

Joining the RAF

Your next steps





PRACTICE APTITUDE TESTS

ANSWER SHEET

TEST 1: VERBAL REASONING

TEST 2: NUMERICAL REASONING

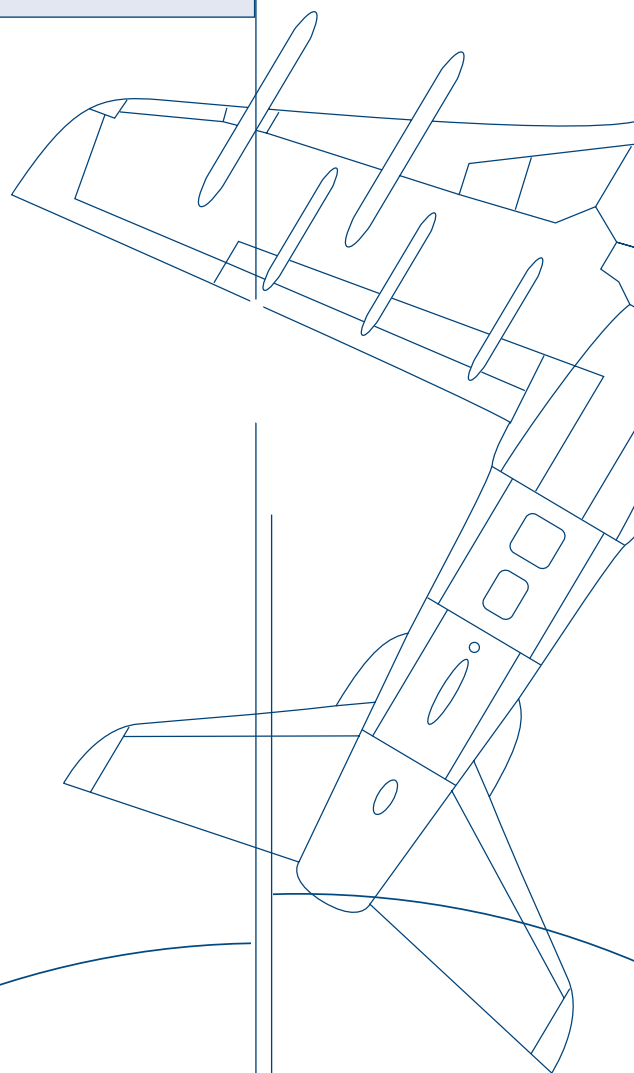
TEST 3: WORK RATE

TEST 4: SPATIAL REASONING

TEST 5: ELECTRICAL COMPREHENSION

TEST 6: MECHANICAL COMPREHENSION

TEST 7: MEMORY



APTITUDE TESTS

What are the tests for?

The Aptitude Tests you will take as part of the RAF selection process are known as the Airmen Selection Tests (AST). The purpose of the AST is to find out which RAF trades might suit you. The AST consists of seven multiple-choice tests, each of which assesses your aptitude in a different area:

- **Verbal Reasoning** is an aptitude for using and interpreting written information.
- **Numerical Reasoning** is an aptitude for working with fractions, decimals and formulae, as well as using and interpreting numerical information in the form of graphs and tables.
- **Work Rate** is an aptitude for working through routine tasks quickly and accurately.
- **Spatial Reasoning** is an aptitude for working with shapes and objects.
- **Electrical Comprehension** is an aptitude for working with electrical concepts.
- **Mechanical Comprehension** is an aptitude for working with mechanical concepts.
- **Memory** is an aptitude for remembering information accurately.

By looking at a range of different aptitudes, we get an accurate picture of where your potential lies. When we've identified your strengths, we can decide which jobs might be suitable for you.

The results of your AST are strictly confidential and will only be used for the RAF selection process.

Preparing for the tests

Preparing for the tests will help you perform to the best of your abilities. Read the information in this section carefully before sitting the Aptitude Tests.

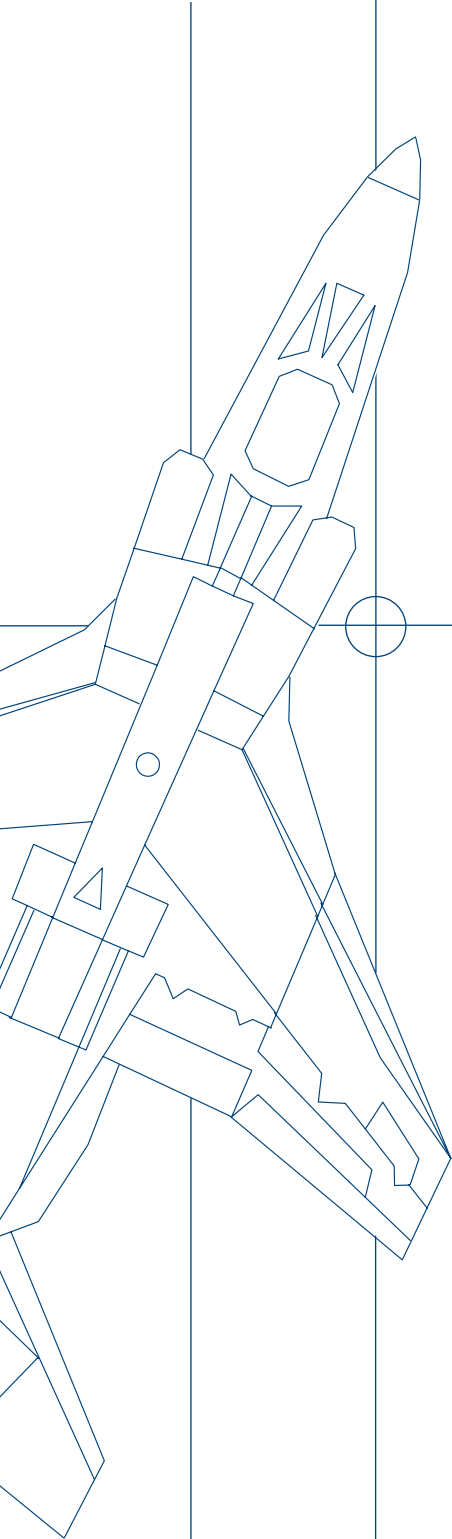
You should also attempt the practice questions in this booklet. You can find these in the section called 'Practice Aptitude Tests' beginning on page 7. These questions are similar to those you will have to do in the real test. Opposite page 7 you will also find a tear-out practice answer sheet, where you can fill in your answers. Once you have completed the practice tests, you can check your answers at the back of this booklet on page 28. If you have made mistakes, go back to the questions and try to work out where you went wrong. Think carefully about how to avoid errors in the future.

