



Key skills application of number

Adult numeracy

Level 1

Test Paper

YOU NEED

- This test paper
- An answer sheet
- A ruler marked in mm and cm

You may NOT use a calculator

You may use a bilingual dictionary

You may write on this paper if it helps you to work things out

Do NOT open this paper until you are told to do so by the supervisor

THERE ARE 40 QUESTIONS IN THIS TEST

Total marks available: 40

Try to answer ALL the questions

YOU HAVE 1 HOUR 15 MINUTES TO FINISH THE TEST

INSTRUCTIONS

- Make sure your personal details are entered correctly on the answer sheet
- Read each question carefully
- Follow the instructions on how to complete the answer sheet
- At the end of the test, hand the test paper, your answer sheet and all notes to the supervisor

REMEMBER: YOU HAVE 1 HOUR 15 MINUTES TO FINISH THE TEST

INSTRUCTIONS TO CENTRES

- This paper must not be photocopied

Questions 1 to 5 are about a man buying a multi gym to exercise at home.

The man uses this table to check the prices and waiting times for delivery of different multi gyms.

Name	Code	Price (£)	Dimensions (cm)	Waiting time for delivery (days)
Oxford	3172	299.99	H 213 W 114 D 255	35
Muscle Trainer	3330	349.98	H 142 W 192 D 107	14
Fitnessse	3055	440.90	H 211 W 108 D 153	7
Power Max	2867	446.78	H 224 W 125 D 225	14
Flex	3024	498.00	H 210 W 226 D 253	21
Shape Master	2960	649.98	H 205 W 118 D 248	7
Super Sport	2678	946.78	H 203 W 100 D 230	7

1 What is the waiting time for delivery of the Flex multi gym?

- A 7 days
- B 14 days
- C 21 days
- D 35 days

2 There is a discount of **one-third** of the price of the Flex multi gym.
The normal price of this multi gym is £498.00

How much is the discount?

- A £33.00
- B £149.40
- C £166.00
- D £333.00

3 What is the price difference between the Oxford and the Muscle Trainer multi gyms?

- A £49.99
- B £50.01
- C £50.99
- D £150.01

4 The Power Max multi gym costs £446.78
What is £446.78 rounded to the nearest £10?

- A £400
- B £440
- C £447
- D £450

5 The man buys a Fitness multi gym costing £440.90
He pays a 10% deposit.

How much is the deposit?

- A £4.49
- B £10.00
- C £44.09
- D £44.90

Please go on to the next page

Questions 6 to 11 are about a report on smoking in the UK.

6 The report says that the Government spent thirty million pounds in one year on anti-smoking education.

What is thirty million in figures?

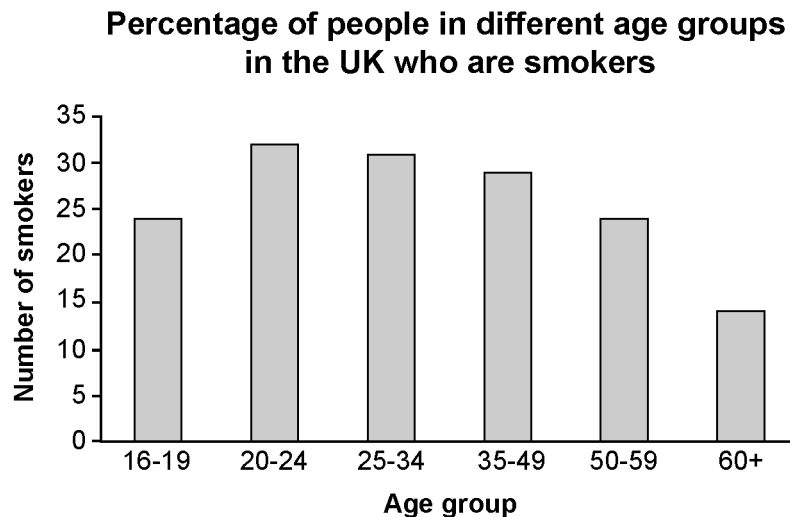
- A 300 000
- B 3 000 000
- C 30 000 000
- D 300 000 000

7 The report also says that treating illnesses caused by smoking costs the National Health Service £171 000 an hour.

What is this number of pounds in words?

- A seventeen million and one thousand
- B one million, seven hundred and one thousand
- C one million, seventy-one thousand
- D one hundred and seventy-one thousand

8 This chart shows the percentage of people in different age groups in the UK who are smokers.



What is wrong with the chart?

