Calculation mats
Supporting guidance

- Calculation mats are versatile tools designed to support learning and reinforce mathematical concepts.
- These calculation mats are best utilised alongside modelled examples in your teaching to create an interactive and engaging learning environment. Children may also use the calculation mats to support them alongside their practical or independent work.
- Some sentence stems are included on the calculation mats to encourage discussion.
- Use manipulatives (such as counters, base 10, cubes or everyday objects) with the calculation mats, alongside the abstract calculations, to develop children's conceptual understanding. The calculation mats may also be used to show pictorial representations, such as drawn counters or bar models, to support understanding.
- Consider printing in A4 and putting the calculation mats within a plastic wallet. Alternatively, you may print the calculation mats in A3 and laminate them for reuse.

Calculation Mats
Addition – perimeter

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ = _____

	T	O
+		

The perimeter of the shape is _____ mm/cm/m/km.

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ = _____

	T	O
+		

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ = _____

	T	O
+		

The perimeter of the shape is _____ mm/cm/m/km.

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ = _____

	T	O
+		

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ + _____ = _____

	T	O
+		

The perimeter of the shape is _____ mm/cm/m/km.

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ + _____ = _____

	T	O
+		

Model

Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ + ____ + ____ = ____

	T	O
+		

The perimeter of the shape is _____ mm/cm/m/km.

White Rose MATHS

Model

Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ + ____ + ____ = ____

	T	O
+		

Model

Tens	Ones

Do you need to make an exchange?

Calculations

	T	O
+		

To find the perimeter of the shape, I need to ...

Model

Tens	Ones

Do you need to make an exchange?

Calculations

	T	O
+		

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ = _____

	H	T	O
+			

The perimeter of the shape is _____ mm/cm/m/km.

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ = _____

	H	T	O
+			

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ = _____

	H	T	O
+			

The perimeter of the shape is _____ mm/cm/m/km.

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ = ____

	H	T	O
+			

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ + _____ = _____

	H	T	O
+			

The perimeter of the shape is _____ mm/cm/m/km.

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ + _____ = _____

	H	T	O
+			

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ + ____ + ____ = ____

	H	T	O
+			

The perimeter of the shape is _____ mm/cm/m/km.

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ + ____ + ____ = ____

	H	T	O
+			

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculations

	H	T	O
+			

To find the perimeter of the shape, I need to ...

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculations

	H	T	O
+			

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ = _____

	Th	H	T	O
+				

The perimeter of the shape is _____ mm/cm/m/km.

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ = _____

	Th	H	T	O
+				

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ = _____

	Th	H	T	O
+				

The perimeter of the shape is _____ mm/cm/m/km.

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ = ____

	Th	H	T	O
+				

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ + _____ = _____

	Th	H	T	O
+				

The perimeter of the shape is _____ mm/cm/m/km.

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ + _____ + _____ + _____ = _____

	Th	H	T	O
+				

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ + ____ + ____ = ____

	Th	H	T	O
+				

The perimeter of the shape is _____ mm/cm/m/km.

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

____ + ____ + ____ + ____ + ____ = ____

	Th	H	T	O
+				

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculations

	Th	H	T	O
+				

To find the perimeter of the shape, I need to ...

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculations

	Th	H	T	O
+				

Calculation Mats
Subtraction – perimeter (missing side lengths)

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ – _____ = _____

	T	O
–		

The missing side length is _____ mm/cm/m/km because...

Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ – _____ = _____

	T	O
–		

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ – _____ = _____

	H	T	O
–			

The missing side length is _____ mm/cm/m/km because...

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ – _____ = _____

	H	T	O
–			

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ – _____ = _____

	Th	H	T	O
–				

The missing side length is _____ mm/cm/m/km because...