You can also prepare by testing yourself in your own time. For example:

- Read articles in newspapers and magazines, then test your understanding of what you have read.
- Practise simple arithmetic. Don't use a calculator – you will not be allowed to use one during the real test.
- Look at tables of data, charts and graphs, then test your understanding of the information presented in them.
- Try to imagine what objects would look like from another perspective.
- Try to remember sequences of letters or images.
- Your school or local library may have books containing information about basic electrical and mechanical principles that you may find helpful.

If you are still unsure of what you have to do after working through the practice tests, you can ask for further advice from the staff at your nearest AFCCO.

Finally, have a good night's sleep before the test session!



On the day

Knowing what to expect on the day of the tests will help you to relax. You should plan to arrive in plenty of time. If you wear reading glasses, be sure to bring them along.

The tests will take place at your nearest AFCO. You will probably be part of a small group of people taking the tests at the same time. Before the test session begins you will be asked to switch off your mobile phone or pager to avoid distracting yourself and other candidates. Any pens, pencils or erasers you need will be provided by the AFCO.

A qualified member of the RAF Careers Service will administer the AST. You will be given instructions on how to complete each of the seven tests. Instructions are also printed on your test booklet. You will have the chance to complete some practice questions to make sure you understand what you have to do. If at any time during the test session you do not understand the instructions or are unsure of what you have to do, ask the test administrator. If you feel unwell at any time during the test session, tell the test administrator.

You are not allowed to use a calculator or dictionary during the tests. For the Numerical Reasoning test you will be given rough paper for working out your answers. You will have to hand in your rough working, but it will not be taken into account when your answers are marked.

The first six tests will be presented in a test booklet. In the actual test session, the Memory test will be presented on film. You will answer all the tests in an answer booklet. Before you answer a question, make sure you read it carefully. You should work accurately and quickly. Altogether the AST will take about 90 minutes. Tests are strictly timed so that everyone taking the AST has the same opportunity to complete them. Don't spend too much time on any one question, and try to answer as many as you can in the time allowed. Don't worry if you can't finish all the questions – very few people do. You will not lose marks for a wrong answer.

PRACTICE APTITUDE TESTS

Practising the kind of questions you will be given in the AST will help prepare you for the real thing. The practice questions in this booklet are similar to those in the actual AST.

When you work through the practice questions, try to do them as accurately and quickly as you can – just as you would in the real thing. You can mark your answers on the answer sheet, which you can find on the tear-out page attached. This answer sheet is similar to the one in the real test.

For each question there is a choice of answers, which are labelled A, B, C, D and E. When you have chosen the correct answer, find the corresponding number of the question on your answer sheet and place a cross in the box that contains the letter of your choice. When you have completed the practice tests, check your answers; the correct answers are at the back of this booklet. If you have made mistakes, go back to the questions and try to work out where you went wrong. Think carefully about how to avoid errors in the future.

ANSWER SHEET – AST PRACTICE QUESTIONS

Surname (Block Capitals)	Initials	Age	Date	Place of Testing	Candidate URN

**VERBAL
REASONING (VR)****Practice Question 1**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E

Practice Question 2

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E

Practice Question 3

1.	A	B	C	D	E
2.	A	B	C	D	E

Practice Question 4

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score**NUMERICAL
REASONING (NR)****PART 1**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E
5.	A	B	C	D	E

**NUMERICAL
REASONING (NR)****PART 2****Practice Question 1**

1.	A	B	C	D	E
2.	A	B	C	D	E

Practice Question 2

1.	A	B	C	D	E
2.	A	B	C	D	E

Practice Question 3

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E
5.	A	B	C	D	E

Raw Score**WORK RATE
(WR)**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score**SPATIAL
REASONING (SR)****PART 1**

1.	A	B	C	D	E
2.	A	B	C	D	E

**SPATIAL
REASONING (SR)****PART 2**

1.	A	B	C	D	E
2.	A	B	C	D	E

Raw Score

**ELECTRICAL
COMPREHENSION
(EC)**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score**MECHANICAL
COMPREHENSION
(MC)**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score**MEMORY (MM)****PART 1**

1.	A	B	C	D
2.	A	B	C	D

Raw Score**MEMORY (MM)****PART 2**

1.	A	B	C	D
2.	A	B	C	D

Raw Score

TEST 1: VERBAL REASONING

This is a test of your ability to understand, interpret and use written information.

In the real test, you will have 15 minutes to answer 20 questions. The questions will be divided into four sections. You will need to mark your answers on the separate answer sheet, in the space headed VERBAL REASONING (VR).

Below are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

Practice Question 1

The following houses are for sale:

House A is located in a village, is far from work, has three bedrooms, no double-glazing and is a moderate distance to the shops.

