Non-Verbal Reasoning - A Complete Guide

11 Plus - Non Verbal Reasoning

Non Verbal Reasoning (NVR) is used to test a child's ability to logically work out problems which are shown pictorially as sequences of shapes.

There are a number of different NVR question types The table below shows these types and how they are typically described in a question or section:

| Type	Description
1 **'Like Shapes'**	Look at the two shapes separated by an arrow on the left. The first shape is related to the second one in some way. To the right of these shapes, there is a third shape followed by an arrow and five other shapes. One of these five shapes is related to the shape before the arrow in the same way as the two shapes on the left are related to each other. Choose which one.
2 **'Odd One Out'**	Choose which one of the pictures is most unlike the other four.
3 **'Rotations'**	Only one of the five figures to the right of the dotted line can be rotated to make the figure on the left. The others are mirror images. Choose which figure can be rotated to make the figure on the left
4 **'Code Breaker'**	To answer these questions, you need to work out a code. You are given three or four boxes on the left followed by a separate box on the right of the dividing line. Each box on the left has a pair of letters in it which are a code for the shape or shapes in that box. You need to work out the code that applies to the shapes on the left and then choose which pair of letters should be given to the shape or shapes in the box on the right.
5 **'Missing Sequence'**	The five squares on the left contain shapes arranged in order to form a sequence. One of the squares is missing. Choose which one of the five squares on the right should take the place of the empty square.
6 **Missing Square**	Each question has a group of either four or nine squares on the left. One of the squares has been left blank. Choose one of the five options on the right to best complete the group.
7 **'Most Like'**	The two figures on the left are alike in some way. Choose which one of the five figures to the right of these is most like the first two figures.
8 **'Nets'**	Which one of the five 2D nets shown on the right can be folded to make the 3D cube on the left?

- The figures and diagrams consist of <u>lines, shapes and shading/patterns.</u>
- The shapes can shift in various ways. (<u>rotate, reflect and transpose</u>).
- The shapes can change in many ways. (<u>increase/decrease, add and copy</u>).
- They can consist of a <u>movement, size or number sequence</u>.

Below is a guide showing the figures and diagrams, with shapes and shifts explained more clearly:

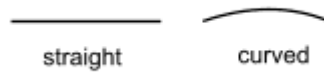# COMPONENTS 1

LINES - various line shapes and line types are used:

Line types:
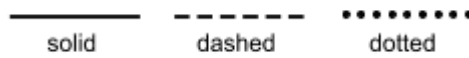
Line thickness:

Line shapes:

Examples of other line shapes:

SHAPES - Non-Verbal Reasoning shapes can be thought of as two different groups:
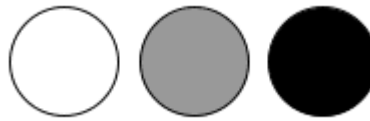
Standard (regular) shapes:

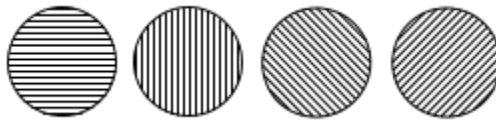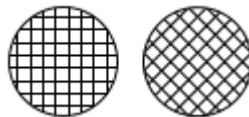Non-Standard (irregular) shapes:

COMPONENTS 2

SHADING & PATTERNS - Shapes can be filled in a variety of ways:

Solid shading:
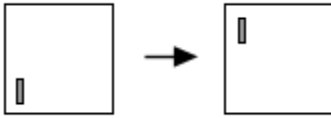
Line shading:

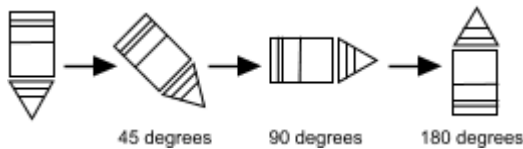Lattice patterns:

Irregular patterns:

Spotted patterns:

SHIFTS

In Non-Verbal Reasoning questions, shapes can shift in various ways. They can *transpose, rotate, reflect* or *overlay.*

TRANSPOSE
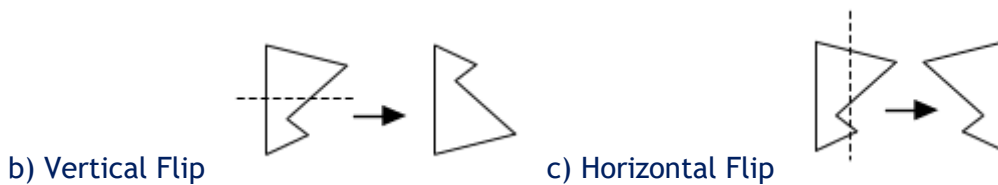
Shapes can move vertically, horizontally or diagonally

ROTATE

Shapes can move Clockwise or Anti-Clockwise

REFLECT

a) Mirror Reflection
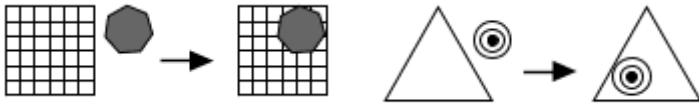
Shapes can be mirrored using a line of Reflection (the shape will reflect and move from its original position)

b) Vertical Flip   c) Horizontal Flip

The line of Reflection runs through the shape (the shape will invert and stay in its original position)
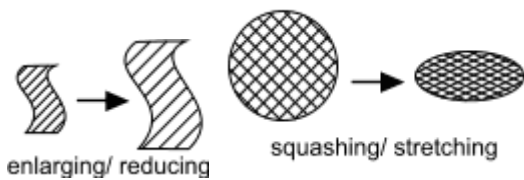

OVERLAY

Shapes can overlap each other .....or merge together

MANIPULATIONS

Shapes can be changed and manipulated in a variety of ways.