- A The title is incorrect.
- B The label on the horizontal axis is incorrect.
- C The scale is incorrect.
- D The label on the vertical axis is incorrect.

- 9 One person says she spends £4.50 on cigarettes every day.
How much does she spend on cigarettes every **week**?
- A £28.50
 - B £31.50
 - C £31.57
 - D £33.30
- 10 Four-fifths of people who smoke regularly have tried to give up smoking in the past.
What is this fraction as a percentage?
- A 20%
 - B 45%
 - C 80%
 - D 90%
- 11 Two-thirds of all cigarette smokers say they want to give up smoking this year.
Which of these types of display will best show this information?
- A a pie chart
 - B a scatter graph
 - C a flow chart
 - D a line graph

Please go on to the next page

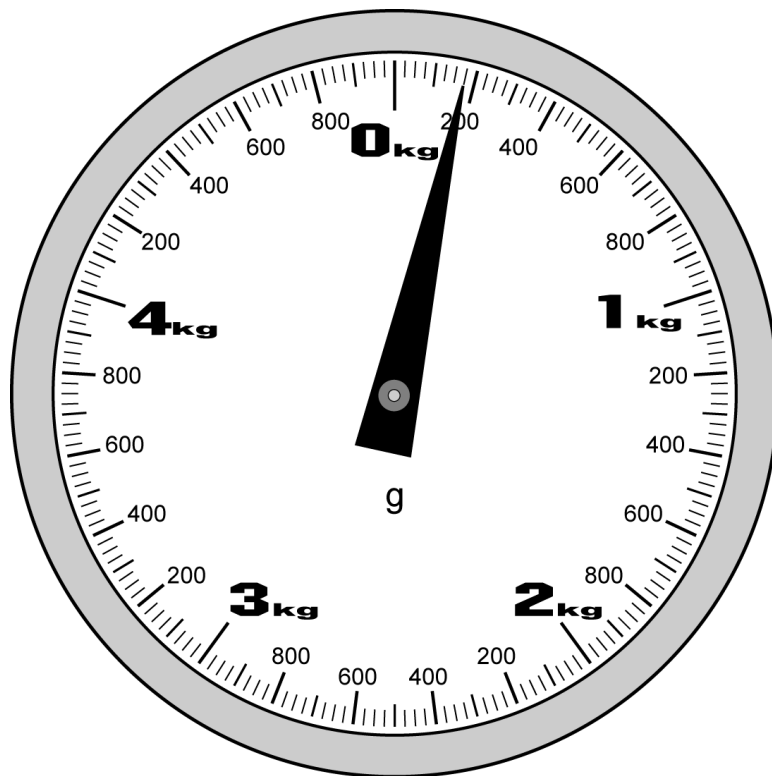
Questions 12 to 18 are about selling goods on an internet auction site.

A woman has several boxes of new golf balls. She decides to sell them on an internet auction site.

12 There are 4 golf balls in each box.
One box of golf balls costs £2.60
How much does each golf ball cost?

- A 60p
- B 64p
- C 65p
- D 66p

13 She checks the weight of a box of golf balls on her kitchen scales.



What is the reading on the scales?

- A 150g
- B 175g
- C 180g
- D 190g

14

Another box of golf balls sells for £3.20

The woman must pay 5% of the selling price to the internet company.

What is 5% of £3.20?

A 5p

B 16p

C 32p

D 64p

Please go on to the next page

Questions 15 and 16 use the following information.

The woman sells 5 boxes of golf balls for a total of £15.80
The selling prices of the boxes are

£3.20 £3.20 £3.00 £2.90 £3.50

15 What is the average (mean) selling price of these boxes of golf balls?

- A £2.90
- B £3.00
- C £3.16
- D £3.20

16 What is the range of the selling prices of these boxes of golf balls?

- A £0.30
- B £0.60
- C £3.20
- D £3.50

17 The woman works out her profit.

Total selling price	£15.80
Money paid to internet company	– £ 1.76
Profit	£14.04

Which calculation checks the profit?

- A $14.04 + 1.76 = \text{total selling price}$
- B $14.04 - 1.76 = \text{total selling price}$
- C $14.04 + 15.80 = \text{total selling price}$
- D $14.04 - 15.80 = \text{total selling price}$

18

She also sells a golf trolley.

