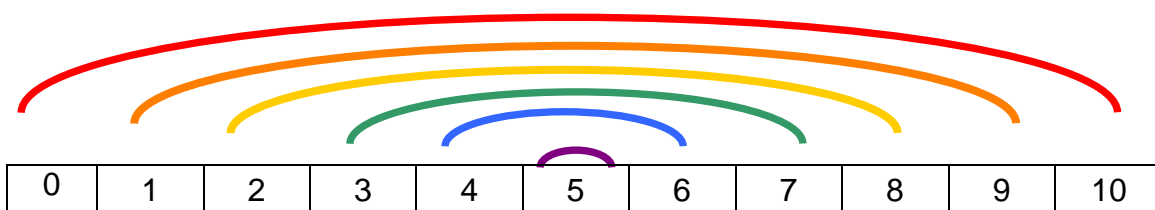 $9 + 7$ is 16   (one less)

Take 9

Students rely on their knowledge of place value of teen numbers.
e.g. $13 – 9$,   13 take 10 is 3,   so $13 – 9 = 4$
e.g. $13 – 4$,   13 take 3 is 10,   so $13 – 4 = 9$

__Make 10__

The rainbow diagram is excellent for identifying all pairs of addends which add to 10.
What numbers go together to make 10 ?

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Students rely on their knowledge of facts adding to 10.
e.g. $10 – 6 =$ I know 6 and 4 makes 10 so 10 take 6 leaves 4