INCREASING / DECREASING - A shape can change in size or transform by squashing and stretching

enlarging/ reducing   squashing/ stretching

ADDITION - One or more new shapes can change the original shape
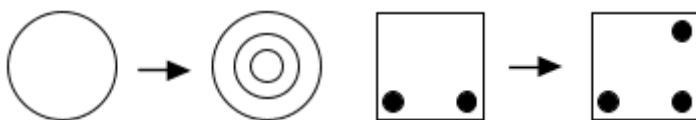
1. The original shape can be copied once or more often
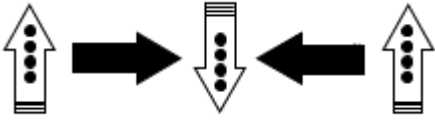2. The number of shapes can change in regular intervals

DEDUCTION - Parts can be removed to create a new shape

or

SEQUENCES

Shapes can make a sequence (pattern) by either repeating the same movement (or change to the components) or by increasing/decreasing in size or numbers in a regular interval

MOVEMENT SEQUENCE

Repetitive movement through rotation - 90 degrees clockwise. The shading also alternates in the above example.

SIZE AND NUMBER SEQUENCE

growing/ reducing in size   increasing/ decreasing in numbers
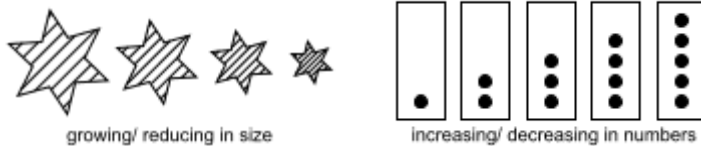
CHANGES

Be aware that more than one change can happen in Non-Verbal Reasoning questions. In easier questions you might just have one or two changes that happen to shapes, however questions with as many as 5 different changes are more complex to solve and more practice is needed to be able to identify these changes quickly.

Non-Verbal Reasoning

Strategies For Each Question Type

In Summary:

Non-verbal reasoning is problem-solving based around pictures, diagrams and shapes, rather than words. Unlike verbal reasoning, it's not as reliant on the English language; rather, the questions use drawings, shapes or codes, and your child will need to work out sequences, similarities and differences between these figures or break the code.

Non-verbal reasoning tests are designed to see how your child can use critical thinking and logic to solve problems

- Timed sections

- Read through example

- Complete practise questions (watch out for correct place on answer sheet)

- Work through section

- Time calls given at half way through and 1 minute to go (time to start guessing)

Instructions

In each of the rows below there are five figures. Find one figure in each row that is **most unlike** the other four and **mark its letter on the answer sheet.**
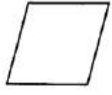
Example

a	b	c	d	e

Answer: b

Example

a	b	c	d	e

Practise
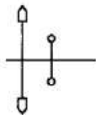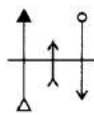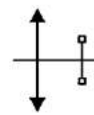
a	b	c	d	e

Top tips!

- **Most** unlike – may be two that are very similar
- Cross out ones that don't fit first

Instructions

To answer these questions you have to work out a code. In the boxes on the left are shapes and the code letters that go with them. The top letters mean something different to the bottom ones. You must decide how the letters go with the shapes. Then find the correct code for the **test shape** from the set of five codes on the right. Mark its letter on your answer sheet.

Example 1

TEST SHAPE

Both squares have a Y at the top but the circle has an X, so the top code must be for shape. Both white shapes have an S at the bottom, but the shaded shape has a T, so the bottom code must be for shading. The test shape is a shaded circle so its code letters must be X for circle and T for shading, and *b* has been marked on the answer sheet.

Answer: b

Example

Practise

Top tips!

- Choose one code at a time
- What have the shapes with the same code got in common?
- Repeat for second code
- Cross out ones that don't fit

Instructions

On the left of each of the rows below there are two figures that are alike. On the right there are five more figures: find which of these is **most like** the two figures on the left, and mark its letter on your answer sheet.
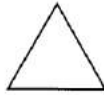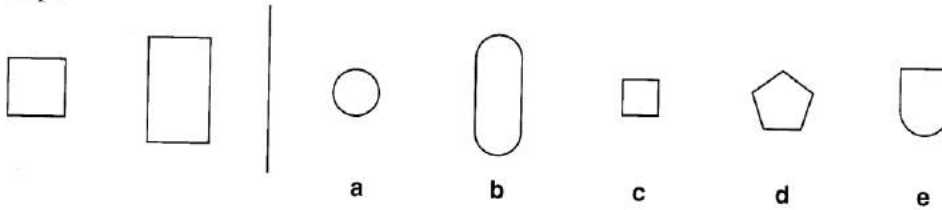
Example

a   b   c   d   e

Answer: c

Example

a   b   c   d   e

Practise

a   b   c   d   e
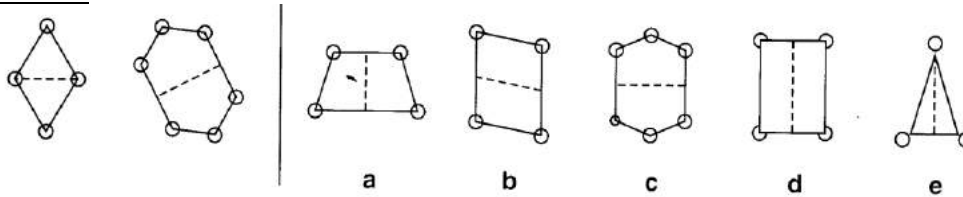
Top tips!