To work out the charge for postage and packing, she needs to know the volume of the box that the trolley is packed in.

The dimensions of the box are

Length = 30cm Width = 40cm Height = 90cm
--

The volume of the box is

- A 160cm³
- B 1 290cm³
- C 3 630cm³
- D 108 000cm³

Please go on to the next page

Questions 19 to 26 are about an open-air swimming pool.

- 19 This table shows the total number of people who visited the swimming pool over a period of 8 years.

Year	1998	1999	2000	2001	2002	2003	2004	2005
Total number of people	13000	20000	11000	34000	22000	45000	51000	63000

In how many of these years did **more than** 22 000 people visit the swimming pool?

- A 3
- B 4
- C 5
- D 6

- 20 The table shows the prices of different types of ticket.

Ticket type	Adult	Child (5-15 years)	Family (2 adults and 2 children)	Group (2 adults and 6 children)
Price	£5.15	£3.10	£12.30	£18.45

A family of 2 adults and 2 children (5 years and 8 years old) buys a family ticket instead of individual tickets.

Which calculation works out the amount in pounds the family saves by buying a family ticket?

- A $12.30 - 5.15 + 5.15 - 3.10 + 3.10$
- B $(5.15 \times 2) + (3.10 \times 2) \div 12.30$
- C $12.30 - (5.15 \times 2) + (3.10 \times 2)$
- D $5.15 + 5.15 + 3.10 + 3.10 - 12.30$

21 The manager checks how many of each type of ticket they sell.

This table shows the results for one half hour of one day

group	family	child	adult	adult	family
adult	family	adult	child	group	child
child	adult	group	family	family	group
child	child	adult	adult	group	family

The ticket type sold most often in this half hour is

- A adult
- B child
- C family
- D group

22 The swimming pool shop offers a discount on last year's swimwear.



The marked price of a pair of swimming trunks is £24.

How much is the **discount**?

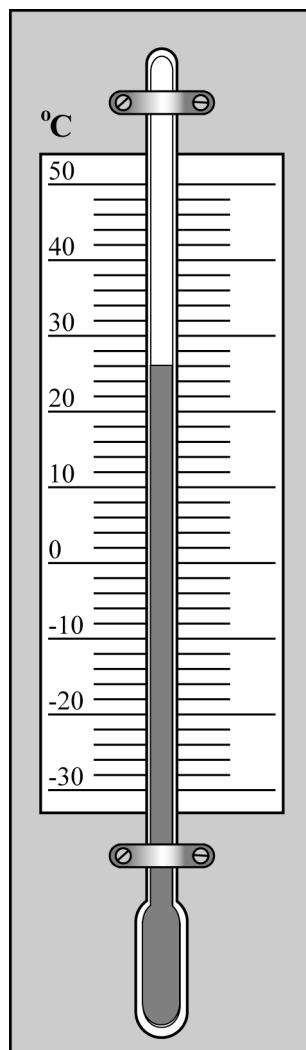
- A £6
- B £8
- C £12
- D £20

- 23 A worker in charge of refreshments fills in an order. He always orders 2 ice creams for every 3 cold drinks. The manager tells him to order 600 cold drinks.

How many ice creams does he need to order?

- A 200
- B 300
- C 400
- D 900

- 24 An assistant checks the thermometer on a wall at the swimming pool.



The reading on the thermometer in °C is

- A 23 (°C)
- B 26 (°C)
- C 28 (°C)
- D 32 (°C)

- 25 The manager employs 8 lifeguards on a Saturday.
Each lifeguard works for 9 hours.
Each lifeguard earns £6.75 an hour.

Which calculation works out the amount of money (in £) that the manager pays for lifeguards on a Saturday?

- A $6.75 + 8 + 9$
- B $6.75 \times 8 + 9$
- C $6.75 \times 9 + 8$
- D $6.75 \times 9 \times 8$

- 26 The swimming pool holds 1.5 million gallons of water.

Another unit used to measure the **volume** of water is

- A degrees
- B kilograms
- C litres
- D metres

Please go on to the next page

Questions 27 to 34 are about the work of an interior designer.

27 The designer earned £48 475 last year.

What is this amount to the nearest thousand pounds?

- A £48 000
- B £48 500
- C £49 000
- D £50 000

28 The designer expects to receive 2 orders for every 5 visits he makes to clients.

This month he has planned 40 visits.

