

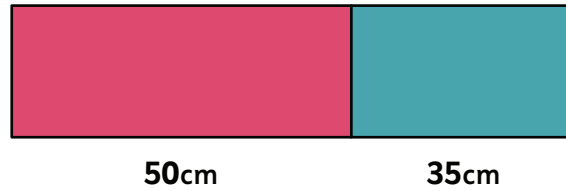
# Add lengths

$$2+2=4$$

Fluency



1) Joshua puts two plastic blocks next to each other.



What is their total length?

He then adds another plastic block that is 15cm long.

What is the new total length of these blocks?

# Add lengths

$$2+2=4$$

Fluency



2) Complete these addition calculations.

a)  +  =  cm

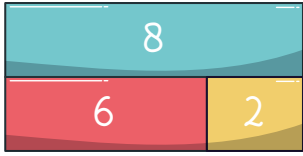
b)  +  =  mm

c)  mm =  +

d)  +  cm =

e)  mm +  =

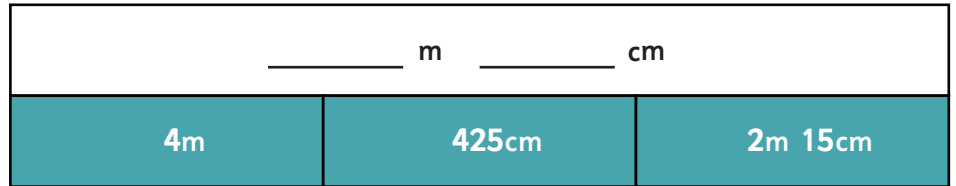
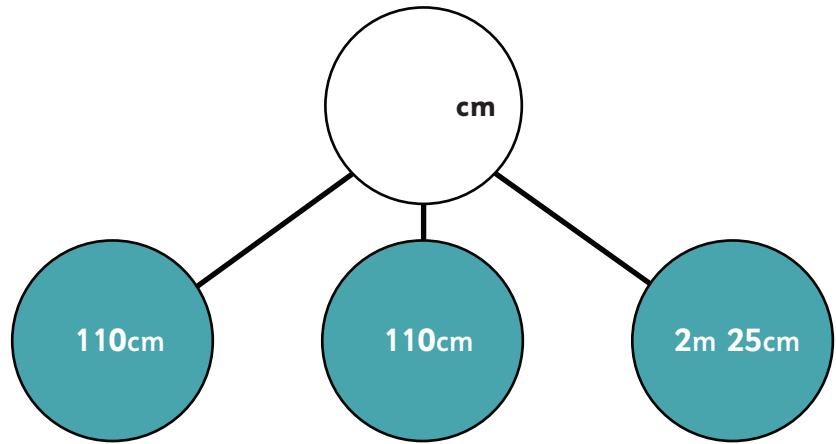
# Add lengths



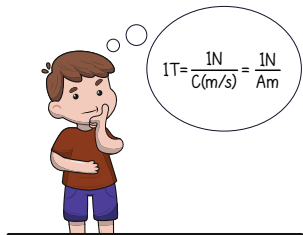
Pictorial



3) Complete the models below.



# Add lengths



Problem solving



4) Three children are measuring how far they can swim without stopping each day. Their results are in the table below.

Child	Day 1	Day 2	Day 3	Total distance
Maisie	10m 20cm	15 and a $\frac{1}{2}$ metres	20m 20cm	___m___cm
Libby	15m	17m	22m 60cm	___m___cm
Pippa	12m	15m 40cm	17m 25cm	___m___cm

Complete the table and put the children in order from longest to shortest distance swam.

Longest distance



Shortest distance

# Add lengths



Find all of the possibilities!



5) A builder is using old bits of wood to make a shelf.

The shelf must be 16cm in length. He has 4 piles of wood each with different lengths. Each pile has more than 5 pieces in it. Find at least 3 different ways that he can he make the shelf using the planks of wood?



80mm



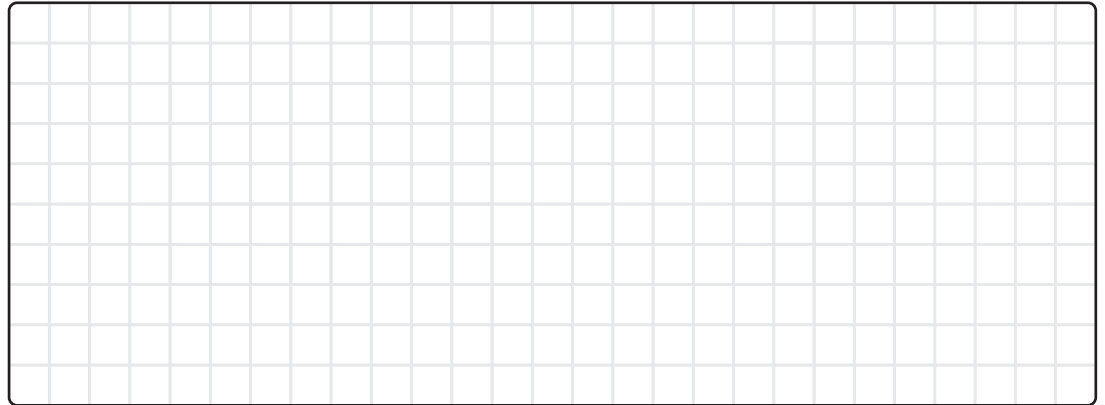
3cm



4cm



50mm



# Add lengths



Spot the error!