House B is located in a city, is near to work, has three bedrooms, double-glazing and is a short distance from the shops.

House C is located in a village, is near to work, has four bedrooms, double-glazing and is a long distance to the shops.

House D is located in a city, is far from work, has four bedrooms, no double-glazing and is a moderate distance to the shops.

House E is located in a village, is near to work, has three bedrooms, double-glazing and is a short distance to the shops.

Which house would be the most suitable for each of the following situations? (Each house may be suitable for more than one situation)

1. You want a house in a village that is near to work with three bedrooms.

A.	B.	C.	D.	E.
House A	House B	House C	House D	House E

2. You want a house that is near to the shops and work, and is located in a city.

A.	B.	C.	D.	E.
House A	House B	House C	House D	House E

3. You want a house with more than three bedrooms. The distance from the shops is not important, but it must have double-glazing and be located in a village.

A.	B.	C.	D.	E.
House A	House B	House C	House D	House E

Practice Question 2

If any member of staff breaks the company rules in the Post Room there is a set procedure to be followed, depending on which rule has been broken and the number of times it has been broken in the past. **Special conditions apply in some cases.** The disciplinary rules are outlined below, but the secretary has not yet finished typing the rules for items wrongly packed.

see special conditions below	Items wrongly packed	Items mislabelled*	Items sent late*
FIRST TIME	Extra training in correct procedure	Observed by supervisor	Verbal warning from supervisor
SECOND TIME	Observed by supervisor	Verbal warning from supervisor	Written warning from supervisor
THIRD TIME		Written warning from supervisor	Dismissal
FOURTH TIME		Dismissal	–
FIFTH TIME	Dismissal	–	–
SPECIAL CONDITIONS	*If two items are packed wrongly in the same week, the employee is given a written warning by the supervisor.	*If only one item is mislabelled in any one calendar month, it is not carried forward to the next calendar month.	*Valid reasons will be acknowledged and disregarded at the supervisor's discretion.

1. Based on the information shown in the table, what will happen to someone who mislabels items wrongly for the third time?

- A. Extra training in correct procedure
- B. Written warning from supervisor
- C. Dismissal
- D. Observed by supervisor
- E. Verbal warning from supervisor

2. Michael was responsible for sending items late twice. The first time it was the result of a computer failure in the department. What will happen to him the next time he is caught sending items late?

- A. Extra training in correct procedure
- B. Written warning from supervisor
- C. Dismissal
- D. Observed by supervisor
- E. Verbal warning from supervisor

3. Amy has just been dismissed. Which one of the following is likely to be the reason?

- A. She sent items late three times (the first time was because of a computer failure in the department)
- B. She mislabelled items once in August and twice in September
- C. She packed items wrongly twice in the same week
- D. She mislabelled items three times in August and once in September
- E. She packed items wrongly three times

Practice Question 3

Three friends are deciding what to do on a night out together. Harry enjoys going to the cinema the most. His second favourite activity is bowling. His next choice would be going for a meal, and then the theatre. George's least favourite activity is bowling. He most enjoys going for a meal and then going to the theatre. His second least favourite activity is the cinema. Eleanor would go to the theatre, but does not like the cinema. Her favourite activity is going bowling and then going for a meal.

1. Which activity would Harry and Eleanor be most likely to do together?

- | | | | | |
|-----------|-----------|-----------|-----------|-------------|
| A. | B. | C. | D. | E. |
| Cinema | Theatre | Bowling | Meal | Cannot tell |

2. If Eleanor was not available and the cinema was closed, which activity would Harry and George be most likely to do this evening?

- | | | | | |
|-----------|-----------|-----------|-----------|-------------|
| A. | B. | C. | D. | E. |
| Cinema | Theatre | Bowling | Meal | Cannot tell |

Practice Question 4

Russell and his sister Anna live in the centre of Kelton. Their house is a short walk from Westfield School. They usually walk together because Russell works in the shop next to Westfield School. Anna's friend Jenny goes to Westfield School. Jenny lives in a village on the outskirts of the town where she goes to school. Her brother Nicolas attends Sixth Form College in Bexton. He travels by train from their home in the village of Eastley. Sometimes his friend Andrew travels with him. Andrew gets on the train at his home village of Lintoft. When Andrew does not travel to college by train, his sister Jill gives him a lift on her way to work at the supermarket in Modbury.

1. Where does Russell work?

- | | | | | |
|-----------|-----------|-----------|-----------|-----------|
| A. | B. | C. | D. | E. |
| Bexton | Eastley | Lintoft | Modbury | Kelton |

2. Where does Jill live?

- | | | | | |
|-----------|-----------|-----------|-----------|-----------|
| A. | B. | C. | D. | E. |
| Bexton | Eastley | Lintoft | Modbury | Kelton |

3. Where does Andrew go to college?

- | | | | | |
|-----------|-----------|-----------|-----------|-----------|
| A. | B. | C. | D. | E. |
| Bexton | Eastley | Lintoft | Modbury | Kelton |

4. Which one of the following statements is definitely true?

- A.** Bexton is a village
- B.** Eastley is a town
- C.** Lintoft is a town
- D.** Modbury is a town
- E.** Kelton is a town

TEST 2: NUMERICAL REASONING

This is a test of your ability to work with fractions, decimals and formulae, as well as your ability to understand, interpret and use numbers in graphs and tables.

There are two parts to this test.

You are not allowed to use a calculator in this test. You will be given rough paper for working out your answers. You will have to hand in your rough working, but it will not be taken into account when your answers are marked.

Numerical Reasoning Part 1

Part 1 tests your ability to work with fractions, decimals and formulae.

In the real test you will have four minutes to answer 12 questions. You will need to mark your answers on the separate answer sheet, in the space headed **NUMERICAL REASONING (NR) PART 1**.

