



**KEY SKILLS**  
**Application of Number Level 1**  
**External Assessment**

**EXEMPLAR 1**

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**WHAT YOU NEED FOR THIS TEST**

- This Question Paper
  - An Answer Sheet
  - Instructions on how to complete the Answer Sheet
  - A Pen with black or blue ink
  - A Ruler marked with mm and cm
  
  - **Calculators may NOT be used**
  - **Bilingual dictionaries may be used**
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**TIME ALLOWED - 1 HOUR 15 MINUTES**

**THERE ARE 40 QUESTIONS IN THIS TEST**  
**(Total Marks: 40)**

**You should try to answer all of the questions**

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**INSTRUCTIONS TO CANDIDATES**

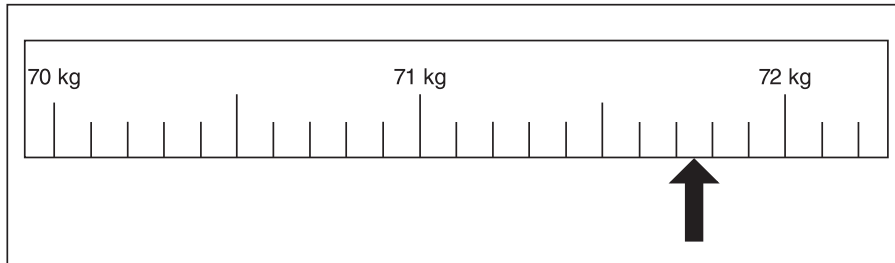
- Ensure your personal details are correctly entered in the spaces provided on the Answer Sheet
  - Read each question carefully
  - Try to answer all of the questions
  - Follow the instructions on how to complete the Answer Sheet
  - At the end of the test, hand this Question Paper, the Answer Sheet and all notes to the supervisor
  
  - **DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO BY THE SUPERVISOR**
-



Use the information below for questions 1, 2 and 3.

Four friends have joined their local gym to lose some weight and get fit.

1 Jo stands on the scales first:



How much does Jo weigh?

- A 71 kg 7.5 g
- B 71 kg 75 g
- C 71 kg 750 g
- D 72 kg

2 After one month the friends weigh themselves again.  
They write down their weight loss in a chart.

Name	Weight lost after 1 month
Jo	500 grams
Hasran	1 kilogram
Kevin	1 kilogram 200 grams
Cathy	750 grams

How much weight have they lost in total after one month?

- A 2 kilograms
- B 2 kilograms 450 grams
- C 3 kilograms
- D 3 kilograms 450 grams

- 3 Hasran wants to lose 10 kilograms. After two months he has lost  $\frac{2}{5}$  of this amount. How much weight has he lost?

- A 0.4 kg
- B 2 kg
- C 2.5 kg
- D 4 kg

- 4 Rashid arrives at Cambridge station at 6 minutes past 2 in the afternoon. He catches the next train to London Kings Cross. Here is the timetable.

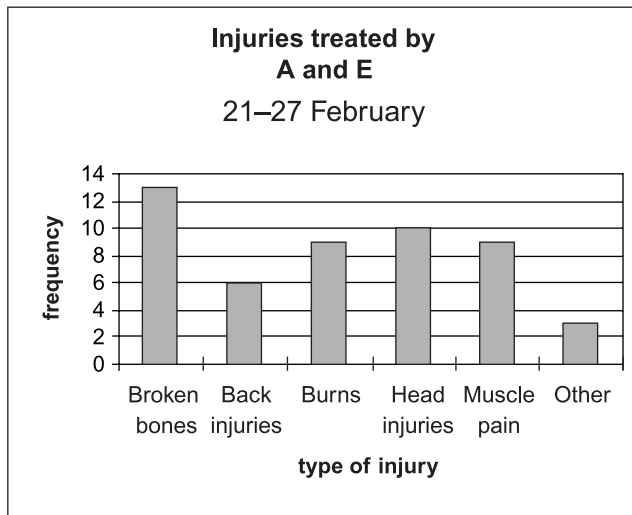
Monday to Saturday						
Cambridge	12.47	13.47	13.58	14.17	14.31	14.47
London Liverpool Street			15.16		15.42	
London Kings Cross	13.36	14.36		15.06		15.36

What time does he arrive at Kings Cross?

- A 13.36
- B 15.06
- C 15.36
- D 15.42

Use the information below for questions 5, 6 and 7.

A general hospital has an Accident and Emergency (A and E) department. The bar chart shows the injuries of 50 patients during one week.



