

NON-VERBAL REASONING

NETS AND CUBES

Paper 3
Challenging Level

Read the following instructions carefully:

1. The test has 20 questions in total and you have 10 minutes to complete it.
2. This is a multiple-choice test.
3. Work as carefully and as quickly as you can.
4. Answers should be marked on the answer sheet provided and not on this paper.
5. If you make a mistake, rub it out completely and put in your new answer.

Good Luck!

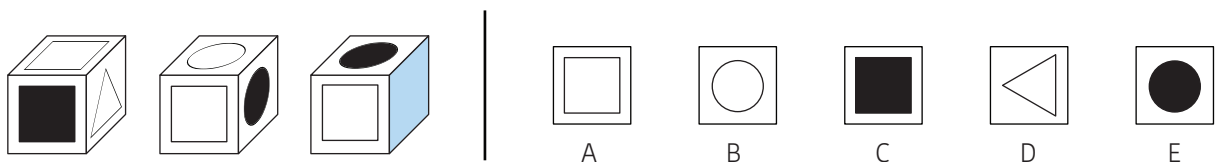


NETS AND CUBES

Instructions:

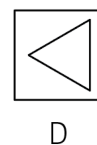
The three cubes on the left show different views of the same cube. Each cube face is different. Choose one of the options that would best replace the blue face on the third cube.

Example 1:



Answer:

Example	
A	<input type="checkbox"/>
B	<input type="checkbox"/>
C	<input type="checkbox"/>
D	<input checked="" type="checkbox"/>
E	<input type="checkbox"/>

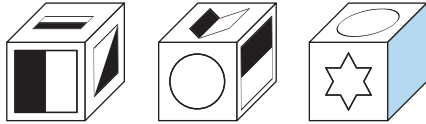


Explanation:

The answer is the white triangle. A and E are wrong because they are already shown on the third cube. B is wrong because the white circle should be on the left side of the white square on the third cube. C is wrong because the black should be opposite the black circle.

NETS AND CUBES

1



A



B



C

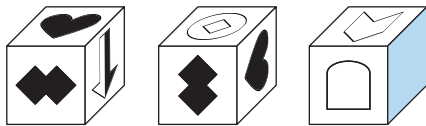


D



E

2



A



B



C

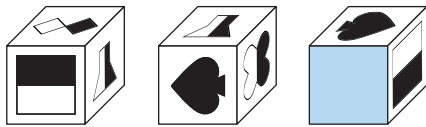


D



E

3



A



B



C

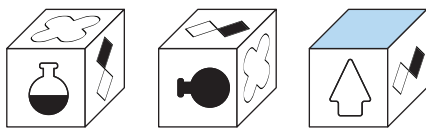


D



E

4



A



B



C

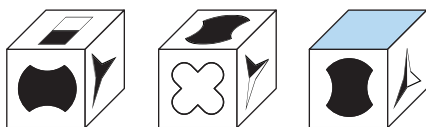


D



E

5



A



B



C



D



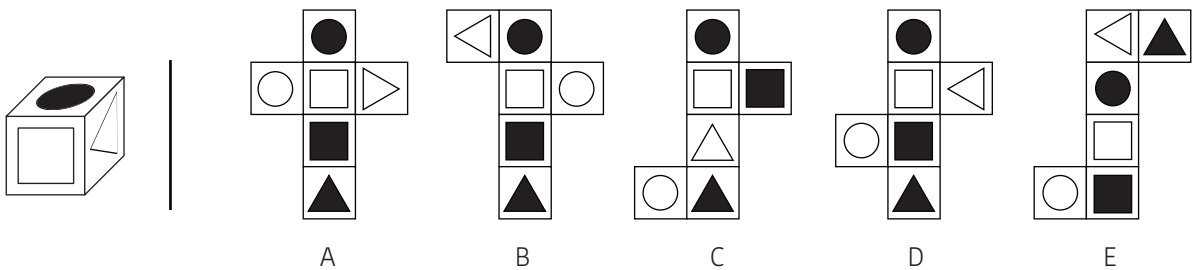
E

NETS AND CUBES

Instructions:

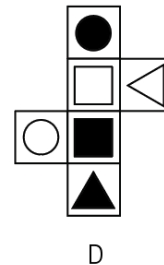
Choose which of the nets can be formed if the cube on the left is unfolded.

Example 2:



Answer:

Example	
A	<input type="checkbox"/>
B	<input type="checkbox"/>
C	<input type="checkbox"/>
D	<input checked="" type="checkbox"/>
E	<input type="checkbox"/>

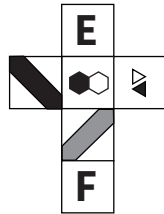


Explanation:

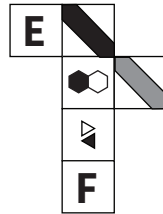
The correct net is D. The black circle, white square and white triangle should not be opposite each other. The white triangle should point to the white square.