Below are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

1. Calculate $0.64 + 2.51$

- | | | | | |
|------|------|------|------|------|
| A. | B. | C. | D. | E. |
| 2.85 | 3.15 | 3.95 | 3.05 | 2.95 |

2. Calculate $\frac{5}{6} - \frac{2}{3}$

- | | | | | |
|---------------|---------------|---------------|---------------|---------------|
| A. | B. | C. | D. | E. |
| $\frac{1}{6}$ | $\frac{3}{4}$ | $\frac{2}{3}$ | $\frac{1}{2}$ | $\frac{1}{3}$ |

3. Convert $\frac{3}{5}$ to a decimal

- | | | | | |
|------|------|------|------|------|
| A. | B. | C. | D. | E. |
| 0.35 | 0.70 | 0.60 | 0.55 | 0.40 |

4. $\frac{4^x - 6}{7} = 2$ What is the value of x ?

- | | | | | |
|----|----|----|----|----|
| A. | B. | C. | D. | E. |
| 5 | 6 | 7 | 8 | 9 |

5. Calculate $2.73 - 1.80$

- | | | | | |
|------|------|------|------|------|
| A. | B. | C. | D. | E. |
| 1.10 | 1.17 | 1.93 | 0.93 | 1.03 |

Numerical Reasoning Part 2

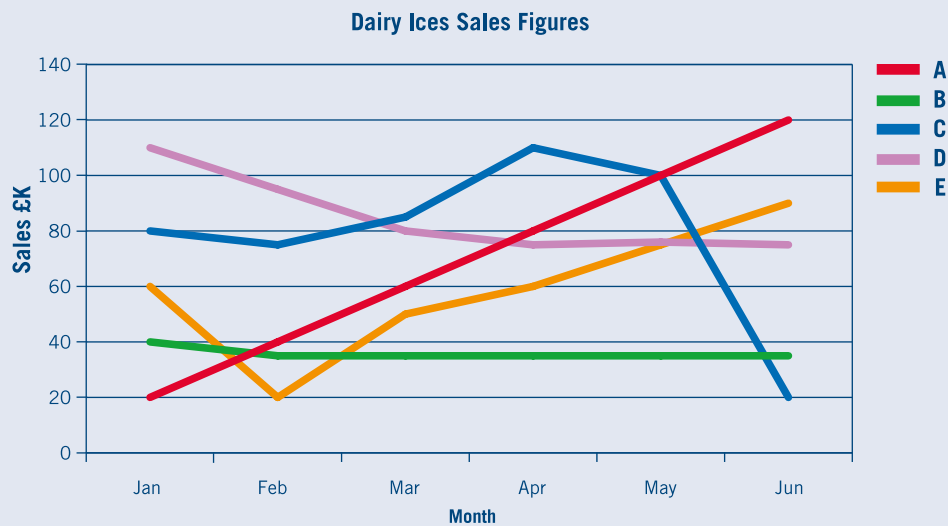
Part 2 tests your ability to understand, interpret and use numerical information in the form of tables and graphs.

In the real test you will have 11 minutes to answer 15 questions. You will need to mark your answers on the separate answer sheet, in the space headed **NUMERICAL REASONING (NR) PART 2**.

Below are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

Practice Question 1

The graph below shows the sales figures of five different kinds of ice cream made by Dairy Ices.



1. In April, which flavour of ice cream made Dairy Ices the most money?

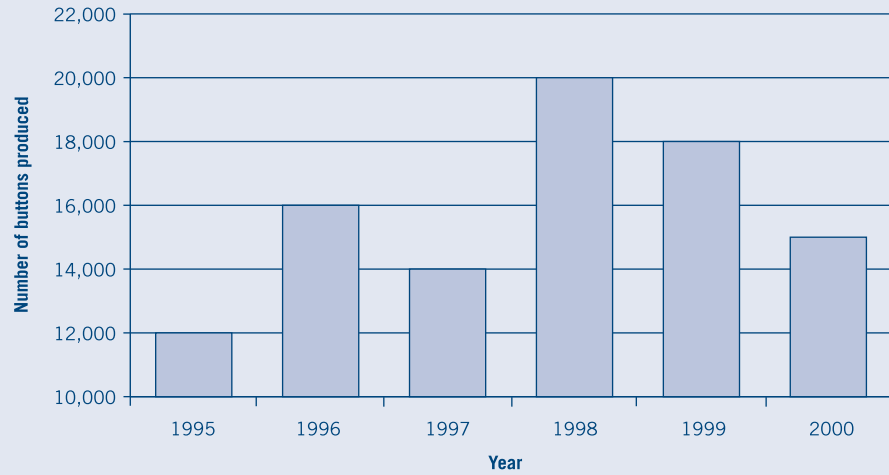
- A. B. C. D. E.
A B C D E

2. Which flavour of ice cream had sales figures that increased continuously?

- A. B. C. D. E.
A B C D E

Practice Question 2

The bar chart below shows the number of buttons produced by a button factory between 1995 and 2000.



1. In which year was the number of buttons produced 75% of what it was in 1998?

- | | | | | |
|-----------|-----------|-----------|-----------|-----------|
| A. | B. | C. | D. | E. |
| 1995 | 1996 | 1997 | 1999 | 2000 |

2. What was the difference between the number of buttons produced in 1997 and 1998?

- | | | | | |
|-----------|-----------|-----------|-----------|-----------|
| A. | B. | C. | D. | E. |
| 3,000 | 4,000 | 5,000 | 6,000 | 7,000 |

Practice Question 3

The following table shows the distribution records of Zed Ltd, an engineering company. However, the clerk has yet to enter some of the figures.