5 How many patients in total had either back injuries or head injuries?

- A 19
- B 16
- C 13
- D 12

6 Ten of the 50 patients had head injuries. What fraction of the patients is this?

- A  $\frac{1}{3}$
- B  $\frac{1}{4}$
- C  $\frac{1}{5}$
- D  $\frac{1}{10}$

- 7 13 of the 50 patients had broken bones. What percentage of the patients is this?
- A 13%
  - B 20%
  - C 26%
  - D 50%

Use the information below for questions 8 and 9.

This is the information on the side of a 420 g tin of baked beans.

Typical composition	One 210 g serving provides	100 g provides
Energy	853 kJ/202 kcal	406 kJ/96 kcal
Protein	11.3 g	5.4 g
Carbohydrate	37.0 g	17.6 g
Fat	0.8 g	0.4 g
Fibre	7.8 g	3.7 g
Sodium	1.1 g	0.5 g

- 8 How much fibre is there in the 420g tin of baked beans?
- A 3.7 g
  - B 7.8 g
  - C 14.6 g
  - D 15.6 g
- 9 All the amounts in the table (except for Energy) are given to the nearest
- A ten grams
  - B gram
  - C fifth of a gram
  - D tenth of a gram

Use the information below for questions 10 and 11.

Ranjit is planning to renew the floor covering of his office. The floor is 3.78 m wide and 5.91 m long.

10 He uses a calculator to find the area of the floor.

He wants to check that his calculator answer is about right.

Which of these quick checks should he use?

- A  $3 \times 5$
- B  $4 \times 5$
- C  $3 \times 6$
- D  $4 \times 6$

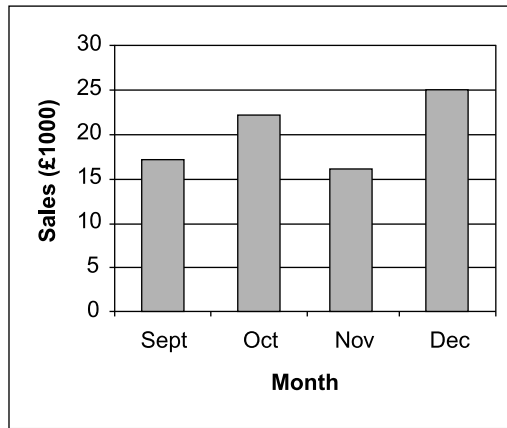
11 He plans to cover the floor with carpet tiles. Each tile is 0.5 m by 0.5 m.

How many tiles will he need?

- A 96
- B 80
- C 60
- D 48

Use the information below for questions 12 and 13.

David Smith is the sales manager for an electrical goods company. He has drawn a chart to show the sales for four months.



- 12 What is missing from the chart?
- A Label for the x axis
  - B Label for the y axis
  - C Labels to show what the bars mean
  - D Title for the chart
- 13 What were the sales in October?
- A £2100
  - B £2200
  - C £21 000
  - D £22 000



- 14 A group of local people formed a syndicate to enter the lottery. They won the jackpot! This was a headline in the TOWN CRIER

**Local workers share £8.5 million**

How much is this in figures?

- A £85 000
  - B £850 000
  - C £8 500 000
  - D £85 000 000
- 15 This was the second time a local syndicate had won the lottery jackpot. A year ago, five workers at a Garden Centre won £1 660 000.
- How much did each of the five workers get?
- A £31 000
  - B £33 200
  - C £310 000
  - D £332 000
- 16 Jane and Tom spend £5 between them on their lottery tickets each week. Jane puts in £1 and Tom puts in £4.
- They have agreed to share the winnings according to the amount they put in.
- One week they win £45 000. How much will they get each?
- A Jane will get £15 000 and Tom will get £30 000
  - B Jane will get £11 000 and Tom will get £34 000
  - C Jane will get £10 000 and Tom will get £35 000
  - D Jane will get £9 000 and Tom will get £36 000

Use the information below for questions 17, 18 and 19.

Maria is keeping a check on the drinks sold in the staff canteen at morning break.

17 Here is her list of drinks sold during one break.

tea	hot chocolate	hot chocolate	tea
tea	decaffeinated coffee	tea	tea
white coffee	tea	hot chocolate	soup
hot chocolate	tea	hot chocolate	white coffee
tea	hot chocolate	decaffeinated coffee	soup
tea	tea	tea	hot chocolate
tea	soup	tea	hot chocolate
black coffee	hot chocolate	black coffee	tea
soup	hot chocolate	white coffee	white coffee
decaffeinated coffee	white coffee	black coffee	tea

She marks a tally chart for each drink.

tea	
white coffee	
black coffee	
decaffeinated coffee	
hot chocolate	
soup	

She knows that she sold 40 drinks, but the tallies total more than 40.

