## What Makes the 11 Plus Difficult?

## Introduction

#### **Grammar Schools**

Some Grammar School tests are more difficult than others, but most do not stray far from the KS2 syllabus in Maths and English. This pack will explain, for each subject, some of the types of questions children may come across and why they may find the 11 Plus difficult.

**IMPORTANT NOTE:** The point often missed by both tutors and parents is that because of time pressure, the design of these tests penalises children who do not have rock solid core skills in Maths and English. In English, the strong core skills needed include:

- Fast reading speeds.
- Experience with complex texts.
- Vocabulary that is 800-1000 words larger than average.
- Excellent spelling skills.
- Good technical English skills.

In maths, the strong core skills needed include:

- Rock solid times tables skills.
- Faultless four operations skills (addition, subtraction, multiplication, division).
- Excellent mental maths skills.
- Attention to detail.

**Keep in mind that, in maths**, if a child faces 50 questions in 50 minutes (some tests allow even less time per question), they might have to do over 200 small calculations to reach all the correct answers. This is where most children struggle; they may know what to do for each question, but their core skills are not strong enough to perform well under pressure.

**Keep in mind that in English** many children may not be able to read a complex text quickly enough to do well. Their vocabulary may be too weak to allow them to access the meaning of the text. Without strong core skills they can't succeed.

**Keep in mind that in Verbal Reasoning** most questions are vocabulary based. Of course, understanding the question type and the process for arriving at an answer is useful BUT without a strong vocabulary children cannot succeed.

**Keep in mind in Non-Verbal Reasoning** attention to detail skills are paramount. While doing some work on question types is useful, if children do not have strong attention to detail they will make far too many mistakes to succeed.

#### How Learning Street can help you

- Structured courses that help your child develop their core skills. For example:
  - Primary school courses designed for younger children. These will improve their levels considerably over a year.
  - Specialised courses for the 11 Plus. These help children in every aspect, so that they are fully prepared for the exam.
- A worksheet library for those who wish to pick and choose specific topics.
- Mock papers that prepare your child for the pressure of sitting the exam itself.

To find the right course for you, or to purchase a mock paper, visit www.learningstreet.co.uk. Use our course finder feature which will show you all the courses relevant for your chosen school.

For any further advice, please describe your query in the contact form on our website, and we will get back to you shortly.

## **Difficult English Questions**

#### **Comprehension Section**

Many comprehension questions will be relatively straightforward such as the question below:

Example 1

"The soldiers had been on the frontline for over a week and the weather had been appalling throughout."

Which word best describes the weather the soldiers had encountered on the frontline?

average	divine	abysmal	pleasant	awesome
Α	В	С	D	E

In Independent School tests, CSSE tests, FSCE tests and some stage 2 Grammar school tests, additional complexity is added by making questions require a written answer. For example:

Example 2

"Poonam came home absolutely exhausted. She had put so much effort into the lead up to the big event that she couldn't really enjoy it once it was here. She just found it draining.

It would be days after before she could look back with some satisfaction. Especially once her certificate came through – the work had paid off and she was an accredited swimming coach."

What was the "big event" that Poonam had attended? Use evidence from the passage to support your answer.

\_\_\_\_\_\_

The most difficult questions tend to be the written questions that ask for your own view, or to infer an answer from the text. Here is an example of this type of question:

The vast majority of grammar school tests consist of multiple-choice questions. These can still be very difficult because each answer may be correct to a certain degree, but only one will be totally correct. Under pressure, these are difficult for children to deal with. See Example 4:

#### Example 4

"It was while the curate had sat and talked so wildly to me under the hedge in the flat meadows near Halliford, and while my brother was watching the fugitives stream over Westminster Bridge, that the Martians had resumed the offensive. So far as one can ascertain from the conflicting accounts that have been put forth, the majority of them remained busied with preparations in the Horsell pit until nine that night, hurrying on some operation that disengaged huge volumes of green smoke.

But three certainly came out about eight o'clock, and, advancing slowly and cautiously, made their way through Byfleet and Pyrford towards Ripley and Weybridge, and so came in sight of the expectant batteries against the setting sun. These Martians did not advance in a body, but in a line, each perhaps a mile and a half from his nearest fellow. They communicated with one another by means of siren-like howls, running up and down the scale from one note to another."