Date	Engineering Part	Destination	Distance to Destination (km)	Number Required	Cost Per Part	Total Cost
1st June	AHB	Company A (Leeds)	250	4		
7th June	LTO	Company B (Hull)	50	9	£300	£2,900
12th June	ZAQ	Company A (Leeds)	250	6		£1,200
14th June	AHB	Company C (Manchester)	400	7		
21st June	LTO	Company B (Hull)	50	5	£300	£1,500

1. What is the total cost of two 'ZAQs'?

- A.** £200 **B.** £300 **C.** £400 **D.** £500 **E.** £600

2. 'AHBs' are half the price of 'ZAQs'. How much did Company A spend on 'AHBs' in June?

- A.** £100 **B.** £200 **C.** £300 **D.** £400 **E.** £500

3. On the 12th June the delivery driver arrived at Company A at 11:00 hrs having travelled at an average speed of 100 km/h. What time did he leave Zed Ltd?

- A.** 07:30 **B.** 08:00 **C.** 08:30 **D.** 09:00 **E.** 09:30

4. On the 21st June the delivery driver left Hull at 16:00 hrs hoping to travel at an average speed of 100 km/h. However he could only travel at half this speed because of traffic. What time did he arrive back at Zed Ltd?

- A.** 16:30 **B.** 17:00 **C.** 17:30 **D.** 18:00 **E.** 18:30

5. A mistake was made somewhere in the Total Cost column. What should have been the correct figure?

- A.** £2,700 **B.** £500 **C.** £1,700 **D.** £1,200 **E.** £3,000

TEST 3: WORK RATE

This is a test to see how quickly and accurately you can work through routine tasks. You will have to complete a coding exercise, like the one below.

In each question you will be shown a grid like this:

	Columns			
	▼	▼	▼	▼
Letters	R	D	B	S
Numbers	7	6	3	2
Symbols	●	▼	▲	■

In each column there is a letter, a number and a symbol. For example, the first column in the grid above contains:

The letter R
The number 7
The symbol ●

In each question you will be given an **original code** made up of three letters or three numbers. Each letter or number is taken from a separate column in the grid.

For every item in a code, there are two alternative items in the same column. For example, for the code **RDS**, using the grid above:

The alternatives to **R** are 7 and ●
The alternatives to **D** are 6 and ▼
The alternatives to **S** are 2 and ■

In each question you will be given five **alternative codes** labelled A–E. You have to decide which one of these **alternative codes** contains items taken from the **same columns**, and in the **same order**, as the **original code**.

For example, given the grid above, which of the following could be an alternative code for **RDS**:

A. 7 ▼ 3 **B.** ▼ 6 2 **C.** ● 6 2 **D.** 7 3 ■ **E.** 7 ▲ 2

The correct answer is C because:

R is in the same column as the symbol ●
D is in the same column as the number 6
S is in the same column as the number 2

R	D	B	S
7	6	3	2
●	▼	▲	■

In the real test you will have four minutes to answer 20 questions. You will need to mark your answers on the separate answer sheet, in the space headed WORK RATE (WR).

On the facing page are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

1. Which could be an alternative code for FSK?

F	J	S	K
7	9	4	3
▼	▲	◆	■

- A. 7 4 ▼ B. ▼ ◆ 3 C. 9 4 ▼ D. 7 ▲ ■ E. ▲ 4 3

2. Which could be an alternative code for 795?

Q	T	C	F
2	9	7	5
◆	▲	●	■

- A. ◆ C F B. C ▲ ◆ C. ▲ Q ■ D. ● T ■ E. C ● F

3. Which could be an alternative code for 483?

A	B	C	H
4	8	7	3
▲	●	■	▼

- A. A ● ▼ B. ▲ ● B C. B ▼ ▲ D. ▼ B A E. C ● H

4. Which could be an alternative code for ZJE?

J	Z	Q	E
9	5	2	7
◆	■	▲	●

- A. 5 ◆ ■ B. ● ▲ 9 C. ◆ ■ 7 D. 5 ◆ ● E. ■ ▲ 7

TEST 4: SPATIAL REASONING

This is a test of your ability to work with shapes and objects.

There are two parts to this test.

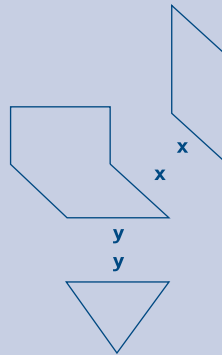
Spatial Reasoning Part 1

Part 1 tests how well you can fit shapes together.

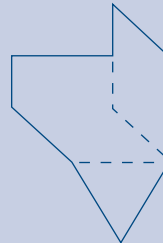
In each question you will be shown either three or four shapes. You have to imagine what they will look like when they are joined together.

All of the shapes have at least one side that is labelled with a letter (either x, y or z). You have to place the sides with the same labels next to each other to form a **new shape**.

For example:



When joined together the above three shapes will look as follows:

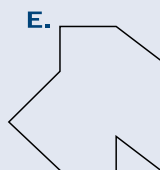
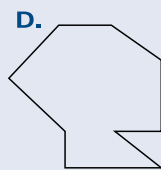
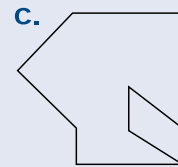
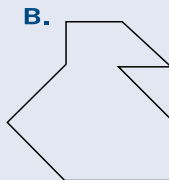
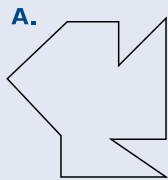
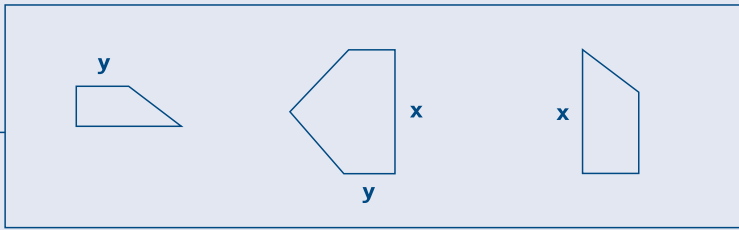


In each question you will be given five options (labelled A–E) for what the **new shape** might look like. You have to decide which one is correct.