How many orders does he expect to receive this month?

- A 20
- B 16
- C 10
- D 8

29 One week he visits 10 clients. He records the time in hours that he spends with each client.

Time in hours									
2.5	1	2.5	2.5	2	2	3	2.5	2	3

The average (mean) time he spends with each client is

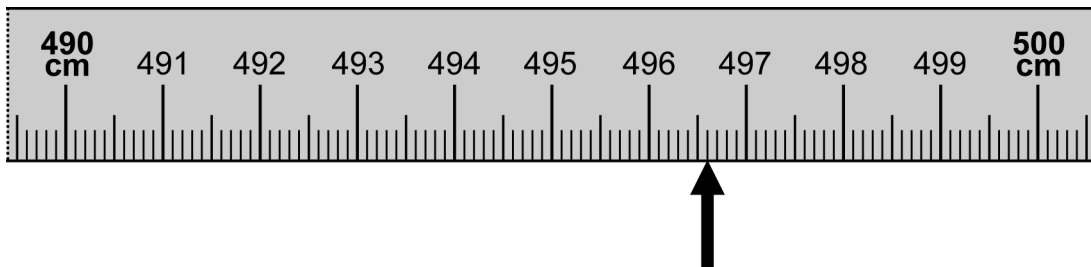
- A 1 hour
- B 2 hours
- C 2.3 hours
- D 2.75 hours

- 30** The designer drives from his office to visit a new client's property.
The distance on the map is 12.8cm.
The scale of the map is 1cm to 4km.

The actual distance is

- A 3.2km
- B 8.8km
- C 16.8km
- D 51.2km

- 31** The client wants his sun terrace redesigned.
He checks the length of the sun terrace with a tape measure.
This arrow points to the length



What is the length of the sun terrace?

- 32** The designer makes a scale drawing of the sun terrace.
The width of the sun terrace is 380cm.
The scale of the plan is 1 : 20

The width of the sun terrace on the plan is

- A 19cm
- B 38cm
- C 76cm
- D 190cm

- 33** The client asks for decking on a section of the sun terrace.
The decking section is 3.0m long and 3.8m wide.

The area of the decking section is

- A 6.8m²
- B 11.4m²
- C 13.6m²
- D 22.8m²

- 34** The client chooses these plants

Plant	Cost per plant	Quantity
Olive tree	£12.98	1
Acer tree	£19.98	1
Rose	£5.98	2

The total cost for these 4 plants is

- A £21.62
- B £41.98
- C £44.92
- D £45.08

Please go on to the next page

Please go on to the next page

Questions 35 to 40 are about a survey on travel in London.

An organisation carried out a survey in London about running the tube trains one hour later at night and starting one hour later in the morning.

35 A total of 54 419 people responded to the survey.

What is 54 419 rounded to the nearest hundred?

- A 54 000
- B 54 400
- C 54 420
- D 54 500

36 The survey results showed that if travel times changed the number of journeys made per day would also change. There would be

140 000 **more** late night tube journeys
55 000 **fewer** early morning tube journeys

How many **extra** tube journeys is this?

