

Diving into Mastery – Diving

Adult Guidance with Question Prompts

Children begin to use the multiplication symbol. They understand that multiplication is repeated addition. They write a repeated addition calculation and a multiplication calculation to match an image of groups. Children may find it helpful to have representations of number to provide ideas for the part where they need to draw the picture.

Please note: In this activity $2 + 2 + 2 + 2 + 2 + 2 = 12$ will be written as $2 \times 6 = 12$ and read as 'two multiplied by six'. This is different to the way White Rose write the calculation (6×2) but it has been written this way to match the way multiplication is written in the Year 4 Multiplication Tables Check.

Tell me about the picture.

What number does each number shape represent?

How many threes are there?

What repeated addition would you write?

Why are we using addition?

What does the symbol ' \times ' mean?

Is $3 + 3 + 3$ the same as 3×3 ? Why?

Can you write a repeated addition calculation to match the dice picture?

What would the multiplication calculation be?

Can you draw an image to match the addition calculation?

The Multiplication Symbol



Complete the table.

Picture	Addition	Multiplication
	$__ + __ + __ = __$	$__ \times __ = __$
		$__ \times 6 = __$
	$5 + 5 + 5 + 5$ $= ______$	$5 \times __ = ______$

Diving into Mastery – Deeper

Adult Guidance with Question Prompts

Children recognise multiplication written in different forms, in words, using repeated addition and using the multiplication symbol. They use their ability to count in twos, fives and tens to find the answers as well as their ability to add three one-digit numbers.

Please note: In this activity $5 + 5 + 5 + 5$ will be written as 5×4 and read as 'five multiplied by four'. This is different to the way White Rose write the calculation (4×5) but it has been written this way to match the way multiplication is written in the Year 4 Multiplication Tables Check.

What do you notice about how these statements are written?

What symbols have been used?

How can we find out the solutions?

Can you use known facts?

Can you use addition methods?

How are they the same?

How are they different?

Are ten twos the same as two tens?

The Multiplication Symbol



Find the odd one out.

$$5 + 5 + 5 + 5$$

two 10s

$$10 \times 2$$

ten 2s

$$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$$

$$4 + 4 + 4$$

$$5 \times 4$$

$$2 \times 10$$

four 5s

$$10 + 10$$

Diving into Mastery – Deepest

Adult Guidance with Question Prompts

Children solve problems by finding different combinations of numbers to complete multiplication calculations. They use the two, five and ten times tables. They may need practical equipment to help them with this investigation.

What two numbers could you multiply together to get ten?

Can you think of other ways?

What do we need to calculate first before working out the missing numbers?

What multiplications could have an answer of 30?

What does the symbol '×' mean?

Which part do you need to calculate first?

Which multiplication calculations have an answer less than eight?

The Multiplication Symbol



Find 3 possible solutions to each of these calculations.

$$\square \times \square = 10$$

$$\square \times \square = 10 + 10 + 10$$

$$\square \times \square < 2 + 2 + 2 + 2$$