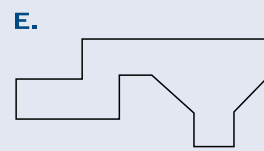
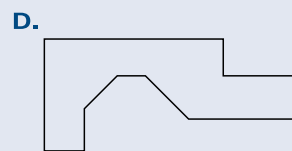
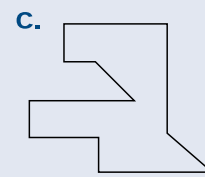
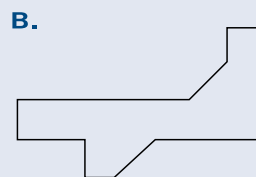
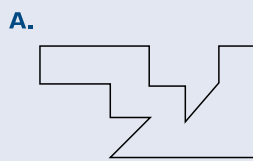
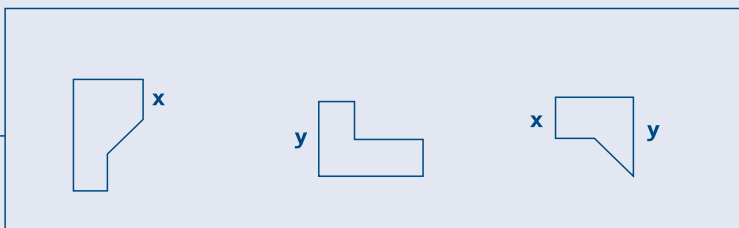
In the real test you will have four minutes to answer 10 questions. You will need to mark your answers on the separate answer sheet, in the space headed **SPATIAL REASONING (SR) PART 1**.

On the facing page are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

1.



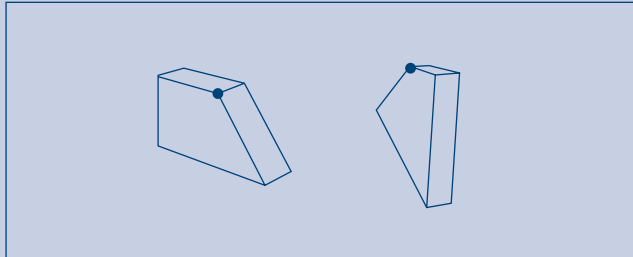
2.



Spatial Reasoning Part 2

Part 2 tests your ability to imagine what three-dimensional objects will look like after they have been rotated.

In each question you will be shown two separate objects, each with a dot placed in one corner. For example:



You will be given five options (labelled A–E) showing the same two objects after each has been rotated in some way.

Only one of the five options shows both the dots placed in the same corners as in the original diagram.

You have to decide which option shows both rotated objects with the dot placed in the correct corner.

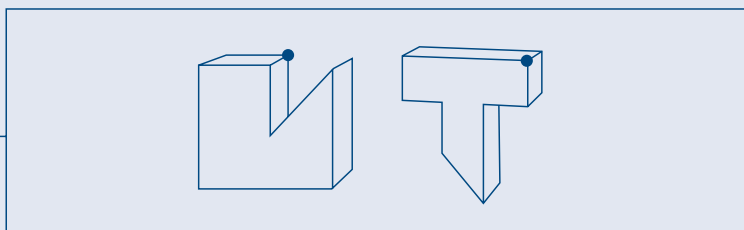
The image shows five options, each with two 3D objects and a black dot on a corner of each. Option A shows the objects rotated 90 degrees clockwise. Option B shows the objects rotated 90 degrees counter-clockwise. Option C shows the objects rotated 180 degrees. Option D shows the objects rotated 90 degrees clockwise, but the dots are on different corners. Option E shows the objects rotated 90 degrees counter-clockwise, with the dots in the same relative positions as in the original diagram.

In this example the correct answer is E.

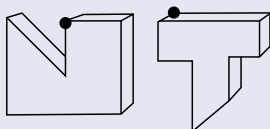
In the real test you will have three minutes to answer 10 questions. You will need to mark your answers on the separate answer sheet, in the space headed **SPATIAL REASONING (SR) PART 2**.

On the facing page are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

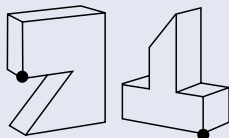
1.



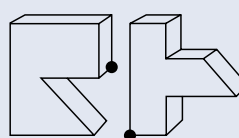
A.



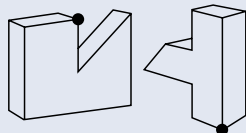
B.



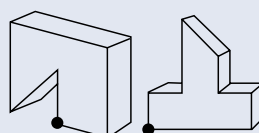
C.



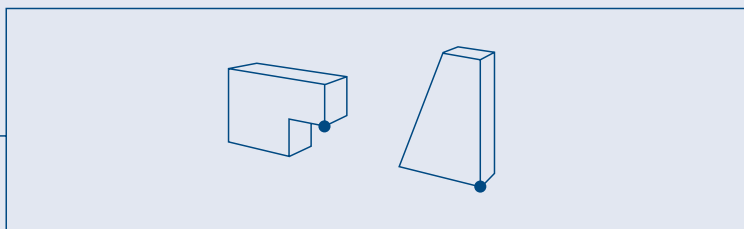
D.



