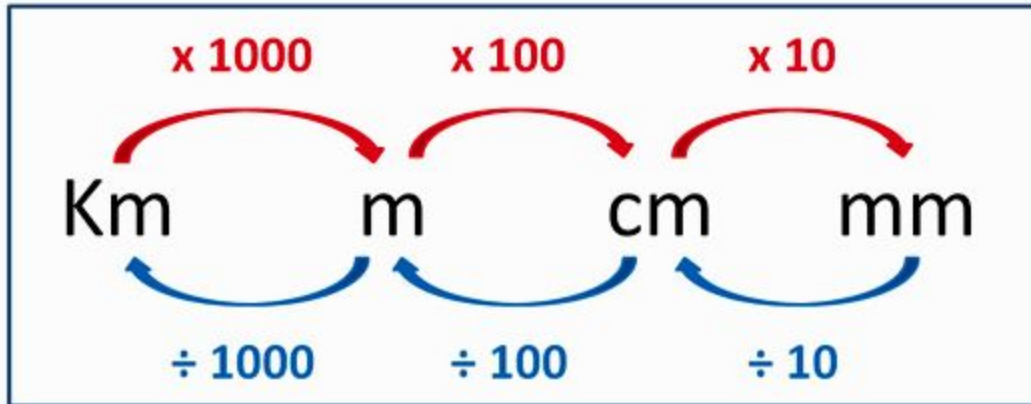


# Converting Units of Measurement



5km = ? m    **Need to  $\times 1000$**

$5 \times 1000 = 5000\text{m}$  ✓

120cm = ? m    **Need to  $\div 100$**

$120 \div 100 = 1.2\text{m}$  ✓

## Multiplying Decimals by 10

Move the **decimal point**  
one place to the right

$$\begin{aligned} & 3.14 \times 10 \\ & = 31.4 \\ & = 314 \end{aligned}$$

## DIVIDING BY MULTIPLES OF 10

$$\begin{aligned} 2351.0 \div 10 &= 2351.0 \\ &= 235.10 \end{aligned}$$

Move the decimal once to the left.

$$\begin{aligned} 2351.0 \div 100 &= 2351.0 \\ &= 23.510 \end{aligned}$$

Move the decimal twice to the left.

# Multiplying Decimals

Multiplying Decimals:  $13.75 \times 5.5$

forget about  
decimal points  
and multiply

$$\begin{array}{r} 1375 \\ \times 55 \\ \hline 75625 \end{array}$$

# decimal places of  
the first number

+

# decimal places of  
the second number

=

# decimal places of  
the third number

$$\begin{array}{r} 13.75 \\ \times 5.5 \\ \hline 75.625 \end{array}$$

← 2 d.p.  
← 1 d.p.  
← 3 d.p.

# Multiplication

**Solve  $43 \times 25$**

**Draw your array and split your factors into tens and ones.**

**2 x 2 digit Multiplication Using Area Models**

**2 Multiply the new factors and write the product in the correct box.**

**3 Add up the four partial products.**

$$\begin{array}{r} 800 \\ 200 \\ 60 \\ + 15 \\ \hline 1,075 \end{array}$$

The sum of the partial products is your answer.  
So,  $43 \times 25 = 1,075$

## Multiplication Strategies

### Partial Products

$453$	
$\times 48$	
$\hline 24$	$8 \times 3$
$400$	$8 \times 50$
$3,200$	$8 \times 400$
$120$	$40 \times 3$
$2,000$	$40 \times 50$
$\hline 16,000$	$40 \times 400$
$21,744$	

### Steps to Use the Standard Algorithm for Multiplication

- 1.) Multiply the ones in the bottom number times the ones in the top number. Regroup to the tens if needed.
- 2.) Multiply the bottom ones times the top tens. Add in any carries.
- 3.) Start a new answer line with a zero in the ones because you will be using the tens place.
- 4.) Multiply the tens in the bottom number times the ones in the top. Regroup if needed.
- 5.) Multiply the bottom tens times the top tens. Add in any carries.
- 6.) Add together your answer lines.

