Reasoning Paper 1: quick guide

Warm-up level · 20 questions · 20 minutes · 8 verbal + 12 non-verbal

Give 1 mark for each correct answer (no half marks). This page is all you need to mark the paper. The full guide from page 2 works through every question and explains what each wrong answer usually means. Note the verbal and non-verbal scores separately – children are often much stronger at one than the other.

Answer key

1 C cold	**6 D** BEE	**11 A**	**16 A**
2 B large	**7 B** hive	**12 C**	**17 D** 4
3 A ball	**8 C** swan	**13 D**	**18 D** 4
4 B n	**9 B**	**14 B**	**19 A** 6
5 C P	**10 A**	**15 D**	**20 C** 6

Scores by section

Add up the marks in each section and copy them into the PrimaryTools 7+ Reasoning tracker. A low section shows what to practise.

Section	Questions	In this paper	Score
Verbal: Word meanings	1–2	Opposites; Same meaning	/ 2
Verbal: Making words	3–4	Compound words; Missing letters	/ 2
Verbal: Letters and codes	5–6	Letter patterns; Number codes	/ 2
Verbal: Links and logic	7–8	Word links; Which belongs?	/ 2
Non-verbal: Odd one out	9–12	Odd one out	/ 4
Non-verbal: What comes next?	13–16	What comes next?	/ 4
Non-verbal: Counting cubes	17–20	Counting cubes	/ 4
Total			/ 20

What the score means

Score	What it suggests
18–20	Secure at warm-up level. Move on to the standard papers (4–8).
14–17	A good start. Read the notes for the questions missed, then try the next paper.
10–13	Getting there. Look at the scores by section and practise the weakest one together before the next paper.
0–9	Some foundations need work. Try the weakest section's questions together, out loud and without a timer, then return to timed papers.

This is a warm-up paper, so scores will usually be higher than on later papers. Scores on practice papers are a guide only – they don't predict a pass mark, which varies by school and year.

Full answer guide

For each question: how to work it out, what each wrong answer usually means, and a tip for next time. Go through the questions your child got wrong – and any they guessed. At this age, talking it through together is worth more than the score.

Verbal: Word meanings · Questions 1–2

Question 1 · Answer C: cold

Opposites

Which word means the opposite of 'hot'?

How to work it out

The opposite of hot is cold. The other words mean something similar, or are only linked to it.

If you chose…

A sunny	Sunny is linked to hot weather, but it isn't the opposite of hot.
B warm	Warm is close to hot in meaning, not the opposite.
D fire	Fire is something hot – it isn't an opposite.

Next time: Watch out for words that mean nearly the SAME – they are there to trick you. An opposite is at the other end.

Question 2 · Answer B: large

Same meaning

Which word means the same, or nearly the same, as 'big'?

How to work it out

'Large' means nearly the same as 'big'. Try it in a sentence: you could use either word.

If you chose…

A heavy	Heavy is about weight, not size.
C small	Small is the opposite of big.
D tall	Tall is only about height. Something can be big without being tall.

Next time: Put each word in a sentence in place of the first word. The right answer keeps the sentence meaning the same. Watch out for opposites.

Verbal: Making words · Questions 3–4

Question 3 · Answer A: ball

Compound words

Which word can go after 'foot' to make one new word?

How to work it out

foot + ball = football.

If you chose…

B shoe	'footshoe' is not a real word.
C toe	'foottoe' is not a real word.
D sock	'footsock' is not a real word.

Next time: Say each new word out loud. If it isn't a real word, cross it out.

Question 4 · Answer B: n

Missing letters

Which letter can finish the first word AND start the second word? ur _ _ ut

How to work it out

The letter n makes 'urn' and 'nut'.

If you chose…

A c	'cut' is a word, but 'urc' is not – the letter must make BOTH words.
C b	'but' is a word, but 'urb' is not – the letter must make BOTH words.
D h	'hut' is a word, but 'urh' is not – the letter must make BOTH words.

Next time: Try each letter in BOTH gaps and say the two words out loud. Many letters make one word – only one makes both.

Verbal: Letters and codes · Questions 5–6

Question 5 · Answer C: P

Letter patterns

Which letter comes next? H J L N ?

