

Calculation strategies to be in Year 3

Year 3 Multiplication Strategies

National Curriculum

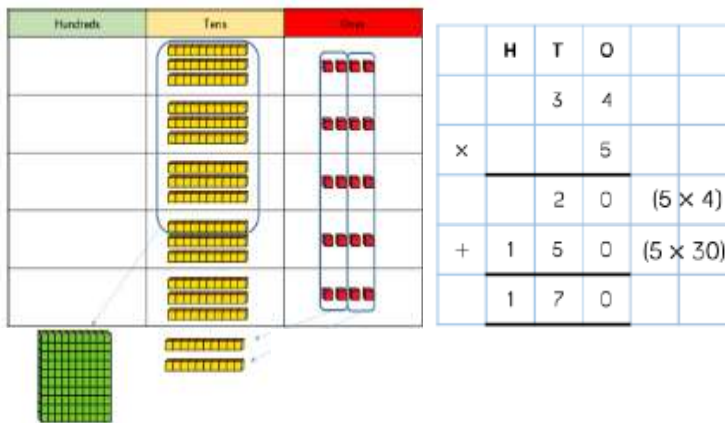
- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

Children will need to know how to partition 2 digit numbers and the value of each digit.

Children will need to know how to use Diennes apparatus and place value counters to multiply 2 digits by 1 digit

Concrete

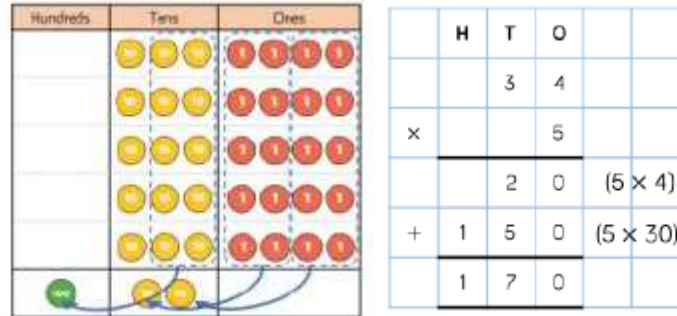
$$34 \times 5 =$$



Dienes should be used to support the understanding of the method rather than the multiplication as children should use timetable knowledge.

Pictorial

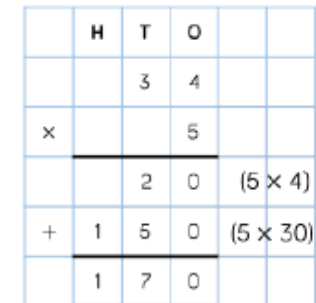
$$34 \times 5 =$$



The drawing of the place value counters should be used to support the understanding of the method rather than the multiplication as children should use timetable knowledge.

Abstract

$$34 \times 5 =$$



Year 3 Division Strategies

National Curriculum

- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

Children will need to know how to partition 2 digit numbers and the value of each digit.

Children will need to know how to use Diennes apparatus and place value counters to multiply 2 digits by 1 digit

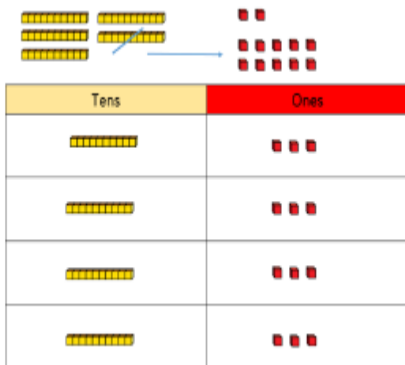
When dividing numbers involving exchanging, children can use Diennes and place value counters to exchange one ten for ten ones.

Children should start with the equipment outside the place value grid before sharing the tens and ones equally between the rows.

Only use division calculations using the multiplication tables that the children know.

Concrete

$$52 \div 4 =$$



	1	3
4	5	12

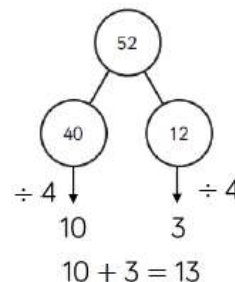
Dienes should be used to support the understanding of the method rather than the multiplication as children should use timetable knowledge.

Pictorial

$$52 \div 4 =$$



	1	3
4	5	12



Flexible partitioning in a part-whole model supports this method and can be used as an alternative/additional pictorial representation.

The drawing of the place value counters should be used to support the understanding of the method rather than the multiplication as children should use timetable knowledge.

Abstract

$$52 \div 4 =$$

	1	3
4	5	12