Which drink has the wrong tally?

- A white coffee
- B black coffee
- C hot chocolate
- D soup

18 Later in the week Maria sold a total of 50 drinks during a morning break.

Three tenths of the drinks were tea.

What is three tenths as a percentage?

- A 30%
- B 15%
- C 10%
- D 3%

19 Maria sold 50 drinks. Three tenths of them were tea.

How many teas did she sell?

A 10

B 13

C 15

D 30

Use the information below for questions 20, 21 and 22.

Janine works at a petrol station. She is paid £4.75 per hour.

20 She needs to earn at least £150 a week.

How can she find out the number of hours she has to work each week?

- A  $4.75 \times 150$
- B  $4.75 \div 150$
- C  $150 \div 4.75$
- D  $150 - 4.75$

21 Last week Janine worked 22 hours. This was 10 hours less than she normally works.

How much less did she earn last week, compared with a normal week?

- A £10.00
- B £22.00
- C £47.50
- D £104.50

22 Janine is paid for each complete quarter hour she works.

She works 7 hours 40 minutes on one day. How long will she be paid for?

- A 7 hours
- B  $7\frac{1}{2}$  hours
- C  $7\frac{3}{4}$  hours
- D 8 hours

Use the information below for questions 23, 24 and 25.

Mr and Mrs Singh decide to gravel the rectangular parking space in front of their house.

23 They estimate that the parking space is about 7.5 metres by 5.2 metres.

Using these values, what is the area of the parking space?

- A  $35 \text{ m}^2$
- B  $36 \text{ m}^2$
- C  $39 \text{ m}^2$
- D  $45 \text{ m}^2$

24 When Mr Singh measures more accurately, he finds that the actual area is  $37.94 \text{ m}^2$ .

Round this result to the nearest 0.5 square metres.

- A  $37.5 \text{ m}^2$
- B  $37.9 \text{ m}^2$
- C  $38.0 \text{ m}^2$
- D  $38.5 \text{ m}^2$

25 The gravel comes in sacks. Each sack holds enough to cover 3 square metres.

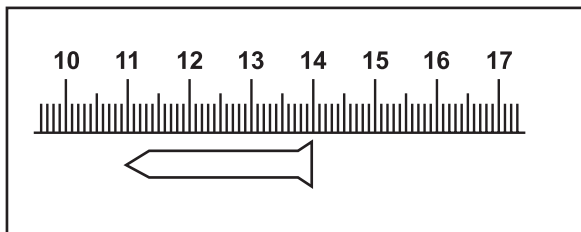
How many sacks will Mr Singh need to cover the area of  $37.94$  square metres?

- A 12
- B 13
- C 14
- D 114

Use the information below for questions 26, 27 and 28.

Penny is buying some loose nails in a do-it-yourself shop. She puts a handful in a bag.

26 The picture shows one of the nails beside a centimetre measuring tape.



What is the length of the nail?

- A 30 cm
- B 14 cm
- C 30 mm
- D 11 mm

27 Each nail weighs 7 grams. Penny's bag of nails weighs 300 grams (weighed to the nearest 5 grams).

How many nails are in the bag?

- A 21
- B 23
- C 42
- D 43

28 Penny needs 60 nails. Each nail weighs 7 grams.

How many grams of nails will she need altogether?

- A 350 g
- B 360 g
- C 420 g
- D 450 g

Use the information below for questions 29, 30 and 31.

Winston has been keeping a record of his withdrawals from a cash machine. Over the past 10 weeks he has made the following withdrawals:

£50 £40 £50 £120 £70 £80 £40 £90 £20 £40

29 What is the mean amount he has withdrawn?

- A £40
- B £50
- C £60
- D £70

30 What is the range of Winston's withdrawals?

- A £20
- B £50
- C £80
- D £100

31 What fraction of his withdrawals are less than £70?

- A  $\frac{1}{2}$
- B  $\frac{3}{5}$
- C  $\frac{6}{9}$
- D  $\frac{7}{10}$

Use the information below for questions 32 and 33.

Judith works as a security guard. She has to travel between different sites to make sure everything is secure. She gets paid 23 pence per mile to use her own car.