- **Most** like, may not exactly fit the same rule
- Look really carefully at the shading, sizes etc for red herrings
- If struggling, cross out ones that don't fit and guess between the ones that are left

Instructions

To answer these questions you have to work out a code. On the left are some shapes and the codes that go with them. You must decide how the code letters go with the shapes. Then find the correct code for the **test shape** from the set of five codes on the right. Mark its letter on your answer sheet.

Look at **Example 1**:

		TEST SHAPE					
△	F						
▲	G	▲	H	G	J	F	K
△	F		a	b	c	d	e

Answer: b

Now decide what the code letters mean. F must mean a white triangle and G must mean a black triangle. So the test shape must have a G code and b has been marked on the answer sheet.

Example

	V S						
	W T		X S	X T	W T	W S	V T
	X S		a	b	c	d	e

Practise

	X L R						
	Y M S		YNS	YMR	XMS	XNR	XMR
	X N R		a	b	c	d	e
	X O S						

Top tips!

- Choose one code at a time
- What have the shapes with the same code got in common?
- Repeat for second code
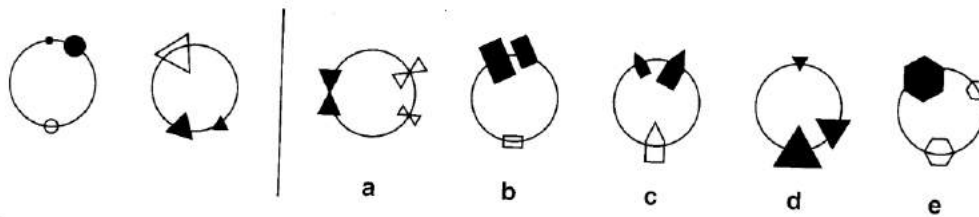- Cross out ones that don't fit

- Instructions

To the left in each of the lines below there are five squares arranged in order. One of these squares has been left empty. Find which one of the five squares on the right should **take the place** of the empty square and mark its letter on your answer sheet.

Example

a   b   c   d   e

Answer: b

Example

a   b   c   d   e
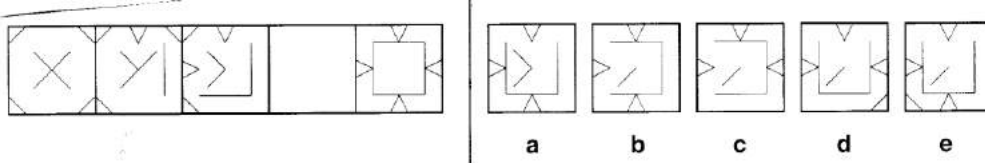
Practise

a   b   c   d   e

Top tips!

- Often involves counting lines, shapes etc
- Look out for patterns with shading and direction
- If the missing box is in the middle look at the boxes before **and** after

Instructions

In the big square on the left of each line below one of the small squares has been left empty. One of the five figures on the right should fill the empty square. Find this figure and mark its letter on the answer sheet.

Example

a   b   c   d   e

Answer: d

Example

a   b   c   d   e
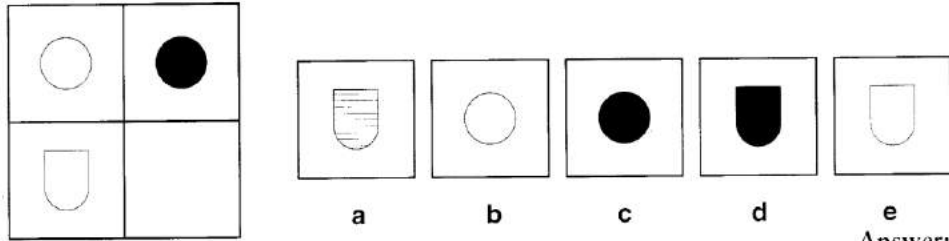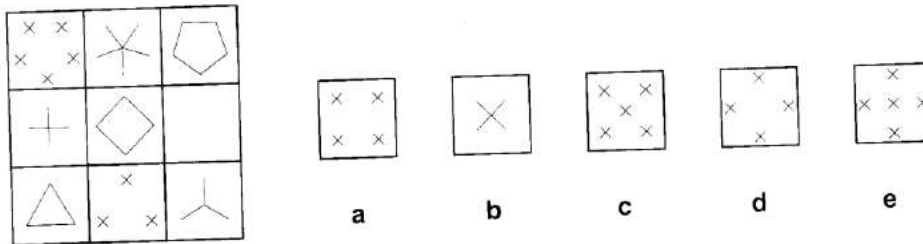
Practise

a   b   c   d   e
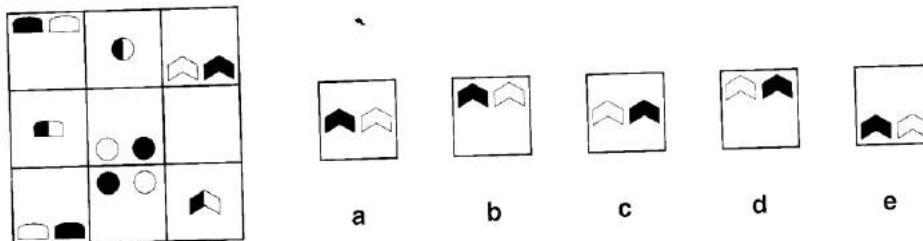
Top tips!