Which of these statements is entirely true?

- A. All of the Martians were working in the Horsell pit that night.
- B. The humans let off masses of green smoke to highlight here the Martians were.
- C. The Martians communicated with each other through sounds.
- D. The Martians came forward in one mass.
- E. The Martians communicated with each other in a strange dialect of words.

#### Spelling, Punctuation, and Grammer Section

These questions don't tend to cause problems for children with good core skills, but here are some examples of the more difficult questions (remember, in grammar school tests, most questions will be easier than this):

Example 6

Choose the word which completes the sentence most appropriately.

The parents really shouldn't \_\_\_\_\_ such poor behaviour.

condemn	condone	concern	condominium	condescend
Α	В	С	D	E

Example 7	
The following sentence may, or may not, have mistakes in its punctuation and capital letters. Write the sentence out correctly.	
The chefs' cold recipes were her favourite ones to cook during this summers heatwave.	

Learning Street produces structured English courses that will help your child develop core skills such as: reading speed, spelling and vocabulary skills. Our specialised courses for the 11 Plus will also prepare them for question complexity and familiarise them with classic texts.

## **Difficult Maths Questions**

In both grammar school tests and Independent School tests, most of the questions children will face will be of KS2 standard or below. However, we cannot emphasise enough that children drop marks needlessly on these questions. They know what to do, but their core skills tend not to be sharp enough to work at the speed required, nor to handle the pressures of the day.

Have a look at the three questions below. Imagine your child has 45 seconds to 1 minute to do each one. Think about how many small calculations they have to do to reach an answer, then imagine there are 25 of these to do in 25 minutes, or 50 in 50 minutes, or in the toughest cases 62 in 50 minutes. This should show you how important core skills are. Many tutors and parents at home make the mistake of training for complexity rather than focusing on core skills.

### Example 1

The width of square A is 7cm. The length of rectangle B is three times the width of square A and its perimeter is 62cm.

What is the width of rectangle B?

## Example 2

Value A is the next prime number after 7. Value B is the area of a right-angled triangle that has a base of 8cm and a height of 14cm. Value C is nine cubed.

Calculate C - (A + B)

## Example 3

Two-fifths of the year group went on the field trip. 40% of those who remained played a sport, whilst the remaining 54 went to the library.

How many people are in the year group in total?

The questions above illustrate the need for rock-solid core skills. To improve to the degree required, children need to do work that is targeted directly to improve those skills. The necessary progress will not come from doing paper after paper.

It is not uncommon for bright children who can do quite complex maths to arrive at a performance plateau- they often can't score more than 85% but should be able to. The problem normally is weak core skills.

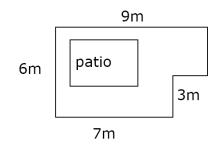
Of course, there are some questions which are more difficult, but these are largely found in independent school tests or super-selective school tests. Look at Example 4 which shows one of these more difficult topic questions.

## Example 4

Here is a plan of my garden. It is not drawn to scale.

It contains a rectangular patio that has a width in metres of the second prime number and a length one metre longer than the width. My neighbour has an identical layout, but with different dimensions.

If the area of my neighbour's garden, minus the patio, is 150% the area of my own garden, minus the patio, what is the area of my neighbour's garden minus the patio?



In some independent school tests and super-selective grammar school tests, children may be given a few reasoning questions at the end. In most cases, these are to differentiate the very best children in order to help decisions on awarding places or, where relevant, scholarships and bursaries. Here's an example of one such question (the answer is not the obvious one):

## Example 5

This is a coin of circumference 12mm being rolled along the 3.6cm sides of a regular pentagon.

If you were to roll the coin around the full perimeter of the pentagon, how many complete turns would it make?



Pentagon side length = 3.6cm Coin circumference = 12mm Learning Street produces structured maths courses that will help your child develop their core skills, so that they will be able to work with the speed and accuracy required in 11 Plus exams. Our specialised courses for the 11 Plus will also prepare your child for question complexity.