32 On Friday Judith travelled 45 miles and was paid £10.35 for it.

She wants to check that the distance she was paid for was correct.

Which of these should she use?

- A  $1035 \div 23$
- B  $10.35 - 0.23$
- C  $10.35 \div 23$
- D  $23 \div 45$

33 She travels 45 miles each day for six days altogether.

How much should she be paid for travelling for the six days?

- A £60.21
- B £61.80
- C £62.10
- D £602.10



Use the information below for questions 34 and 35.

An architect makes scale drawings for different parts of a new house.

One of the scale drawings shows the upstairs floor layout.

34 On the scale drawing, the length of a corridor measures 9.7 centimetres.

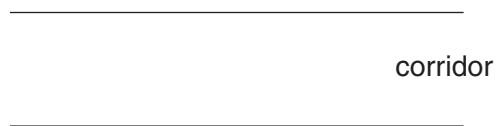
The scale of the drawing is 10 mm to 1 m.

The actual length of the corridor is

- A 0.97 m
- B 9.7 m
- C 90.7 m
- D 97 m

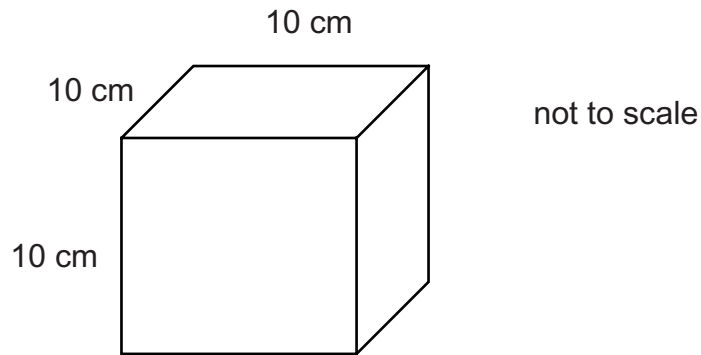
35 Here is a piece of the scale drawing which shows part of the corridor.

Measure the width of the corridor on the drawing, to the nearest millimetre.



- A 1.5 mm
- B 1.6 mm
- C 15 mm
- D 16 mm

- 36 The diagram shows a carton used for sending pottery mugs by post.



The volume of each carton is

- A  $100 \text{ cm}^2$
  - B  $100 \text{ cm}^3$
  - C  $1000 \text{ cm}^2$
  - D  $1000 \text{ cm}^3$
- 37 Barry is planning a cycling holiday. He will be travelling along the Norfolk coast.
- The map he is using has a scale of 1 cm to 2 kilometres.
- He measures the distance on the map from Lowestoft to Great Yarmouth as 8.6 cm.

How far is it from Lowestoft to Great Yarmouth in kilometres?

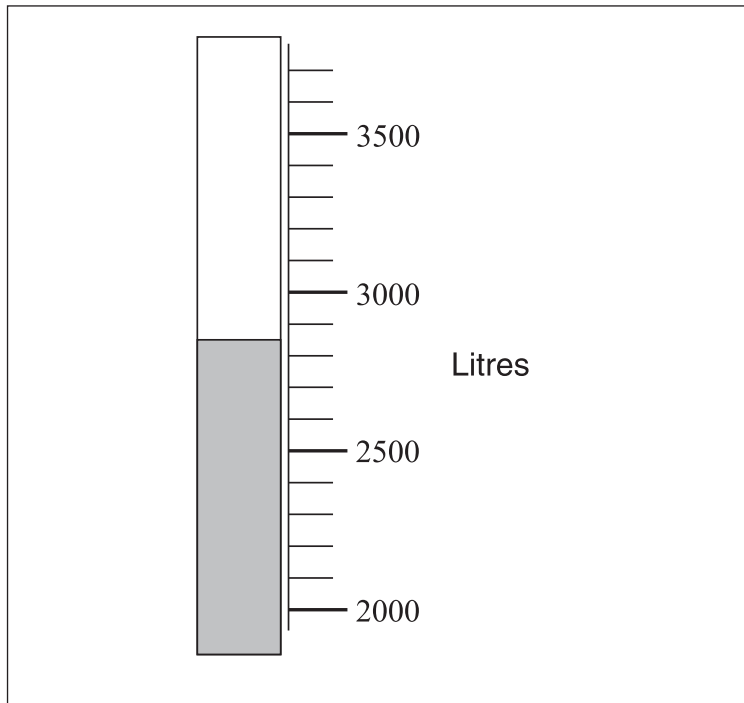
- A 4.3 km
- B 8.6 km
- C 16.12 km
- D 17.2 km

Use the information below for questions 38 and 39.