- Look for changes in number, position in the square, direction, shading
- Look at the grid vertically, horizontally, diagonally

Instructions

On the left of each of the rows below are two shapes with an arrow between them. Decide how the second is related to the first. After these there is a third shape, then an arrow and then five more shapes. Decide which of the five shapes goes with the third one to make a pair like the two on the left. Mark its letter on your answer sheet.

Example

a   b   c   d   e

Answer: b

Example

a   b   c   d   e
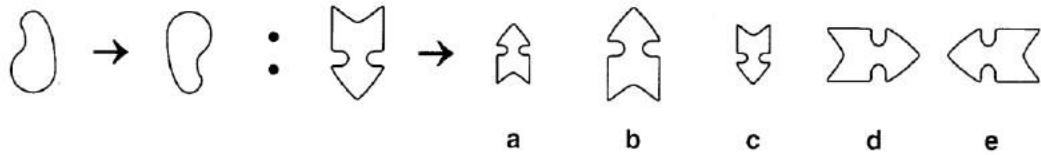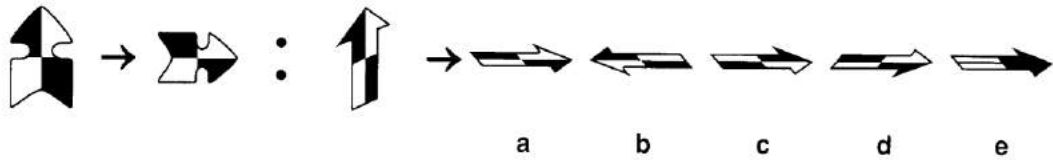
Practise

a   b   c   d   e
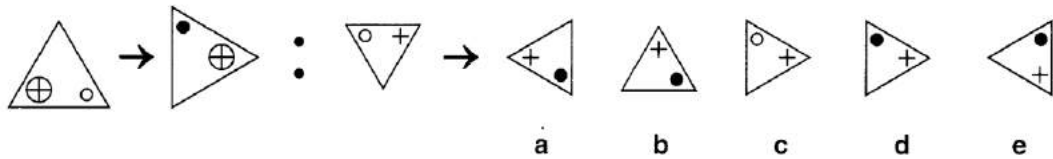
Top tips!

- Look for direction, position, shading
- identify how it has changed and apply the same rule

Verbal Reasoning - A Complete Guide

11 Plus Verbal Reasoning

Verbal Reasoning tests a child's ability to solve problems by using logic to answer a variety of different question types. Verbal Reasoning requires very good maths skills, a good understanding of grammar and a wide vocabulary. The tests are designed to assess a child's potential, not just their intelligence.

The best way to improve vocabulary is to read a lot - preferably out loud to an adult. Pay particular attention to unknown words and ensure that your child understands the meaning of all the words. Learning words in context is the best way to ensure your chold remembers them in future, however there are some other strategies that can help to improve vocabulary.

Making a list of unknown words and have them look them up in a good children's dictionary/thesaurus. Ones with visual aids, at this stage, can be useful as they tap into the multiple senses, making it easier to store and recall.

Pay particular attention to words that have more than one meaning - such as 'contract' and 'suspend'. At the end of the guide in the appendix, you will find a list of important words for Verbal Reasoning. Although this is not exhaustive, it is a good resource to get your child on track with words likely to feature in exams.

Because Verbal Reasoning is not taught in school, it is important that your child becomes familiar with this type of question. They must be able to identify the question types, understand the question and have a strategy for answering them quickly. The questions involve letters, words, codes and sequences and require the child to work quickly and accurately to solve problems described in words and text.

There are typically 21 different types of Verbal Reasoning question types -determined by the GL Assessment group. The table below shows these types and how they are typically described in a question or section:

| Type	Description
TYPE-A : **Insert A Letter**	In the following question, find the one letter that will complete the word in front of the brackets and begin the word after the brackets. The same letter must fit into both sets of brackets.
TYPE-B : **Find the odd word**	In the following questions, find the two words that are different from the other three.
TYPE-C : **Alphabet Code**	In the following question, words have been written in code. The first word and it's code has been given to you. You must find the second word or code.
TYPE-D : **Synonyms**	In the following questions, find two words, one from each group that are most similar in meaning.
TYPE-E : **Hidden word in sentence**	In the following question, you are given a sentence in which a four letter word is hidden at the end of one word and the beginning of the next word. Find the pair of words that contain a real four letter word and write the four letter word in the answer.
TYPE-F : **Find the word**	In the following question, one word, which is in capitals, has had three OR four consecutive letters taken out. These 3 or 4 letters will make one correctly spelt word without changing the order. Find the appropriate 3 or 4 letter word.