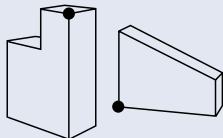
E.



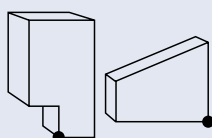
2.



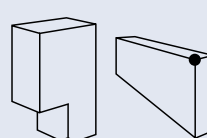
A.



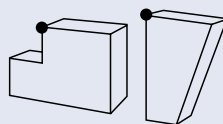
B.



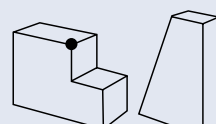
C.



D.



E.



TEST 5: ELECTRICAL COMPREHENSION

This is a test of your ability to work with electrical concepts.

In the real test you will have 15 minutes to answer 22 questions. You will need to mark your answers on the separate answer sheet, in the space headed ELECTRICAL COMPREHENSION (EC).

Below are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

1. Anode is to positive as ... is to negative

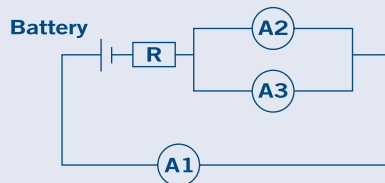
- A. Diode
- B. Electrode
- C. Terminal
- D. Cathode
- E. Triode

2. Which of the following substances is the worst electrical conductor?

- A. Tin
- B. Copper
- C. Rubber
- D. Air
- E. Water

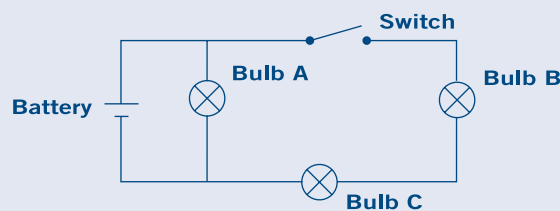
3. Ammeters measure the amount of current in a circuit. In the circuit below all the ammeters are identical. If Ammeter A1 reads 0.8A, what will Ammeter A2 read?

- A. 0.8A
- B. 0.4A
- C. 1.6A
- D. 0.2A
- E. 0.6A



4. In the circuit shown below, what will happen when the switch is open?

- A. Bulbs A, B and C will be lit
- B. Bulbs B and C will be lit
- C. Bulb A will be lit
- D. Bulbs A and B will be lit
- E. Bulb C will be lit



TEST 6: MECHANICAL COMPREHENSION

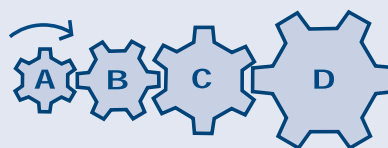
This is a test of your ability to work with mechanical concepts.

In the real test you will have 13 minutes to answer 19 questions. You will need to mark your answers on the separate answer sheet, in the space headed **MECHANICAL COMPREHENSION (MC)**.

Below are some examples of the type of questions you will be given in the real test. Mark your answers on the detachable answer sheet provided.

1. In the diagram below if A is the drive wheel turning clockwise, what directions will B, C and D travel?

- A. B clockwise, C clockwise and D clockwise
- B. B anticlockwise, C anticlockwise and D anticlockwise
- C. B anticlockwise, C clockwise and D anticlockwise
- D. B clockwise, C anticlockwise and D clockwise
- E. B anticlockwise, C clockwise and D clockwise



2. If an engineering drawing is not drawn to full size the scale of the drawing will be stated on the bottom of the page. What does 'Scale 1:4' indicate?

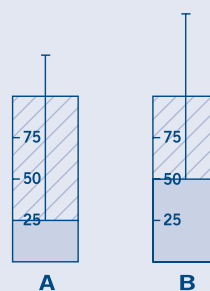
- A. 1 cm on the drawing represents 4 cm on the component
- B. 4 cm on the drawing represents 1 cm on the component
- C. 4 cm on the drawing represents 1 m on the component
- D. 1 cm on the drawing represents 4 m on the component
- E. The drawing is 4 times the size of a full-scale drawing

3. A is usually used to tighten nuts and bolts?

- A. Screwdriver
- B. Spanner
- C. Hammer
- D. Pair of pliers
- E. Drill

4. What will be the effect on the pressure in the cylinder when the piston moves from position A to position B?

- A. The pressure will decrease by a quarter
- B. The pressure will increase by 4 times its original value
- C. The pressure will remain constant
- D. The pressure will double
- E. The pressure will halve



TEST 7: MEMORY

This is a test of your ability to remember information accurately.

There are two parts to this test.

In the real test, both parts will be presented on film.

Memory Part 1

Part 1 tests your ability to remember a sequence of letters.

On screen you will be shown a sequence of between six and eight letters. The letters will be shown one at a time. You have to remember the order in which they appear. You will then be shown two letters from the sequence. You have to decide how many letters were shown between them in the original sequence.

Note that you may not be shown the two letters in the same order as they appeared in the original sequence.

For example, if the sequence shown is:



The question could be either:

How many letters were shown between Z and Q?

Or:

How many letters were shown between Q and Z?

You will be given four options (labelled A–D) and you have to decide which is the correct answer. For example:

A.	B.	C.	D.
1	2	3	4

The correct answer is **B** because there are **two** letters between Q and Z.

In the real test there are 10 questions: they will be presented on film. You will need to mark your answers on the separate answer sheet, in the space headed **MEMORY (MM) PART 1**.

On the facing page are examples of the type of questions you will be given in the real test. Remember, in the real test the sequence of letters will appear on film and you will only see one letter at a time. Mark your answers on the detachable answer sheet provided.

Question 1

Study the following sequence of letters and then answer the question below.
Remember, in the real test the letters will be shown one at a time.