6)

$$345\text{cm} + 1\text{m} + 2\text{m} = 348\text{cm}$$



Beth

Beth has made a mistake with her calculation.

Explain the mistake she has made.

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# Add lengths

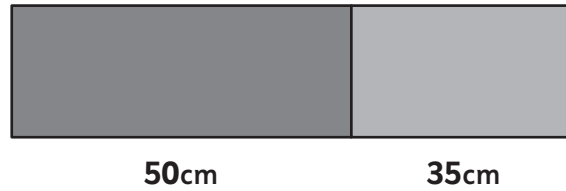
$$2+2=4$$

Fluency

E

ANSWERS

1) Joshua puts two plastic blocks next to each other.



What is their total length?

85cm

He then adds another plastic block that is 15cm long.

What is the new total length of these blocks?

100cm or 1m

# Add lengths

$$2+2=4$$

Fluency

E

ANSWERS

2) Complete these addition calculations.

a)  $45\text{cm} + 46\text{cm} = 91\text{ cm}$

b)  $15\text{mm} + 4\text{cm} = 55\text{ mm}$

c)  $55\text{ mm} = 3\text{cm} + 25\text{mm}$

d)  $1\text{m } 40\text{cm} + 35\text{ cm} = 175\text{cm}$

e)  $30\text{ mm} + 1\text{m } 15\text{cm} = 118\text{cm}$

# Add lengths

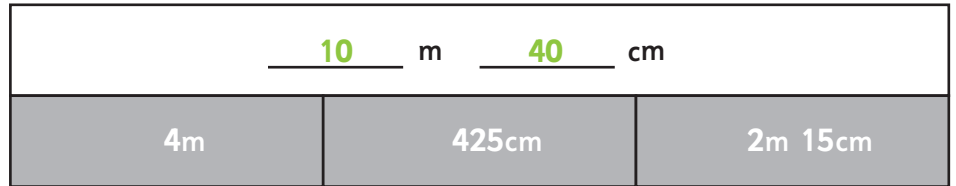
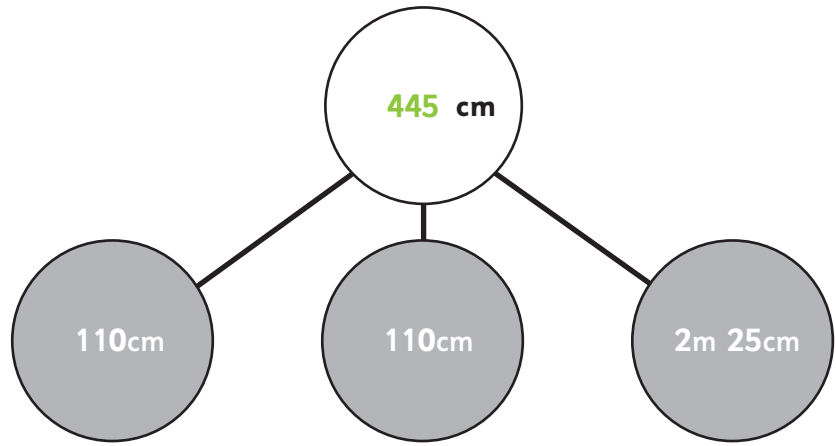


Pictorial

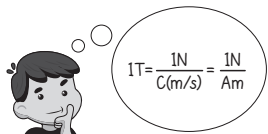


ANSWERS

3) Complete the models below.



# Add lengths



Problem solving



ANSWERS

4) Three children are measuring how far they can swim without stopping each day. Their results are in the table below.

Child	Day 1	Day 2	Day 3	Total distance
Maisie	10m 20cm	15 and a $\frac{1}{2}$ metres	20m 20cm	<u>45</u> m <u>90</u> cm
Libby	15m	17m	22m 60cm	<u>54</u> m <u>60</u> cm
Pippa	12m	15m 40cm	17m 25cm	<u>44</u> m <u>65</u> cm

Complete the table and put the children in order from longest to shortest distance swam.

Libby

Longest distance

Maisie

Pippa

Shortest distance

# Add lengths



Find all of the possibilities!



ANSWERS

5) A builder is using old bits of wood to make a shelf.

The shelf must be 16cm in length. He has 4 piles of wood each with different lengths. Each pile has more than 5 pieces in it. Find at least 3 different ways that he can he make the shelf using the planks of wood?



80mm



3cm



4cm



50mm

$80\text{mm} + 80\text{mm} = 16\text{cm}$   
 $80\text{mm} + 4\text{cm} + 4\text{cm} = 16\text{cm}$   
 $4\text{cm} + 4\text{cm} + 4\text{cm} + 4\text{cm} = 16\text{cm}$   
 $50\text{mm} + 50\text{mm} + 3\text{cm} + 3\text{cm} = 16\text{cm}$   
 $50\text{mm} + 80\text{mm} + 3\text{cm} = 16\text{cm}$

# Add lengths



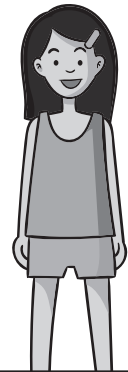
Spot the error!



ANSWERS

6)

$$345\text{cm} + 1\text{m} + 2\text{m} = 348\text{cm}$$



Beth

Beth has made a mistake with her calculation.

Explain the mistake she has made.

Beth has just added the three numbers together.

She needed to make sure they were in the same unit of measurement.

e.g  $1\text{m} = 100\text{cm}$  and  $2\text{m} = 200\text{cm}$ .

The answer should be  $645\text{cm}$  or  $6\text{ m and }45\text{cm}$ .