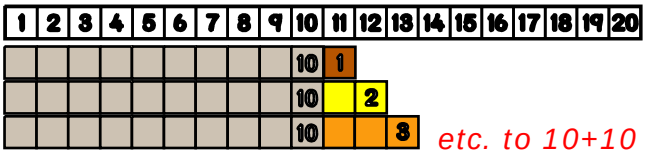
Do-Sheet 3 — 20-Strip and pieces

Building the Number Facts to 20

1 Building the teens

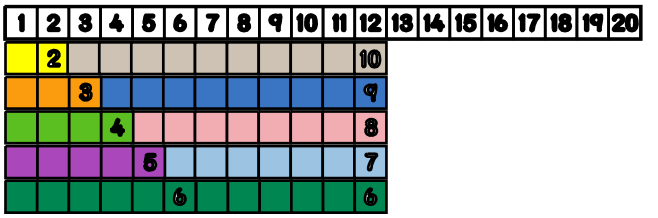


etc. to 10+10

✓ Count from 10 to 20.

One difficulty with the teens is that they are written *tens* first but pronounced *units* first.
e.g.: 'Four-teen' = 14
(First Class)

2 Continuing number "stories" *e.g.* story of 12

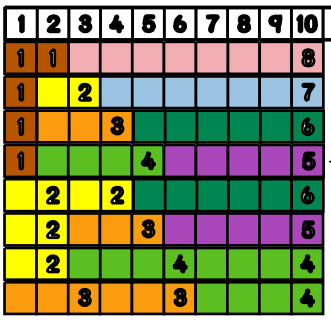


Note: The order can be reversed to illustrate *the commutative property* of addition.

✓ Extend the 'story of a number' systematically through activities which discover the bonds of each number up to 10 + 10 = 20.

No addend greater than 10 is used hence there is no need for pieces greater than the 10 piece.
These activities lay the foundations for memorisation of Addition Tables. (First Class)

3 Adding 3 addends *e.g. totaling 10*



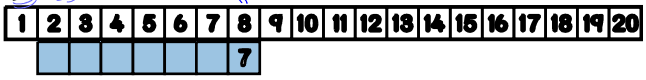
Note: The sequence is broken here at (1+4)+5=10 The next grouping would be (1+5)+4=10 but this has just been recorded. This is *the associative property* of addition in application.

✓ Add three addends to a make a total of 10. Extend this activity to all the numbers less than 10 then to numbers greater than 10 up to 20.

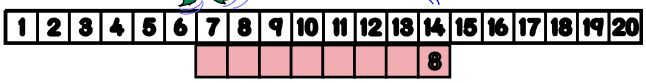
These activities provide practice in applying the *associative property* of addition to a situation. *See example.* (First Class)

4

Example: 8 - 7 = 1



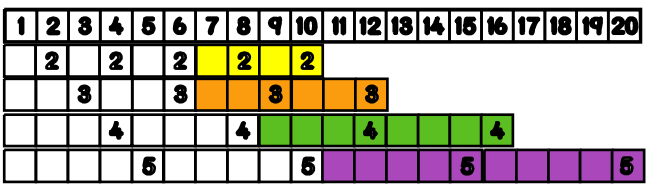
Ex.: 14 - 8 = 6



✓ Jump backwards on the Number Line. Starting with numbers up to 10 subtract by jumping backwards. Do systematically and record the results.

Subtraction is presented as three separate concepts;
(i) *difference* between two amounts
(ii) *complementing* a smaller to equal a larger amount and
(iii) *counting backwards*
(First Class)

5 Examples of group counting



Note: This is also known as *repeated addition*.

✓ Count in two's, three's, four's and five's on the number line.
Record each pattern. (Second Class)

Knowing the number of pieces that are needed to reach each point on the pattern, is the beginnings of acquiring multiplication and division facts.
Continues this line of discovery on the 100-Square. *(See Do-Sheet 4)*