## **Difficult Verbal Reasoning Questions**

While there are lots of 'technical' VR question types, most children will find the bulk of the test focusses on vocabulary-based questions. In their most difficult form, these will be very difficult for children without a wide vocabulary. Successful children will have a vocabulary which is 800-1000 words larger than their contemporaries. This has to be specifically developed over time in a discrete way – the same way that you work on their maths skills.

Try the questions below. Imagine a child only has between 45 seconds and 1 minute to complete each question, and we think you'll see how important a wide vocabulary is.

Example 1

Fill in the gaps within the word on the right, so that it has a similar meaning to the word on the left.

SAD

\_0\_SE

Example 2

Fill in the gaps within the word on the right, so that it has the opposite meaning to the word on the left.

**BENIGN** 

\_ A\_ \_ G \_ \_ N T

There are also technical VR questions, and while it is relatively straightforward to understand HOW to do these, the difficulty really comes with how quickly children need to work.

Look at the question below and imagine a child has to do seven of these in seven minutes.

Example 3

Here are four words and three codes, not necessarily in the correct order.

What is the code for TREAD?

ABLE TRAY LEND DART

3176 6594 5831

The tests also use more traditional worded VR questions, although you won't find more than one or two or these in a test. These are difficult because children need to feel relaxed enough to

think clearly. They need to remember the correct technique to answer these questions, and they need to have completed the previous questions quickly enough to ensure they have enough time left to tackle these ones.

## Example 4

Five friends get exactly two scoops of ice cream each. Jim is the only one to get Vanilla. Everyone bar Ritu gets Chocolate. Only Lucy and Dave get Caramel, whilst only Dan and Ritu get Mint.

Which of these statements is true?

- A. Ritu gets Orange.
- B. Lucy gets Orange.
- C. Jim gets Mint.
- D. Ritu gets Vanilla.
- E. Dave gets Lemon.

Remember, a good performance in verbal reasoning always requires very strong vocabulary skills. Strong vocabulary skills cannot be developed by doing question papers.

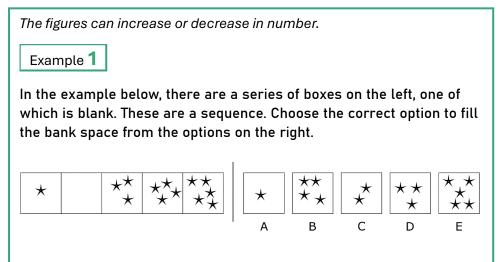
Learning Street produces structured courses and mock papers which cover verbal reasoning. These courses will help your child develop the necessary core skills such as vocabulary and spelling. Our specialised courses for the 11 Plus will also familiarise them with different question types and teach them the correct technique to tackle each type.

## **Difficult Non-Verbal Reasoning Questions**

While non-verbal reasoning (NVR) isn't taught in schools, it isn't difficult to grasp. Most children, having got used to the various question types, find that they can score in the 80%-85% range during timed tests.

Some children are naturally more adept at NVR, and it's also true that children will reach their performance ceiling relatively quickly in this subject. It is common for tutors and families to put too much focus on NVR once their children have reached a plateau. However, the time might be better spent on other areas where further improvement can be made.

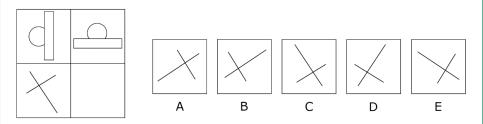
NVR has some basic skills which are easy to grasp. The following six questions are easy and are here **just to show the ways the figures can change**. Questions will be more difficult in the exam.



The figures can be rotated.

Example 2

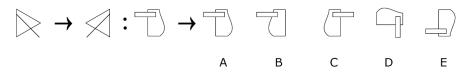
In the example below, there are a series of boxes on the left, one of which is blank. These are a sequence. Choose the correct option to fill the bank space from the options on the right.



The figures can be reflected.

Example 3

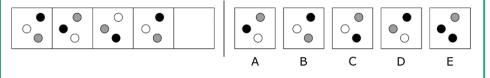
In the example below, identify how the shape to the left of the arrow is related to the shape to the right of the arrow. Then look at the shape to the right of the colon and choose a shape that is related to it in the same way as the example pair.



The figures' shading can change.