TYPE-G : **Calculating with Letters**	For the following question, numbers have been allocated to letters. Work out the answer to the calculation and mark the appropriate letter on the answer sheet or in the space provided.
TYPE-H : **Opposite Meaning**	In the following questions, find two words, one from each group that are most opposite in meaning.
TYPE-I : **Complete the calculation**	In the following questions, find the number that best completes the calculation.
TYPE-J : **Rearrange to make two new words**	In the following question, you are given two words. Choose one letter that can be moved from the word on the left to the word on the right, making two new words. You cannot rearrange any letters, but the letter that you move can fit anywhere in the second word.
TYPE-K : **Number relationship**	In the following question, the numbers in the last group must be related to each other in the same way as the numbers in previous group(s). Find the missing number.
TYPE-L : **Complete alphabet series**	In the following question, find the letters that best complete the series.
TYPE-M : **Complete the Sentence**	In the following questions you must chose two words, one from each group in brackets that best complete the sentence.
TYPE-N : **Word Codes**	You have been given four words and three codes. The codes are not necessarily written in the same order as the words and one code is missing. Once you have figured out which code belongs to which word, answer the question below.
TYPE-O : **Complete word pairs**	In the following question there are three pairs of words. You must complete the third pair in the same way as the first two pairs.
TYPE-P : **Number series**	For the following question, find the number that best completes the series.
TYPE-Q : **Form new word**	In the following question, find the two words, one from each group, that together make a new, real word. The word from the first group always comes first.
TYPE-R : **Create word**	In each of the following question, the word in brackets in the second group must be made from the words outside the brackets in the same way as the word in brackets in the first group is made from the words outside the brackets in the first group. Find the missing word.
TYPE-S : **Similar Meaning**	In the question below there are two pairs of words. Choose the word from the 5 possible answers which goes equally well with both the pairs.
TYPE-U : **Letter Relationship**	In the question below, the pairs of letters are related in some way. Write the letters which complete the second relationship. The alphabet has been provided to assist you.
TYPE-Z : **Comprehension**	Generally includes Logic questions where the student has to read the question and comprehend the logic before answering.

IPS stands for Internet Primary School, who were one of the first publishers to categorise the question styles for Verbal Reasoning using a lettering system (type L,B,N etc). Sometimes you will find the types identified by a number and labelled differently – below we have included a comparison table to make this clearer:

QUESTION TYPE	IPS
01 – INSERT A LETTER	A
02 – RELATED WORDS	B
03 – WORD-LETTER CODES	C
04 – CLOSEST MEANING	D
05 – HIDDEN WORD	E
06 – MISSING WORD	F
07 – LETTERS FOR NUMBERS	G
08 – MOVE A LETTER	J
09 – LETTER SERIES	L
10 – WORD CONNECTIONS	M
11 – NUMBER SERIES	P
12 – COMPOUND WORDS	Q
13 – MAKE A WORD	R
14 – LETTER CONNECTIONS	U
15 – READING INFORMATION	Z
16 – OPPOSITE MEANING	H
17 – COMPLETE THE SUM	I
18 – RELATED NUMBERS	K
19 – WORD-NUMBER CODES	N
20 – COMPLETE THE WORD	O
21 – SAME MEANING	S

What You Can Do

When tutoring your child at home it may help to link question types together rather than to go through each of the 21 question types in order. This is because some question types can be worked out by using similar methods & techniques. The following list takes into account these similarities, grouping the types of question into families which should be studied together:

TYPE	NUMBERS TYPES	IPS LETTER TYPES
CODES	Types 3, 9 and 14	Types C, L and U
	Type 19	Type N
MAKING WORDS	Types 1 and 8	Types A and J
	Types 5, 6 and 12	Types E, F and Q
	Types 13 and 20	Types R and O
WORD MEANING	Types 2 and 10	Types B and M
	Types 4, 16 and 21	Types D, H and S
MATHS	Types 7 and 17	Types G and I
	Types 11 and 18	Types P and K
READING INFORMATION	Type 15	Type Z

Verbal Reasoning
Strategies For Each Question Type

In Summary:

Verbal reasoning is understanding and reasoning using concepts framed in words. It aims at evaluating ability to think constructively, rather than at simple fluency or vocabulary recognition.

- Timed but not broken into sections

- Time calls at half way through and a few minutes from the end

- You **need to be able to pace** yourselves!!!

- Order of questions can slow you down so don't get stuck - keep moving and come back later to tricky questions

Verbal Reasoning Tests - Student FAQs

What will I be tested on?

> The questions are tests of ability, not what you have learned elsewhere in school. They require skills that are needed to succeed in secondary education, including your ability to:
>
> - understand and analyse tasks
> - work quickly and carefully
> - apply attention to detail
> - solve problems
> - discover and apply rules
> - repeat a particular task at increasing levels of difficulty

How long does the test last?

> The test will normally be 50 minutes long. But it can be 60 minutes or even 45.
>
> The test includes examples of each type of question as part of the timed assessment. Remember, there will be times when you need to sit and listen to instructions, to make sure that your answer sheet has been handed in or to wait for other pupils in the room to finish.

What kind of questions will be asked?

> The verbal reasoning test asks you questions involving the manipulation of words, letters and numbers. In some cases you are dealing with a relationship between symbols (numbers, letters) and in others the relationship between the meanings of words.

The answer sheet - sometimes you will answer in a special booklet. If that is the case:

Only the answers you fill in on the answer sheet will be marked . **The sheet is read by a special scanning machine so you need to mark it in a particular way** in order for your responses to be clear. You can get an adult to check that you are **doing it correctly.**

The top of the answer sheet will show the name of the test and some information about you, including your name and date of birth.

- Check that your name and date of birth are correct. Tell an invigilator if you think there is a mistake

- If the boxes are blank, you will need to fill them out. Ask an invigilator to help.

The rest of the answer sheet contains spaces for you to submit your answers. Each question has its own box containing the answer options. The question number is in the top left hand corner. For example, question 1 might look like this:

- You answer each question by putting a thin horizontal line in the rectangle next to your answer, like this:

- If you make a mistake, rub it out as completely as you can and put in your new answer.
- You must only use a pencil to mark the answer sheet.
- All the questions you do will be multiple choice.

That means that you are given a range of answers to choose from. The answer options will be printed in the test booklet but you must submit your responses on the answer sheet.