- A 85 000
- B 95 000
- C 115 000
- D 195 000

37 About 75% of the people who replied said that they would use the tube if it operated for one hour later at night.

75% is the same as

A $\frac{1}{75}$

B $\frac{5}{7}$

C $\frac{3}{5}$

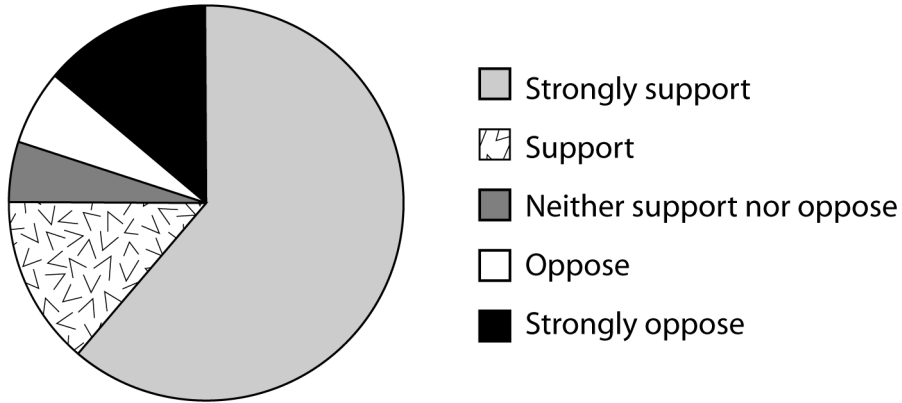
D $\frac{3}{4}$

Please go on to the next page

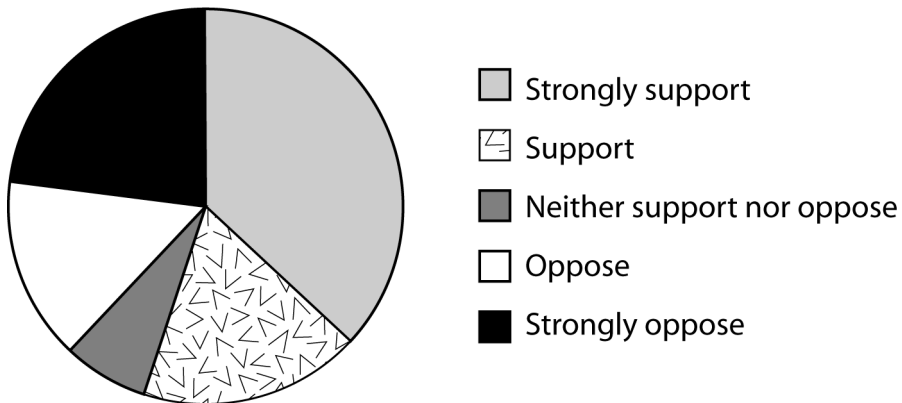
38

Late night workers and early morning workers were questioned about the proposed changes. These pie charts show the answers people travelling for work purposes gave.

Late night workers



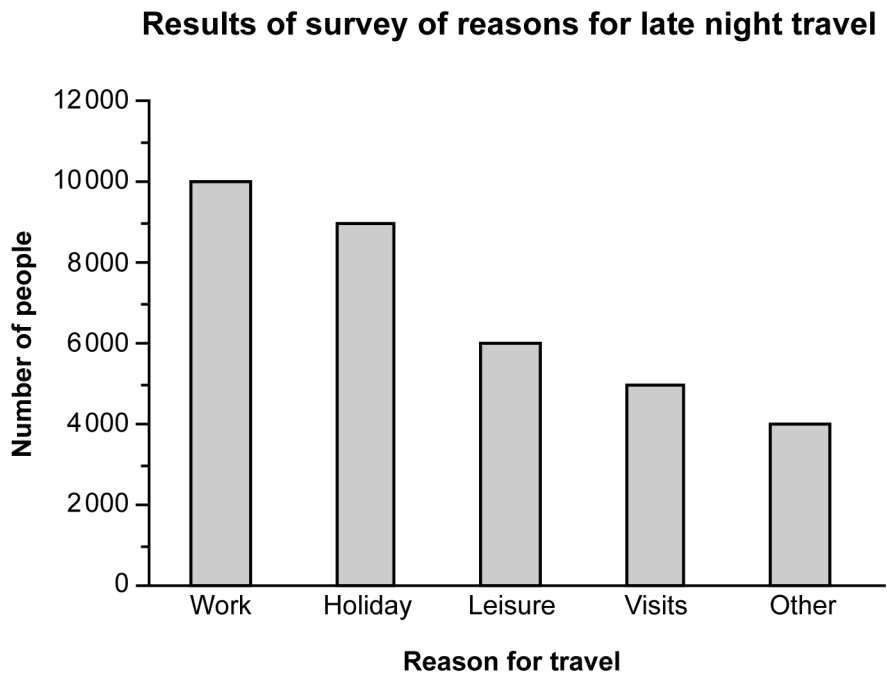
Early morning workers



Most late night workers answered

- A Strongly oppose
- B Oppose
- C Neither support nor oppose
- D Strongly support

39 This bar chart shows the reasons people gave for their late night travel.



How many **more** people gave their reason for late night travel as **Work** than gave their reason as **Leisure**?

- A 1 000
- B 3 000
- C 4 000
- D 16 000

40 Shortly after the survey the underground was closed for engineering work from 01:45 to 08:15

The underground was closed for

- A $6 \frac{1}{2}$ hours
- B $7 \frac{1}{2}$ hours
- C 8 hours
- D 10 hours

End of test

BLANK PAGE

BLANK PAGE

BLANK PAGE