



MATHEMATICS



N.S. Yr. 2 P.71

Word problems involving measurement

Equipment

Paper, pencil, ruler
Clock face useful

MathSphere

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Concepts

In this module children use mental calculations strategies to solve various number problems involving length, mass, capacity and time.

They should be encouraged to explain orally how the problems were solved and could begin to write a simple number sentence on paper:

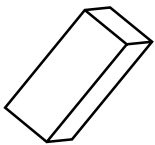
$$\text{Eg } 12 \text{ cm} + 6 \text{ cm} = 18 \text{ cm}$$

Children should also be reminded about abbreviations such as cm for centimetre, kg for kilogram and g for gram.

Word problems – length

My pencil is 12 centimetres long.
Tom's pencil is 6 centimetres longer.

1. How long is Tom's pencil?



Wazim's pencil case is 35 cm long.
Sue's pencil case 10 centimetres shorter.

2. How long is Sue's pencil case?



Pat's rabbit is 40 cm long.
Zita's rabbit is 5 cm longer.

3. How long is Zita's rabbit?



Hi! I'm 25
centimetres tall.

4. What would his height be if he
was twice as tall?

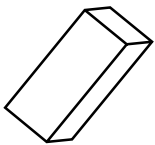


5. My cat is 20 cm tall.
My dog is 15 cm taller.
How tall is my dog?

Word problems – length

My pencil is 15 centimetres long.
Tim's pencil is 10 centimetres longer.

1. How long is Tim's pencil?



Cassie's pencil case is 45 cm long.
Sue's pencil case is 10 centimetres shorter.

2. How long is Sue's pencil case?



Jake's rabbit is 33 cm long.
Tina's rabbit is 7 cm longer.

3. How long is Tina's rabbit?



Hi! I'm 60
centimetres tall.

4. What would his height be if he
was half as tall?



5. My cat is 30 cm tall.
My dog is 15 cm taller.
How tall is my dog?

Mass problems

1. There are 5 kilograms of peaches in a box.
How many kilograms of peaches are in 2 boxes?



2. A loaf of bread weighs 500 grams
How much do two loaves of bread weigh?



3. There are 10 kilograms of bricks in a crate.
How many kilograms of bricks are in 3 crates?



4. An apple weighs 100 grams.
How much do five apples weigh?



5. There are 10 bananas in a 1 kg crate.
How many bananas in 4 crates?

Mass problems

1. There are 4 kilograms of cherries in a box.
How many kilograms of cherries are in 5 boxes?



2. A box of strawberries weighs 200 grams
How much do two boxes weigh?



3. There are 5 kilograms of pears in a crate.
How many kilograms of pears are in 3 crates?



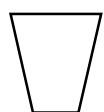
4. An orange weighs 200 grams.
How much do 3 oranges weigh?



5. There are 10 apples in a 1 kg bag.
How many apples in 6 bags?

Measuring volume

1. A teapot holds 6 mugs of tea.
How much would 5 teapots hold?



2. A jug holds 5 litres of water
How many half litre glasses can you fill?



3. You have 60 litres of water.
How many 10 litre buckets can you fill?



4. You have 10 litres of water.
How many 2 litre jugs can you fill?



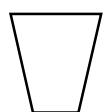
5. You have 20 litres of water.
How many 2 litre saucepans can you fill?



6. A mug holds 200 ml of coffee.
How much will 3 mugs hold?

Measuring volume

1. A teapot holds 5 mugs of tea.
How much would 3 teapots hold?



2. A jug holds 4 litres of water
How many half litre glasses can you fill?



3. You have 80 litres of water.
How many 10 litre buckets can you fill?



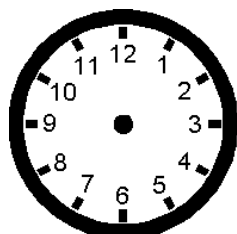
4. You have 12 litres of water.
How many 4 litre jugs can you fill?



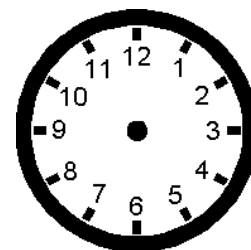
5. You have 16 litres of water.
How many 2 litre saucepans can you fill?



6. A mug holds 200 ml of coffee.
How much will 4 mugs hold?



Time problems



1. How long is it from 10 o'clock to 1 o'clock?

2. How long is it from 9 o'clock to 2 o'clock?

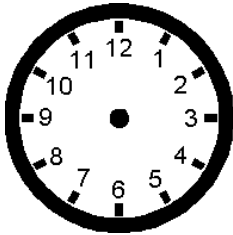
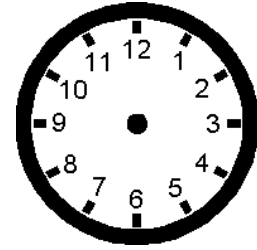
3. Alex got on a bus at 4 o'clock.
The journey took half an hour.
What time did he get off the bus?