Example 4

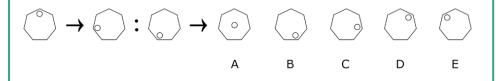
In the example below there are a series of boxes on the left, one of which is blank. These are a sequence. Choose the correct option to fill the bank space from the options on the right.

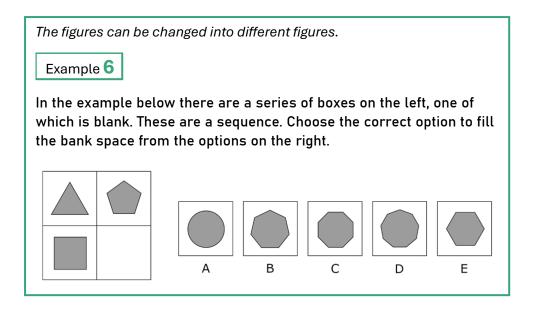


The figures can move clockwise or anticlockwise.

Example 5

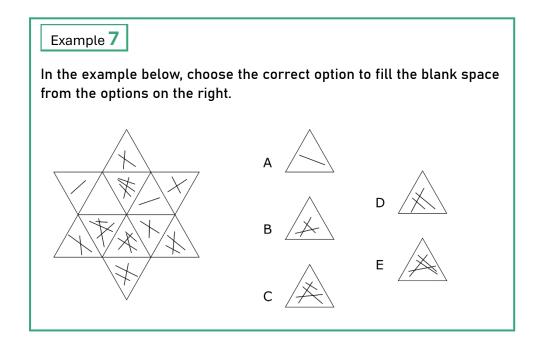
In the example below, identify how the shape to the left of the arrow is related to the shape to the right of the arrow. Then look at the shape to the right of the colon and choose a shape that is related to it in the same way as the example pair.





These simple questions are here solely to illustrate how NVR works at its core.

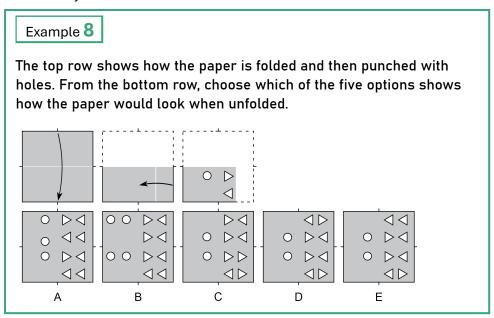
NVR gets more complicated when several actions (e.g. rotation, reflection, shading changes... etc.) are happening at the same time. For example, look at the question below:

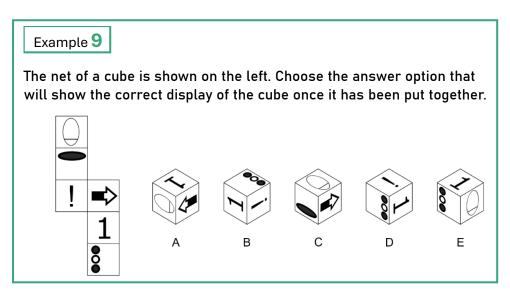


Example 7 is about as difficult as grammar school NVR questions will get. However, remember that the difficulty level also concerns the speed with which children will be required to answer the questions, and the accuracy they need to deliver. In some cases, children have less than 45 seconds to answer each question.

#### **Spatial Reasoning Questions**

In recent years, schools have introduced spatial reasoning questions. These can also take some getting used to, and once again, some children will be more adept at them than others. As said before, the pressures of the exam, caused by timing and stress, can be responsible for making these types of questions difficult. Here are a couple examples of the types of spatial reasoning questions a child may face in the exam:





Learning Street produces structured courses and mock papers which cover NVR. They will help your child develop the necessary core skills such as problem solving, attention to detail and logic. Our specialised courses for the 11 Plus will also familiarise them with different question types and teach them the correct technique to tackle each type.

