Calculation Mat

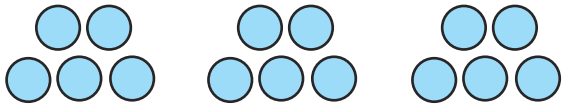
Working towards Year 2

Calculating

Show that addition of two numbers can be done in any order (commutative)

7 + 9 = 9 + 7 = 16

Calculate simple mathematical statements for multiplication and division



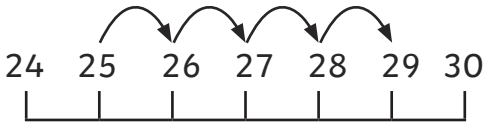
three sets of five makes 15

Methods

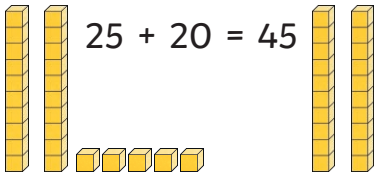
Add and subtract numbers using concrete objects, pictorial representations, and mentally

- **a two-digit number and ones**

25 + 4 = 29



- **a two-digit number and tens**



25 + 20 = 45

Number Facts

Recall and use addition and subtraction fact to 10 fluently, and derive and use related facts up to 20

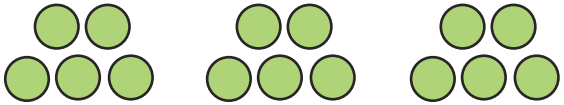
5 + 3 = 8 What is 15 + 3?

Recall and use multiplication facts for the 2 and 10 multiplication tables, including recognising odd and even numbers

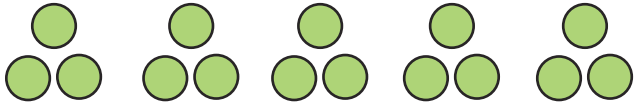
Ring the odd numbers: 4 (11) 18 (23) (47)

5 × 2 = 10 10 × 3 = 30

Show that multiplication of two numbers can be done in any order (commutative)



5 × 3 = 15



3 × 5 = 15

Solve Problems

Solve problems with addition and subtraction:

- **using concrete objects and pictorial representations, including those involving numbers and quantities**
- **applying their increasing knowledge of mental and written methods**

There are 15 blue and red pencils in a pencil pot. Eight are blue. How many are red?

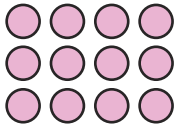
seven red pencils

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations

What calculation would you use to check 12 – 4 = 8?

8 + 4 = 12

Solve problems involving multiplication using materials, arrays, repeated addition



How many counters are there? Can you write this as a number sentence?

4 × 3 = 12 or 3 × 4 = 12

Calculation Mat

Expected Year 2

Calculating

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

7 + 9 = 9 + 7 = 16

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs

3 × 5 = 15 15 ÷ 5 = 3

Methods

Add and subtract numbers using concrete objects, pictorial representations, and mentally

- a two-digit number and ones
- a two-digit number and tens
- two two-digit numbers
- adding three one-digit numbers

Number Facts

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

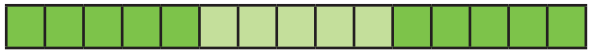
Use 8 + 6 = 14 to calculate 58 + 16 =

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

Ring the odd numbers: 4 (11) 18 (23) (47)

5 × 4 = 20 10 × 3 = 30

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot



3 × 5 = 15 15 ÷ 5 = 3

5 × 3 = 15 15 ÷ 3 = 5

Solve Problems

Solve problems with addition and subtraction:

- using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- applying their increasing knowledge of mental and written methods

A ribbon is 35cm long. 17cm is cut off. How long is the ribbon now?

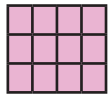
18cm

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

What calculation would you use to check 41 – 16 = 25?

25 + 16 = 41

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts



Calculation Mat

Greater Depth Year 2

Calculating

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

Explain why 7 + 9 = 9 + 7

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs

3 × 5 = 15 15 ÷ 5 = 3

Methods

Add and subtract numbers using concrete objects, pictorial representations, and mentally

- **a two-digit number and ones**

34 + 7 =

- **a two-digit number and tens**

56 + 40 =

- **two two-digit numbers**

37 + 24 =

- **adding three one-digit numbers**

7 + 4 + 5 =

Number Facts

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

What number fact could you use to calculate 67 – 14?

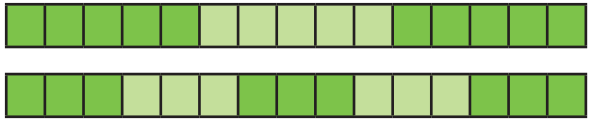
Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

Explain which of the numbers are odd:
24 31 48 63 87

5 × 8 = 10 × 6 =

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot

Can you write four calculations represented by:



Solve Problems

Solve problems with addition and subtraction:

- **using concrete objects and pictorial representations, including those involving numbers, quantities and measures**
- **applying their increasing knowledge of mental and written methods**

A ribbon is 85cm long. 57cm is cut off. What calculation would you use to find how long the ribbon is now?

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

What calculation would you use to check 91 – 37 =

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Which multiplication and division statements does this represent?