As outcomes, Year 5 pupils should, for example:	As outcomes, Year 6 pupils should, for example:

Know by heart all multiplication facts up to 10×10, including multiplication by 0 and 1.

Derive quickly the corresponding division facts.

Know by heart the squares of all numbers from 1×1 to 10×10.

Respond rapidly to oral or written questions like:
- Nine sevens.
- How many eights in 48?
- 6 times 7.
- 5 multiplied by 9.
- Multiply 9 by 6.
- 7 multiplied by 0.

Respond quickly to questions like:
- Divide 38 by 9.
- What is 48 shared between 8?
- Three divided by 5.
- One seventh of 35.

Use, read and write, spelling correctly:
double, twice, half, halve, whole, divide by 2, divide into 2… and ½ as one half.

Understand that halving is the inverse of doubling: for example, if half of 72 is 36, then double 36 is 72.

Know by heart or derive quickly:
- doubles of all numbers 1 to 100;
- doubles of multiples of 10 up to 1000;
- doubles of multiples of 100 up to 10 000;
and all the corresponding halves.

Respond rapidly to oral or written questions like:
- Double 7½… 98… 680… 8500…
- Half of 154… of 820… of 5600…
- Twice 85.
- ½ of 920.
- Half of one half.
- What is half of £71.30?
- How many millimetres is half a metre?

Complete written questions, for example:
- working quickly, using mental strategies:

$160 \times 2 = \square$	$1600 \div \square = 800$	$^{16}\!/_2 = \square$
$134 \times 2 = \square$	$430 \div 2 = \square$	$^{\square}\!/_2 = 65$
$\square \times 2 = 290$	$\square \div 2 = 330$	

Continue to know by heart all multiplication facts up to 10×10, including multiplication by 0 and 1.

Derive quickly the corresponding division facts.

Know by heart the squares of all numbers from 1×1 to 12×12.

Derive quickly squares of multiples of 10 to 100, such as 20^2, 80^2.

Respond rapidly to oral or written questions like:
- Nine eights.
- How many sevens in 35?
- 8 times 8.
- 6 multiplied by 7.
- Multiply 11 by 8.

Respond quickly to questions like:
- 7 multiplied by 0.8… by 0.
- Multiply 0.9 by 0.6… by 0.
- Divide 3.6 by 9… by 1.
- What is 88 shared between 8?
- Divide 6 into 39.
- 9 divided by 4.
- 0.6 times 7… times 2.
- One twentieth of 360.

Use, read and write, spelling correctly:
double, twice, half, halve, whole, divide by 2, divide into 2… and ½ as one half.

Understand that halving is the inverse of doubling: for example, if half of 0.3 is 0.15, then double 0.15 is 0.3.

Know by heart or derive quickly:
- doubles of two-digit whole numbers or decimals;
- doubles of multiples of 10 up to 1000;
- doubles of multiples of 100 up to 10 000;
and all the corresponding halves.

Respond rapidly to oral or written questions like:
- Double 37½… 3.7… 0.59…
- Twice 2.6.
- ½ of 9.5.
- Half of one eighth.
- What is half of £581?
- What fraction of 1 cm is half a millimetre?

Complete written questions, for example:
- working quickly, using mental strategies:

$370 \times 2 = \square$	$1750 \div \square = 875$	$^{19}\!/_2 = \square$
$176 \times 2 = \square$	$570 \div 2 = \square$	$^{\square}\!/_2 = 165$
$\square \times 2 = 3.9$	$\square \div 2 = 0.87$	