- Most verbal reasoning questions require only one answer but some require more than one answer. Read the instructions for each questions carefully. Here is an example of a question with two answers:

EXAMPLE	
black	☐
mouse	☐
red	☐
green	☐
hut	☐

- You may need to fill in answers on both sides of the answer sheet.
- You must make sure that you mark your answers in the right place on the answer sheet. Mark your answer in the box that has the same number as the test question.
- You must make sure that all your answers are recorded on the answer sheet before the end of the test.

The test booklet:

The test contains a number of different verbal reasoning question types. You need to try to answer all of the questions.

Instructions are given before the start of each section along with an example question.

You can do rough work in the booklet if you need to, or on a separate piece of paper. But remember: the test booklet won't be marked. All your answers must go on the answer sheet.

Instructions

In these questions, one letter can be moved from the first word to the second word, to make two new words. The letters must **not** otherwise be rearranged and both new words must make sense. Find the letter that moves and mark it on the answer sheet.

Example

pound   or

Answer

u
(The two new words are **pond** and **our.**)

Example

QUESTION 5

grain   fir

5
g ☐
r ☐
a ☐
i ☐
n ☐

Practise

QUESTION 7

their   sake

7
t ☐
h ☐
e ☐
i ☐
r ☐

Top tips!

- Take a letter out of the first word one by one (the order of the first word doesn't change), does the word that is left still make sense?

- If it does, try putting it into the second word

- Try it out on scrap paper

- Look out for silent letters, sound changes

In these questions letters stand for numbers. Work out the answer to each sum, then find its letter and mark it on the answer sheet.

Example

If A = 1, B = 2, C = 3, D = 6, E = 8, what is the answer to this sum written as a letter?

A + B + C = (?)

Answer

D

Example

QUESTION 12

If A = 1, B = 2, C = 4, D = 8, E = 12, what is the answer to this sum written as a letter?

E − D − B = (?)

Practise

QUESTION 13

If A = 10, B = 20, C = 30, D = 40, E = 50, what is the answer to this sum written as a letter?

D ÷ B × A = (?)

Top tips!

- Remember that the answer is changed back into a letter

- Remember that the value of a,b,c,d,e changes in every question

- Use scrap paper for working out

- Write the values of the letters above

Read the following information, then find the correct answer to the question and mark it on the answer sheet.

Example

QUESTION **14**

Katie, Adam, Lucy, Ranjit and Richard all wear school uniform.

Katie, Adam and Ranjit wear ties.

Ranjit wears a blazer.

Richard hates the uniform but wears a blazer and tie.

Lucy and Katie wear hats.

Adam wears a blazer but no hat.

Who wears the least items of uniform?

14

Katie ☐
Adam ☐
Lucy ☐
Ranjit ☐
Richard ☐

Practise

QUESTION **22**

David, Gemma, Jane, John and Maria are 12, 11, 10, 10 and 9 years old, but not in that order.
David is 2 years younger than John.
Gemma is 2 years younger than Jane.
Maria is older than David.
Who are the twins?

A   David and Maria
B   John and Jane
C   Gemma and David
D   Maria and Gemma
E   John and Maria

22

A ☐
B ☐
C ☐
D ☐
E ☐

Top tips!

- This question is designed to take a long time but still only worth one mark
- Draw out a chart
- Look out for names with the same letter
- Guess and move on if the answer doesn't show itself quickly!

Instructions

In these sentences, a word of **four letters** is hidden at the **end** of one word and the **beginning** of the next word. Find the pair of words that contains the hidden word and mark it on the answer sheet.

Example

The film ended happily after all.

Answer

film ended (The hidden word is **mend**.)

___

Example

QUESTION **19**

The restaurant was famous for seafood.

19	
The restaurant	☐
restaurant was	☐
was famous	☐
famous for	☐
for seafood.	☐

___

Practise

QUESTION **21**

Trains were delayed through industrial action.

21	
Trains were	☐
were delayed	☐
delayed through	☐
through industrial	☐
industrial action.	☐

___

Top tips!

- Look at the answer sheet rather then the question booklet

- Rip two pieces of scrap paper to cover up the letters

- Watch out for silent letters, changes in sound etc

Instructions

In these questions find the **two** words, **one** from each group, that will complete the sentence in the best way. Mark **both** words on the answer sheet.

Example

Big is to
(small   orange   colour)
as wide is to
(apple'   red   narrow)

Answer

small narrow

Example

QUESTION 25

Belt is to
(leather   buckle   laces)
as shirt is to
(collar   trousers   waistcoat)

25
leather ☐   collar ☐
buckle ☐   trousers ☐
laces ☐   waistcoat ☐

Practise

QUESTION 26

Jump is to
(high   walk   up)
as crouch is to
(down   move   hunch)

26
high ☐   down ☐
walk ☐   move ☐
up ☐   hunch ☐

Top tips!

- Use one word from each column

- Often opposites or synonyms

- Look for relationships between the words

- Some will be very close, guess and move on!

Instructions

In these questions find **two words**, **one** from each group, that are **closest in meaning**. Mark **both** words on the answer sheet.

Example

(office   shop   start)
(work   begin   end)

Answer

start begin

Example

QUESTION 34

(flight   customer   collect)
(client   tourist   expensive)

34			
flight	☐	client	☐
customer	☐	tourist	☐
collect	☐	expensive	☐

Practise

QUESTION 35

(daydream   night   awake)
(tired   asleep   alert)

35			
daydream	☐	tired	☐
night	☐	asleep	☐
awake	☐	alert	☐

Top tips!

- Two boxes shaded, one from each column

- Looking for closest – won't be an exact match

- Often 2 that are similar, guess and move on!

Instructions

In these questions three of the five words are related in some way. Find the **two** words that do not go with these three and mark them **both** on the answer sheet.