NETS AND CUBES

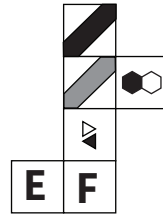
6



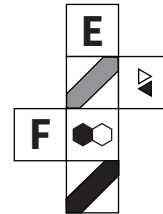
A



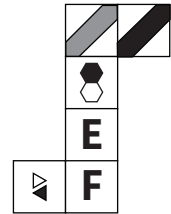
B



C

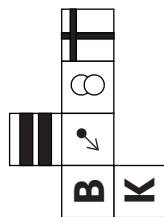


D

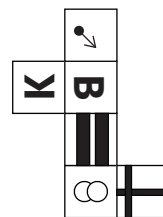


E

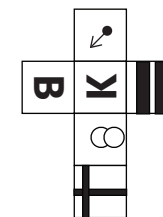
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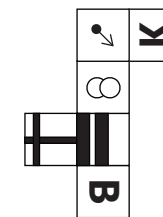
A



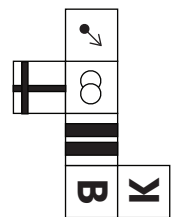
B



C

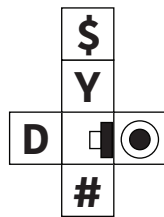


D

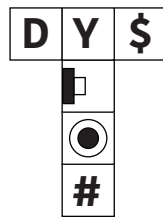


E

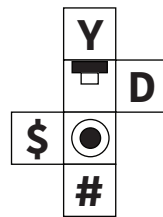
8



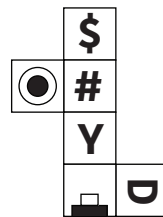
A



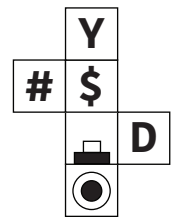
B



C

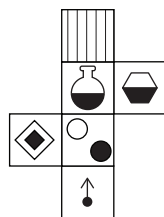
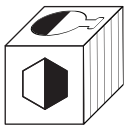


D

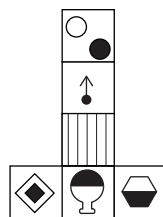


E

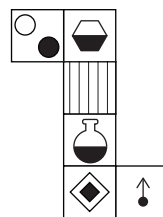
9



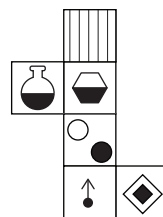
A



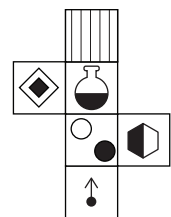
B



C

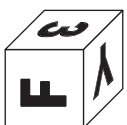


D

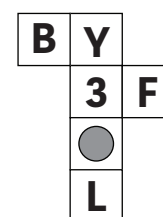


E

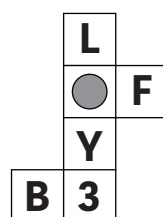
10



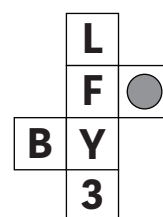
A



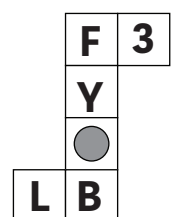
B



C



D



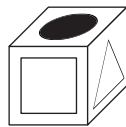
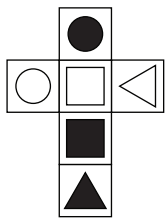
E

NETS AND CUBES

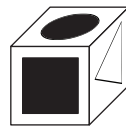
Instructions:

Choose which of the cubes **CAN BE FORMED** if the net on the left is folded.

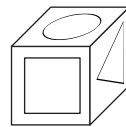
Example 3:



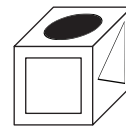
A



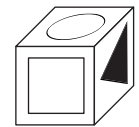
B



C



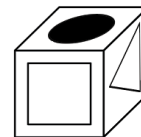
D



E

Answer:

Example	
A	<input type="checkbox"/>
B	<input type="checkbox"/>
C	<input type="checkbox"/>
D	<input checked="" type="checkbox"/>
E	<input type="checkbox"/>



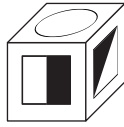
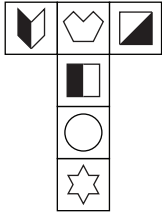
D

Explanation:

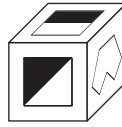
The correct cube is D. Options A, B and E are wrong because they show opposite faces. B and C are also wrong because the white triangle should point to the white square.