4. Julie went to play football at 3:30.
She played for half an hour.
What time did she finish?

5. Gary started the test at 9:30.
He finished at 9:45.
How long did it take him?

6. Luke started running at 3:45.
He stopped at 4:15.
How long did he run for?

7. Linda put the roast dinner in the oven at 11:30.
It was ready at 1:00.
How long did it take to cook?

**Time problems**

1. How long is it from 11 o'clock to 3 o'clock?

2. How long is it from 12 o'clock to 5 o'clock?

3. Sally got on a bus at 3 o'clock.
The journey took quarter of an hour.
What time did she get off the bus?

4. Liz went to play football at 4:15.
She played for half an hour.
What time did she finish?

5. Neil started the test at 10:45.
He finished at 11:00.
How long did it take him?

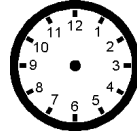
6. Jo started running at 2:15.
She stopped at 3:00.
How long did she run for?

7. Dad put the cake in the oven at 3:45.
It was ready at 4:15.
How long did it take to cook?

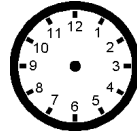
Time problems

Draw the times on the clock faces:

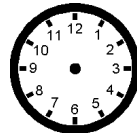
Steve got up at 8:15 in the morning.



He went to school three quarters of an hour later.



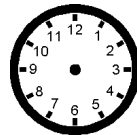
At 10:45 he went out to play.



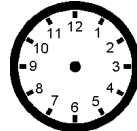
He had a Numeracy lesson at 11.15.



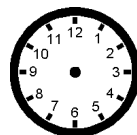
An hour later he went for lunch.



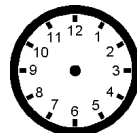
At 1:30 he had a games lesson.



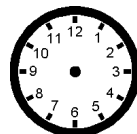
At 3:15 he left school.



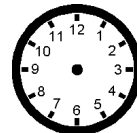
Half an hour later he reached the park.



At 5:00 he went home.



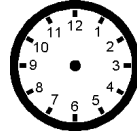
Three quarters of an hour later he had a pizza.



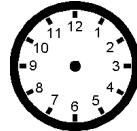
Time problems

Draw the times on the clock faces:

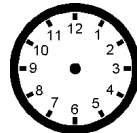
Karen got up at 7:45 o'clock.



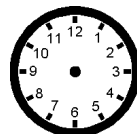
She had breakfast half an hour later.



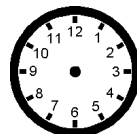
At 9:15 she went to visit her friend, Laura.



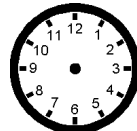
After an hour playing they went shopping.



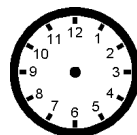
At 12:15 they had a burger and chips.



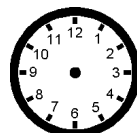
Half an hour later they went into the cinema.



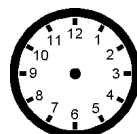
The film finished one and a half hours later.



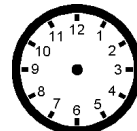
They caught the bus back at 3:15.



They arrived at Laura's house 15 minutes later.



At 5:30 Karen left and went home.



Answers**Page 3**

1. 18 cm 2. 25 cm 3. 45 cm 4. 50 cm 5. 35 cm

Page 4

1. 25 cm 2. 35 cm 3. 40 cm 4. 30 cm 5. 45 cm

Page 5

1. 10 kg 2. 1 000 g or 1 kg 3. 30 kg 4. 500 g 5. 40

Page 6

1. 20 kg 2. 400 g 3. 15 kg 4. 600 g 5. 60

Page 7

1. 30 mugs 2. 10 glasses 3. 6 buckets 4. 5 jugs 5. 10 saucepans 6. 600 ml

Page 8

1. 15 mugs 2. 8 glasses 3. 8 buckets 4. 3 jugs 5. 8 saucepans 6. 800 ml

Page 91. 3 hours 2. 5 hours 3. 4:30 4. 4:00 5. 15 mins
6. 30 mins 7. 90 mins or one and a half hours**Page 10**1. 4 hours 2. 5 hours 3. 3:15 4. 4:45 5. 15 mins
6. 45 mins 7. 30 mins or half an hour**Page 11**

Clock faces showing:

8:15 9:00 10:45 11:15 12:15 1:30 3:15 3:45 5:00 5:45

Page 12

Clock faces showing:

7:45 8:15 9:15 10:15 12:15 12:45 2:15 3:15 3:30 5:30