How to work it out

The pattern goes on 2 letters each time. After N comes P.

If you chose…

A O	This doesn't go far enough – count the jump again.
B Q	This goes one letter too far.
D R	This goes two letters too far.

Next time: Write the alphabet across the top of the page and mark the jumps between letters with little arcs.

Question 6 · Answer D: BEE

Number codes

If A = 1, B = 2, C = 3 and so on, what word is 2 5 5 ?

How to work it out

2 = B, 5 = E, 5 = E, so the word is BEE.

If you chose…

A CEE	One letter is one place too far along: check number 2 again.
B EEB	These are the right letters but in the wrong order – work from left to right.
C BFE	One letter is one place too far along: check number 5 again.

Next time: Write the alphabet with a number under each letter before you start. Change one number at a time, in order.

Verbal: Links and logic · Questions 7–8

Question 7 · Answer B: hive

Word links

Bird is to nest as bee is to …

How to work it out

Find the link in the first pair, then use the same link: the answer is ‘hive’.

If you chose…

A flower	Bees visit flowers, but they don't live in them.
C sting	A sting is part of a bee, not its home.
D honey	Bees make honey, but they live in a hive – the link is ‘where it lives’.

Next time: Make a sentence for the first pair (for example, ‘a bird lives in a nest’), then use the same sentence for the second pair.

Question 8 · Answer C: swan

Which belongs?

Which word belongs with these three? robin, owl, duck

How to work it out

Robin, owl and duck are all the same kind of thing – and so is swan.

If you chose…

A bee	A bee flies, but it is an insect, not a bird.
B frog	A frog is not a bird.
D bat	A bat flies, but it is not a bird.

Next time: Say what the three words have in common. Then check each option: does it belong to exactly the same group?

Non-verbal: Odd one out · Questions 9–12

Question 9 · Answer B

Odd one out

How to work it out



Count the dots. The other figures all have the same number of dots, even though the dots are in different places. This one has a different number.

If you chose…

A		This figure has the same number of dots as the others.
C		This figure has the same number of dots as the others.
D		This figure has the same number of dots as the others.

Next time: Count the dots in every figure. Where the dots are, and the shape around them, don't matter.

Question 10 · Answer A

Odd one out

How to work it out



In the other figures the small shape inside is the same shape as the big one. In this figure it is a different shape.

If you chose…

B		Here the small shape matches the big shape, like the others.
C		Here the small shape matches the big shape, like the others.
D		Here the small shape matches the big shape, like the others.

Next time: Compare the inside shape with the outside shape in every figure. Ignore the colours.

Question 11 · Answer A

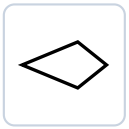
Odd one out

How to work it out



Count the sides. The other shapes all have four sides, even though they look different. This one does not have four sides.

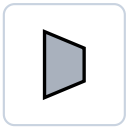
If you chose…

B 

This shape has four sides, like the others.

C 

This shape has four sides, like the others.

D 

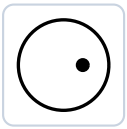
This shape has four sides, like the others.

Next time: Count the sides of every shape and write the number underneath. Ignore the colour and size.

Question 12 · Answer C

Odd one out

How to work it out



Count the dots. The other figures all have the same number of dots, even though the dots are in different places. This one has a different number.

If you chose…

A 

This figure has the same number of dots as the others.

B 

This figure has the same number of dots as the others.

D 

This figure has the same number of dots as the others.

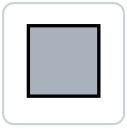
Next time: Count the dots in every figure. Where the dots are, and the shape around them, don't matter.

Non-verbal: What comes next? · Questions 13–16

Question 13 · Answer D

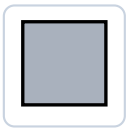
What comes next?

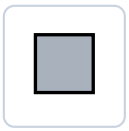
How to work it out

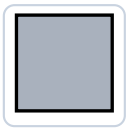


The shape gets bigger each time.

If you chose…

A  This doesn't fit the pattern: the shape gets bigger each time.

B  This doesn't fit the pattern: the shape gets bigger each time.