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ – _____ = _____

	Th	H	T	O
–				

Calculation Mats
Multiplication – perimeter and area

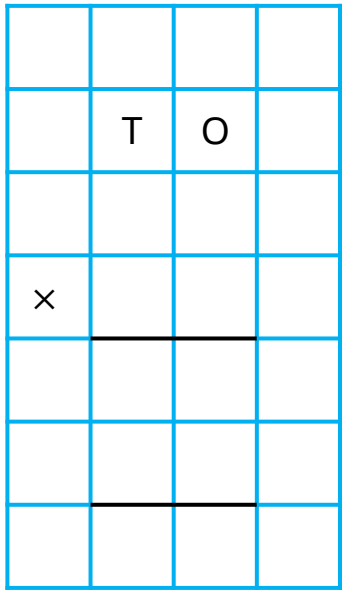
Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____



Each side is _____ cm.

There are _____ sides, so the perimeter of the polygon is _____ × _____cm = _____ cm.

White Rose MATHS

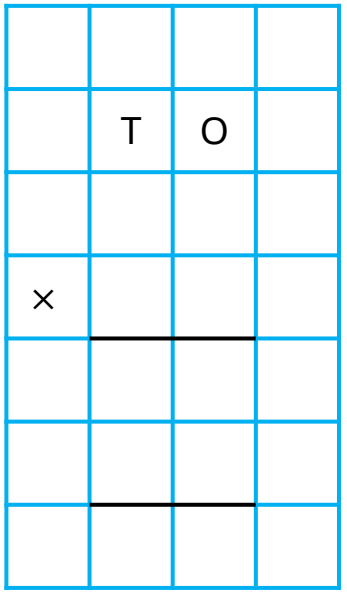
Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____



The area of the shape is _____ mm^2/cm^2/m^2/km^2

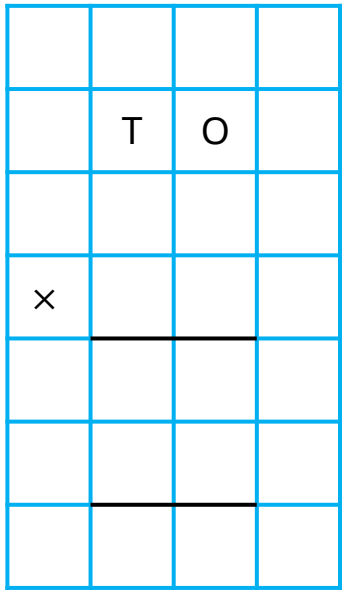
Model

Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____



White Rose MATHS

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____

	H	T	O	
×				

Each side is _____ cm.

There are _____ sides, so the perimeter of the polygon is _____ × _____cm = _____ cm.

White Rose MATHS

Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____

	H	T	O	
×				

The area of the shape is _____ mm^2/cm^2/m^2/km^2

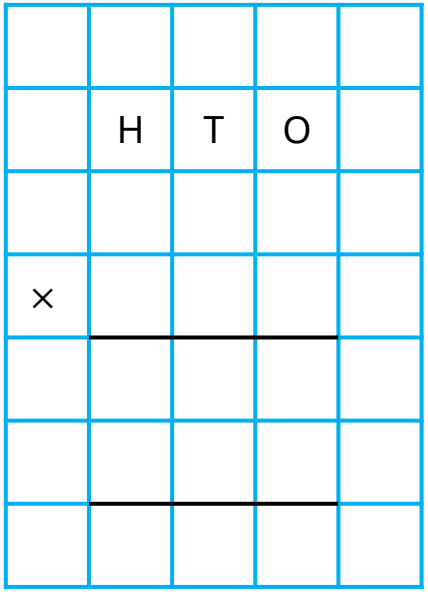
Model

Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____



Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____

	Th	H	T	O	
×					

Each side is _____ cm.

There are _____ sides, so the perimeter of the polygon is _____ × _____cm = _____ cm.

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____

	Th	H	T	O	
×					

The area of the shape is _____ mm^2/cm^2/m^2/km^2

Model

Thousands	Hundreds	Tens	Ones

Do you need to make an exchange?

Calculation

_____ × _____ = _____

	Th	H	T	O	
×					