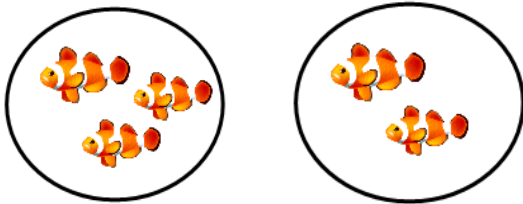# Addition

Key Objective

Show an interest in number problems.

Combine 2 sets practically without number sentence
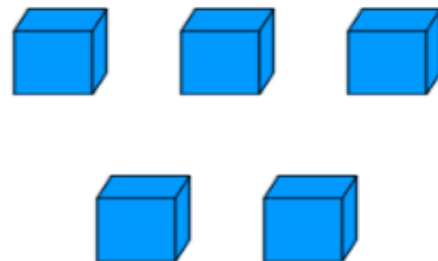
1 Using pictures

2 Using objects

Key Vocabulary

add, more, and, make, altogether, count on.

Nursery

Addition

Key Objective

Add numbers using concrete objects, pictorial representations, and mentally, including:
a 2-digit number and ones, and two 2-digit numbers

7 Mental addition: 32 + 11 = 43

32 + 11 = 43

32 + 10 = 42 (add tens in head)

42 + 1 = 43 (add ones in head)

8 Mental addition crossing tens boundary:

32 + 19 = 51

32 + 19 = 51

32 + 10 = 42 (add tens in head)

42 + 9 = 51 (add ones in head) 43, 44, 45, 46, 47, 48, 49, 50, 51

Key Vocabulary

add, more, plus, and, make, altogether, total, equal to, equals, the same as, double, most, count on, number line, sums, tens, ones, partition, addition, column, tens boundary

Year 3

Addition

Key Objective

Add numbers with up to three digits, using the formal written method of columnar addition

Expanded column addition

1 TO + TO with brackets

```
   5 4
 + 2 3
     7  (4 + 3)
   7 0  (50 + 20)
   7 7
```

2 TO + TO

```
   8 6
 + 3 7
   1 3
 1 1 0
 1 2 3
```

3 HTO + HTO

```
   2 8 6
 + 3 4 8
     1 4
   1 2 0
   5 0 0
   6 3 4
```

Compact column addition

4 No carrying

```
   2 1 6
 + 1 5 3
   3 6 9
```

5 Carrying

```
   3 5 6
 + 1 2 7
   4 8 3
```

Cross out once used!

Key Vocabulary

add, more, plus, and, make, altogether, total, equal to, equals, the same as, double, most, count on, number line, sums, tens, ones, partition, addition, column, tens boundary, hundreds boundary, increase, carry, expanded, compact.

Year 3

Addition

Key Objective

Add whole numbers with more than 4 digits, including using the formal written method of columnar addition

Compact column addition

1 Increasingly large numbers

```
    7 8 9 6 8 4
  + 6 5 5 3 9
  ─────────────
    8 5 5 2 2 3
      ✗ ✗ ✗ ✗ ✗
```

Cross out once used!

2 Adding decimals with mixed amount of digits

Add place holder

```
    1 6 · 3 9 ▢
  +    3 · 7 2 5
  ─────────────
    2 0 · 1 1 5
       ✗ ✗ ✗
```

Cross out once used!

Key Vocabulary

add, more, plus, and, make, altogether, total, equal to, equals, the same as, double, most, count on, number line, sums, tens, ones, partition, addition, column, tens boundary, hundreds boundary, increase, carry, expanded, compact, thousands, digits, inverse, decimal place, decimal point, tenths, hundredths, thousandths, integer.

Year 6