Example

black   mouse   red   green   hut

Answer

mouse   hut

Example

QUESTION 37

carpet   curtain   blanket   pillow   sheet

37
- carpet ▭
- curtain ▭
- blanket ▭
- pillow ▭
- sheet ▭

Practise

QUESTION 40

spoon   rake   fork   wheel   spade

40
- spoon ▭
- rake ▭
- fork ▭
- wheel ▭
- spade ▭

Top tips!

- Two words need to be marked

- Watch out for words with double meanings

In these sentences, the word in capitals has had three letters next to each other taken out. These three letters will make one correctly spelt word without changing their order. The sentence that you make must make sense. Mark the correct three-letter word on the answer sheet.

Example

The cat scratched him with his CS.

Answer

LAW (The word in capitals is **CLAWS.**)

Example

QUESTION **47**

Please play the CASTE.

47	
KEY	☐
CAR	☐
PIN	☐
SET	☐
ROD	☐

Practise

QUESTION **48**

The mist in the valley looked like SM rising.

48	
PAL	☐
OAK	☐
TEA	☐
ALE	☐
TAR	☐

Top tips!

- This can take children a lot of time and slow them down

- Use scrap paper to try out different combinations

- Look out for tricky spellings e.g. double letter, changes in sound etc

ABCDEFGHIJKLMNOPQRSTUVWXYZ

The alphabet is here to help you with these
questions. Find the next letters in the series
and mark the correct answer on the answer sheet.

Example

CQ   DQ   EP   FP   (?)

Answer

GO

Example

QUESTION **55**

QU   RT   SW   TV   UY   (?)

55

WX ▭
WY ▭
VW ▭
VX ▭
WV ▭

Practise

QUESTION **56**

ZW   WU   UR   RP   PM   (?)

56

MK ▭
PR ▭
MJ ▭
PS ▭
ML ▭

Top tips!

- Can be very tricky!

- Write on top of the alphabet strip

- Draw the sequence jumps on top

- Really struggling – guess and move on!

In these questions find **two words**, **one** from each group that together make **one** correctly spelt word, without changing the order of the letters. The word from the first group always comes first. Mark **both** words on the answer sheet.

Example

(out   by   open)
(bite   like   side)

Answer

out   side (The word is outside.)

Example

QUESTION *58*

(ape   have   hope)
(like   ping   less)

Practise

QUESTION *59*

(ball   table   data)
(bat   base   basket)

Top tips!

- Must have one word from each column

- Has to be spelled correctly

- Word in the second column can't come first in the new word

In these questions, the three words in the second group should go together in the same way as the three in the first group. Find the word that is missing in the second group and mark it on the answer sheet.

Example

(man [mat] tip)
(bug [?] dew)

Answer

bud

Example

QUESTION 67

(grown [sewn] dose)
(bloat [?] globe)

67
belt ☐
beat ☐
blob ☐
lobe ☐
boat ☐

Practise

QUESTION 68

(tour [tear] reap)
(lead [?] rent)

68
rend ☐
lend ☐
lent ☐
rate ☐
land ☐

Top tips!

- Number the letters

- Look at the example for the rule

In each question, find the number that continues the series in the most sensible way and mark it on the answer sheet.

Example

2   4   6   8   (?)

Answer

10

Example

QUESTION **76**

13   12   17   15   21   18   (?)

76	
17	☐
21	☐
22	☐
24	☐
25	☐

Practise

QUESTION **77**

2   4   12   48   (?)

77	
234	☐
240	☐
192	☐
196	☐
220	☐

Top tips!

- Draw the sequence jumps

- If the sequence increases then decreases, look at every other number

- Use scrap paper for working out

Instructions

ABCDEFGHIJKLMNOPQRSTUVWXYZ

The alphabet is here to help you with these questions. Find the letters that will complete the sentence in the best way and mark the correct answer on the answer sheet.

Example

AB is to CD as PQ is to (?)

Answer

RS

Example

QUESTION 79

CX is to DW as HS is to (?)

79
IS ☐
IT ☐
GT ☐
IR ☐
JQ ☐

Practise

QUESTION 80

BE is to GJ as CF is to (?)

80
HK ☐
GJ ☐
HL ☐
FI ☐
GD ☐

Top tips!

- Can take a long time

- Work out rule for relationship between the letters

- Draw on alphabet strip

- Look at the answer sheet to help

Instructions

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
The alphabet is here to help you with these questions.
You need to work out a different code for each question.
Choose the correct answer and mark it on the answer sheet.

Example

If the code for **FOOT** is **ENNS**, what is the code for **TOE**?

Answer

SND

Example

QUESTION 80

If the code for **CALF** is **FDOI**, what is the code for **LAMB**?

80
NCPE ☐
ODPE ☐
IXJY ☐
NCOD ☐
ODQF ☐

Practise

QUESTION 81

If the code for **CRATE** is **YNWPA**, what is the code for **BOX**?

81
FSB ☐
XJS ☐
FTA ☐
YLU ☐
XKT ☐

Top tips!

- Often the last section

- Use list on answer sheet to help

In these questions. the **same** letter must fit into **both** sets of brackets. to complete the word in front of the brackets and begin the word after the brackets.
Find this letter and mark it on the answer sheet.

Example

mea [?] able
si [?] op

Answer

t (The four words are
meat. table. sit. top.)

Example

QUESTION 9

sof [?] in
bea [?] rap

9

d ▢
a ▢
t ▢
b ▢
w ▢

Practise

QUESTION 10

ra [?] ain
fo [?] oat

10

t ▢
n ▢
g ▢
s ▢
p ▢

Top tips!