If the sequence of letters is:

F Y W H N G

How many letters were shown between Y and G?

- A. 1
- B. 2
- C. 3
- D. 4

Question 2

Study the following sequence of letters and then answer the question below.
Remember, in the real test the letters will be shown one at a time.

If the sequence of letters is:

X M D R J U A

How many letters were shown between R and X?

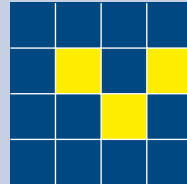
- A. 1
- B. 2
- C. 3
- D. 4

Memory Part 2

Part 2 tests your ability to remember patterns.

You will be shown a sequence of either two or three grids. The grids will be shown one at a time.

Each grid will have a number of yellow squares, like the one below.



You have to remember where the yellow squares are in each grid. Then you have to imagine what the grid would look like if all the grids were 'added together'.

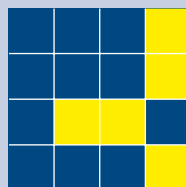
You will then be shown four possible answers (labelled A–D). You have to decide which one represents the 'added' grid.

For example, if the sequence of grids shown was:

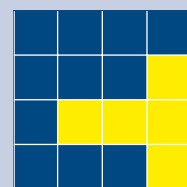


Which grid (labelled A–D) represents the 'added' grid?

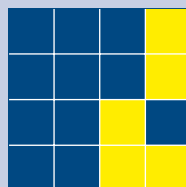
A.



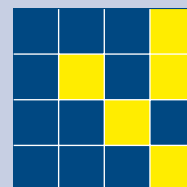
B.



C.



D.



The correct answer is **A**.

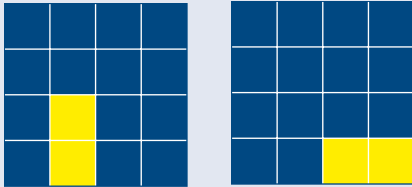
In the real test there are 10 questions. They will be presented on film. You will need to mark your answers on the separate answer sheet, in the space headed MEMORY (MM) PART 2.

On the facing page are examples of the type of questions you will be given in the real test. Remember, in the real test the grids will appear one after the other on film. Mark your answers on the detachable answer sheet provided.

Question 1

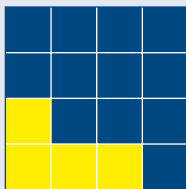
Study the following sequence of grids and then answer the question. Remember, in the real test the grids will be shown one at a time.

If the sequence of grids shown was:

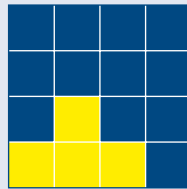


Which grid (labelled A–D) represents the ‘added’ grid?

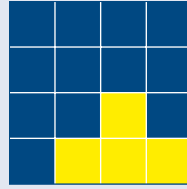
A.



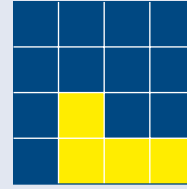
B.



C.

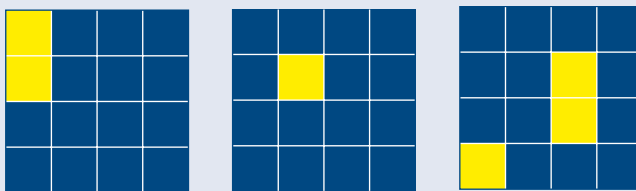


D.

**Question 2**

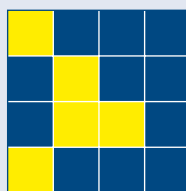
Study the following sequence of grids and then answer the question. Remember, in the real test the grids will be shown one at a time.

If the sequence of grids shown was:

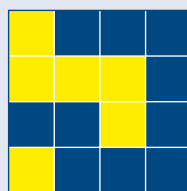


Which grid (labelled A–D) represents the ‘added’ grid?

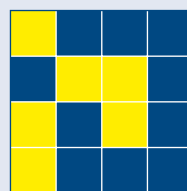
A.



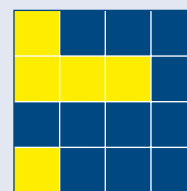
B.



C.



D.



AST PRACTICE QUESTIONS – CORRECT ANSWERS

Surname (Block Capitals)	Initials	Age	Date	Place of Testing	Candidate URN

**VERBAL
REASONING (VR)**

Practice Question 1

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E

Practice Question 2

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E

Practice Question 3

1.	A	B	C	D	E
2.	A	B	C	D	E

Practice Question 4

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score

**NUMERICAL
REASONING (NR)**

PART 1

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E
5.	A	B	C	D	E

**NUMERICAL
REASONING (NR)**

PART 2

Practice Question 1

1.	A	B	C	D	E
2.	A	B	C	D	E

Practice Question 2

1.	A	B	C	D	E
2.	A	B	C	D	E

Practice Question 3

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E
5.	A	B	C	D	E

Raw Score

**WORK RATE
(WR)**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score

**SPATIAL
REASONING (SR)**

PART 1

1.	A	B	C	D	E
2.	A	B	C	D	E

**SPATIAL
REASONING (SR)**

PART 2

1.	A	B	C	D	E
2.	A	B	C	D	E

Raw Score

**ELECTRICAL
COMPREHENSION
(EC)**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score

**MECHANICAL
COMPREHENSION
(MC)**

1.	A	B	C	D	E
2.	A	B	C	D	E
3.	A	B	C	D	E
4.	A	B	C	D	E

Raw Score

MEMORY (MM)**PART 1**

1.	A	B	C	D
2.	A	B	C	D

Raw Score

MEMORY (MM)**PART 2**

1.	A	B	C	D
2.	A	B	C	D

Raw Score