Houses that have oil-fired heating have tanks outside for storing the heating oil.

38 A tank for heating oil has a measuring gauge. This shows how many litres of oil are in the tank.

The picture shows part of the gauge



How much oil is in the tank?

- A 2675 litres
- B 2700 litres
- C 2850 litres
- D 2925 litres

39 The amount of oil is measured in litres.

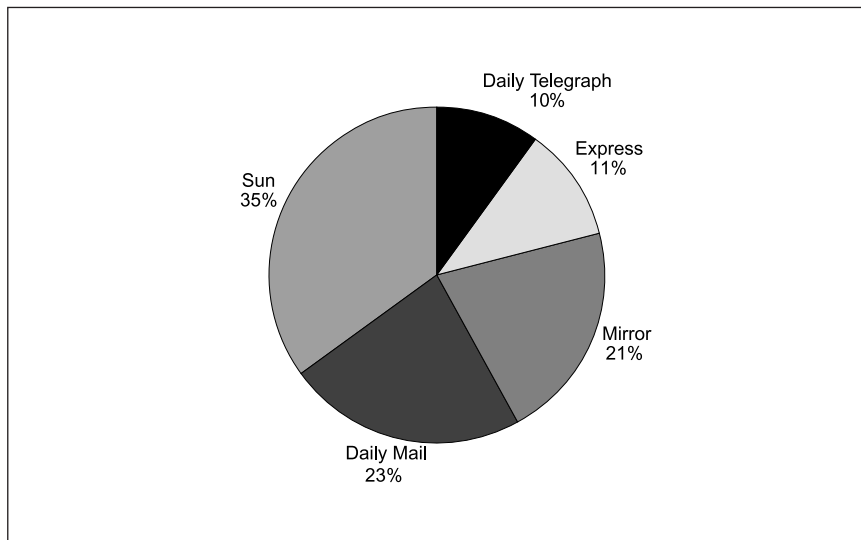
The amount of oil could also be measured in

- A metres
- B square metres
- C degrees
- D cubic metres

40 Chris needs to choose a chart to show the numbers of copies sold each day of the five most popular daily papers.

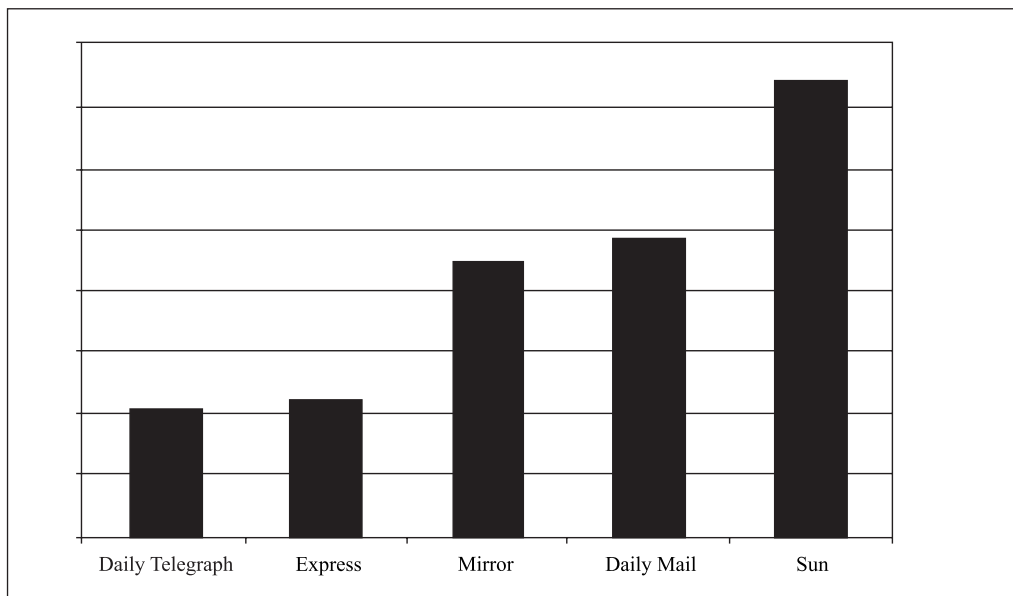
Which of these four charts shows the numbers of copies sold each day most clearly?

A



B

**Copies sold each day of the five most popular daily papers**



C

Copies sold each day of the five most popular daily papers



D

Copies sold each day of the five most popular daily papers