# **Answers**

# **English**

QUESTION	ANSWER AND EXPLANATION
EXAMPLE 1	C – abysmal
	We are told that the weather had been "appalling".
EXAMPLE 2	The big event was an examination to become a qualified swimming coach. We know this because we are told that "the work had paid off and she was now an accredited swimming coach."
EXAMPLE 3	It means that the house would not be able to withstand the elements for much longer. This is because of the material it was made from: wood and with a tiled roof. The house's fragile state is also emphasised by the comment: "if it were so even now". This indicates that the narrator suspects it could succumb to the weather at that very moment.
EXAMPLE 4	С
	"They communicated with one another by means of siren-like howls."
EXAMPLE 5	Remuneration, February  The payroll staff finally worked out the <u>remuneration</u> required in <u>February</u> for the staff.
<b>EXAMPLE 6</b>	B – condone
	The parents really shouldn't condone such poor behaviour.
EXAMPLE 7	The chef's cold recipes were her favourite ones to cook during this summer's heatwave.
	Watch the apostrophes of possession. The sentence tells us there is only one chef.

## Maths

## **QUESTION**

EXAMPLE 1	10cm
	Square A = 7cm B length = 7 X 3 = 21cm B width = 62 – (21 x 2) = 20, and then 20 ÷ 2 = 10cm
EXAMPLE 2	$C - (A + B) =$ $729 - (11 + 56) = 662$ $A = 11$ $B = (8 \times 14) \div 2 = 56$ $C = 729$
EXAMPLE 3	2/5 = 40%, which means 60% remained 54 = 60% of those who remained 54 / 6 = 9 = 10% of those who remained $9 \times 10 = 90 = 100\%$ of those who remained = 3/5 (60%) of total year group $90 \div 3 = 30 = 1/5$ of year group $30 \times 5 = 150$ which is the total year group
EXAMPLE 4	Area of my patio: Width = second prime number = 3 Length = 1 metre longer than width, $3 + 1 = 4$ Total area of patio: $3 \times 4 = 12m^2$ We split the garden into two sections because it is a complex shape. Shape 1 area: $6 \times 7 = 42m^2$ Shape 2 area: $(6 - 3) \times (9 - 7) = 6m^2$ Total area of my garden = $42m^2 + 6m^2 = 48m^2$ Total area of my garden — patio = $48 - 12 = 36m^2$ The neighbours garden minus patio is 150% area of my own garden minus patio. Therefore: $36 \times 1.5 = 54m^2$ is the area of the neighbour's garden minus the patio.

## **QUESTION**

EXAMPLE 5	16 turns
	Coin circumference = $12mm = 1.2cm$ Number of complete turns the coin makes on one side of pentagon = $3.6 \div 1.2 = 3$ Number of complete turns coin makes on 5 sides of pentagon = $3 \times 5 = 15$
	PLUS the coin going around each corner = 72 degrees, so 5 x 72 = 360 degrees = one more turn  So, 16 turns.

# **Verbal Reasoning**

## **QUESTION**

EXAMPLE 1	MRO
	Morose
EXAMPLE 2	MLINA
	Malignant
EXAMPLE 3	49156
	There is a 1 in positions 2 and 4 so 1 must = E Therefore: 5831 = ABLE, 3176 = LEND, 6594 = DART
EXAMPLE 4	A
	Going through what we know below, it can only be true that Ritu got orange, as the rest are impossible. Remember, the question says they each get exactly two scoops of ice-cream.
	Jim – vanilla, chocolate Ritu – mint Lucy – chocolate, caramel Dave – chocolate, caramel
	Dan – chocolate, mint

# **Non-Verbal Reasoning**

## **QUESTION**

EXAMPLE 1	С
	One star added each time.
EXAMPLE 2	A
	Moving across the rows, shape rotated 90 degrees clockwise.
EXAMPLE 3	С
	Shape is reflected through a vertical line.
EXAMPLE 4	A
	Black goes to grey; grey goes to white; white goes to black.
EXAMPLE 5	С
	Circle moves two corners anticlockwise.
EXAMPLE 6	E
	Moving across the rows, shape gains two sides.
EXAMPLE 7	В
	The entire shape has a horizontal line of symmetry. The triangles underneath this line of symmetry have one more intersection than the triangles that are opposite to them, above the line of symmetry.
EXAMPLE 8	D
	The paper is folded twice, and two holes are punched in four layers of paper and one in two layers of paper. Therefore, there are ten holes when the paper is unfolded and the folds act as mirror lines.
EXAMPLE 9	E