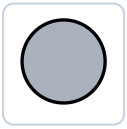
C  This doesn't fit the pattern: the shape gets bigger each time.

Next time: Follow one thing at a time along the row – first the big shape, then the dot or small shapes. The answer must fit every pattern.

Question 14 · Answer B

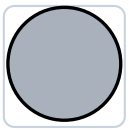
What comes next?

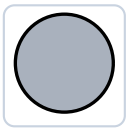
How to work it out

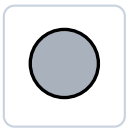


The shape gets bigger each time.

If you chose…

A  This doesn't fit the pattern: the shape gets bigger each time.

C  This doesn't fit the pattern: the shape gets bigger each time.

D  This just repeats the last picture – the pattern has to move on.

Next time: Follow one thing at a time along the row – first the big shape, then the dot or small shapes. The answer must fit every pattern.

Question 15 · Answer D

What comes next?

How to work it out



One more small shape is added each time.

If you chose…

A 

This doesn't fit the pattern: one more small shape is added each time.

B 

This just repeats the last picture – the pattern has to move on.

C 

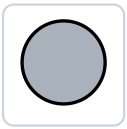
This doesn't fit the pattern: one more small shape is added each time.

Next time: Follow one thing at a time along the row – first the big shape, then the dot or small shapes. The answer must fit every pattern.

Question 16 · Answer A

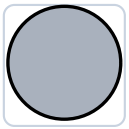
What comes next?

How to work it out

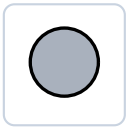


The shape gets bigger each time.

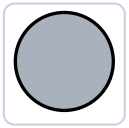
If you chose…

B 

This doesn't fit the pattern: the shape gets bigger each time.

C 

This doesn't fit the pattern: the shape gets bigger each time.

D 

This doesn't fit the pattern: the shape gets bigger each time.

Next time: Follow one thing at a time along the row – first the big shape, then the dot or small shapes. The answer must fit every pattern.

Non-verbal: Counting cubes · Questions 17–20

Question 17 · Answer D: 4

Counting cubes

How many cubes are in this stack?

How to work it out

Count one column at a time, from left to right: 1 + 1 + 2 = 4.

If you chose…

A 3	One cube has been missed. Count one column at a time.
B 5	One cube has been counted twice. Count one column at a time.
C 6	Two too many – count each column from the bottom up.

Next time: Point to each column and count from the bottom up. If a cube is high up at the back, there must be cubes underneath it, even if you can't see them.

Question 18 · Answer D: 4

Counting cubes

How many cubes are in this stack?

How to work it out

Count one column at a time, from left to right: 1 + 2 + 1 = 4.

If you chose…

A 6	Two too many – count each column from the bottom up.
B 3	One cube has been missed. Count one column at a time.
C 5	One cube has been counted twice. Count one column at a time.

Next time: Point to each column and count from the bottom up. If a cube is high up at the back, there must be cubes underneath it, even if you can't see them.

Question 19 · Answer A: 6

Counting cubes

How many cubes are in this stack?

How to work it out

Count one column at a time, from left to right: 2 + 2 + 2 = 6.

If you chose…

B 7	One cube has been counted twice. Count one column at a time.
C 8	Two too many – count each column from the bottom up.
D 5	One cube has been missed. Count one column at a time.

Next time: Point to each column and count from the bottom up. If a cube is high up at the back, there must be cubes underneath it, even if you can't see them.

Question 20 · Answer C: 6

Counting cubes

How many cubes are in this stack?

How to work it out

Count one column at a time, from left to right: 1 + 1 + 2 + 2 = 6.

If you chose…

A	5	One cube has been missed. Count one column at a time.
B	7	One cube has been counted twice. Count one column at a time.
D	8	Two too many – count each column from the bottom up.

Next time: Point to each column and count from the bottom up. If a cube is high up at the back, there must be cubes underneath it, even if you can't see them.

Ready for more? The PrimaryTools 7+ Reasoning pack has Papers 2–14 in the same format, building from warm-up to elite level, with a guide like this one for every paper and a progress tracker. Find it at **primarytools.co.uk/7-plus-practice-papers**.

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