* Look at the answer sheet to help

* Watch out for tricky spellings, new sounds etc.

IMPORTANT WORDS for VERBAL REASONING

OPPOSE	NOTED x2	WASTEFUL
CONTEST x2	FATIGUE	LENIENT
CONCEAL	FEEBLE	RESTRAIN
REVEAL	GRAVE x2	CONDEMN
COMMENCE	SANITARY	EMPLOY
ABANDON	HOAX	RELEASE
ABODE	IMITATE	APPROVE
ADHERE	INSOLENT	NEAT x2
AID	INTENTION	PROHIBIT
ALLY	UNITE	DILUTED
COMPREHEND	LAMENT	FORBID
AFFECTIONATE	LEAN x2	PROMPT
ACCUSE	LOFTY	AVOWED
HYGIENIC	LOYAL	QUAINT
PECULIAR	INSANE	QUEER
ASSEMBLE	SANE	RAIMENT
ASUNDER	MALADY	RAMBLE
BROAD	MARGIN	RANK
BESIEGED	MARINER	DWELLING
CAUTION	MAXIMUM	ROAM
COARSE	MINIMUM	ROBUST
CONCENTRATED x2	DUMB[not stupid]	SHRINE
CUNNING	MEAGRE	SLEEK
ARTFUL	NIMBLE	STERN
SLY	ROWDY	SCORE X4
CURB	ODOUR	OBSTINATE
CUSTOM	OMEN	STURDY
DECEIVE	SCANTY	YIELD
CALAMITY	OPTION	STUBBORN
TWILIGHT	COAX	SUSPEND x2
ELUDE	PLUME	THRUST
FOE	PROFIT	TRANQUIL
EXTENDED	ECONOMICAL	VACANT
EXTERIOR	ABSURD	CANDIDATE
INTERIOR	DISPERSE	WRETCHED
DEBATE	SACRED	QUENCH
DECLARE	LIABLE	PROVOKE
DECLINE	INFLUENCE	PROCLAIM
REFUSE x2	RESIDENCE	CONCLUSION
DETERMINE	GRATITUDE	IMPUDENT
ACCUSTOM	DESTITUTE	REVIVE
CONFERRED	DESPAIR	RESOLVE
FRAGMENT	DESPISE	EXTRACT
PROPORTION	FAMINE	MODERATE

IMPORTANT WORDS for VERBAL REASONING

TRAITOR	DEPOSIT	ESTIMATE
INSERT	RESERVE	PROMOTE
IMMERSE	CONVERT	ENTIRE
WHOLESOME	CONVEY	DISCONTENT
ENTERPRISE	AMBITION	EVIDENT
PROMINENT	OBJECTION	FREQUENT
DOMESTIC	OBJECT x2	EXPEL
HEROIC	ACQUIRE	SATIN
MAJESTIC	AQUAINTED	SOBER
TEMPERATE	OFFEND	EXCLAIM
PUNCTURE	OPPRESS	PLUNGE
ABUNDANCE	RESIGN	ATTEMPT
PUNCTUAL	BURDEN	TEMPTATION
TENANT	PRETENCE	HARBOUR x2
VACANT	TRIFLE x2	CONTRIBUTE
TYRANT	VAPOUR	CONSUME
PROSPEROUS	INVALID x2	JUSTICE
PERCEIVE	RETREAT	CONTRAST
DECEIT	COMMIT	VEIL
CONSIDERATION	SACRIFICE	LABOUR
COMBINATION	PURPOSE	OBLIGE
VENTILATION	DIGEST	COMPEL
FRAGRANT	POULTRY	SUSPECT x2
ASSISTANCE	COMRADE	GARMENT
SEIZE	ENDEAVOUR	FOUNDATION
ORDEAL	WHOLLY	ERRAND
FATAL	ORIGIN	PLEDGE
BETRAY	MORAL	DIVINE
DIVINITY	CSERMON	PERMIT x2
ADOPT	IDLE	HUMBLE
PROMPT	IDOL	VAST
MERCY	STOOP	CONFINE
INSPIRE	GRATE	CONTRACT x2
ROGUE	LINGER	CONVICT x2
EXPENSE	MERCHANT	DEVOTE
EMBRACE	CONSTANT	INHABIT
RECITE	EMPIRE	PASTURE
FERTILE	LIMIT	LEA
BARREN	PUBLIC	COMPOSITION
ENTIRELY	ADVANCE	PERIL
WEARY	HASTY	PROFIT
AVOID	FLEET x2	FLOURISH
ADMISSION	LIBERTY	CREDIT
UNION	BANISH	CULTIVATE

IMPORTANT WORDS for VERBAL REASONING

CURIOUS	PERISH	ARTICLE
ANXIOUS	CORRECT x2	DOSE
WORTHY	DISTINCT	LIMB
ABUNDANT	DISTRESS	ERECT
APPEAL	STRESS	ELECT
BRIEF	OCCUR	HALT
SUBMIT	OCCUPY	CEASE
AROUSE	HOLLOW	MERE
WITHER	COMPANY x2	SINCERE
DENY	COMPANION	LATTER
LIBERAL	GRIEVE	MODEST
FUND	RESTORE	DISPUTE
PIONEER	BOX x2	RURAL
REPENT	VESSEL	MORTAL
CONSENT	RARE	SELDOM
CONTEMPT	LODGE x2	RETAIN
CONCLUDE	DIN	OATH
CONVINCE	STOUT	PROCURE
SOW x2	SCRIPTURE	ENDURE
CONSIST	EARNEST	SECURE