NETS AND CUBES

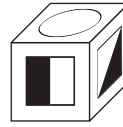
11



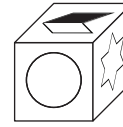
A



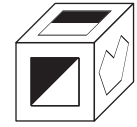
B



C

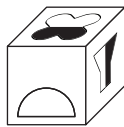
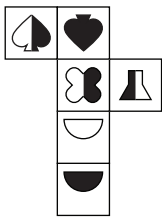


D

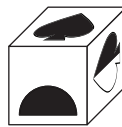


E

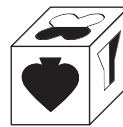
12



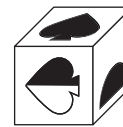
A



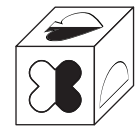
B



C

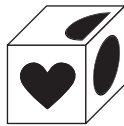
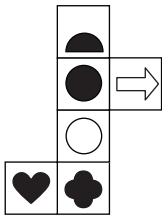


D

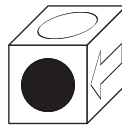


E

13



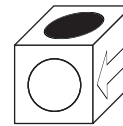
A



B



C

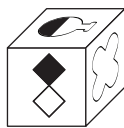
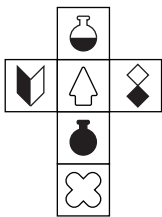


D



E

14



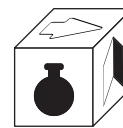
A



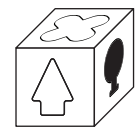
B



C

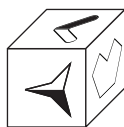
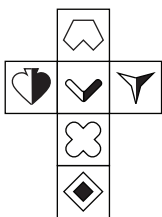


D



E

15



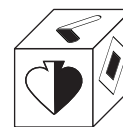
A



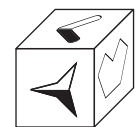
B



C



D



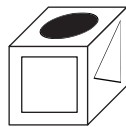
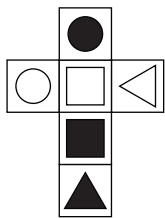
E

NETS AND CUBES

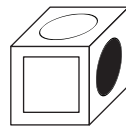
Instructions:

Choose which of the cubes **CANNOT BE FORMED** if the net on the left is folded.

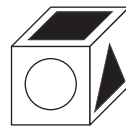
Example 4:



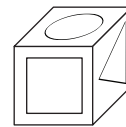
A



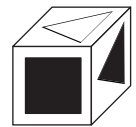
B



C



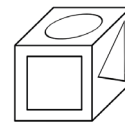
D



E

Answer:

Example	
A	<input type="checkbox"/>
B	<input type="checkbox"/>
C	<input type="checkbox"/>
D	<input checked="" type="checkbox"/>
E	<input type="checkbox"/>



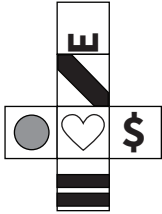
D

Explanation:

D is wrong because the white circle and white triangle are opposite faces.

NETS AND CUBES

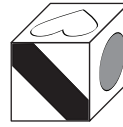
16



A



B



C

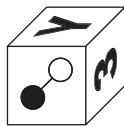
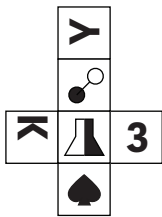


D

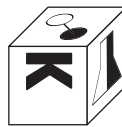


E

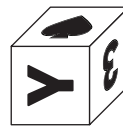
17



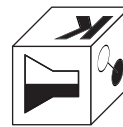
A



B



C

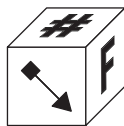
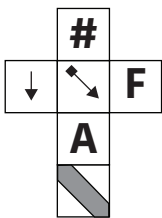


D

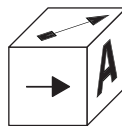


E

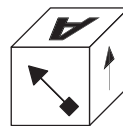
18



A



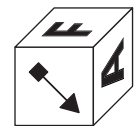
B



C

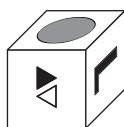
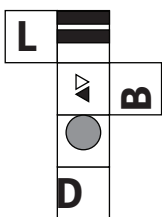


D



E

19



A



B



C

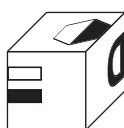
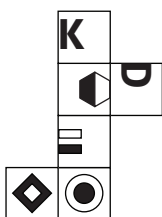


D

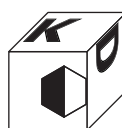


E

20



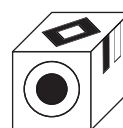
A



B



C



D



E

NON-VERBAL REASONING

NETS AND CUBES

Paper 3 : Challenging Level

ANSWER SHEET

Pupil's name:	Date of test:
School name:	Date of birth:

Instructions:

Mark your answers like this: A

Example 1	Q1	Q2	Q3	Q4	Q5
A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>
B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>
C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>
D <input checked="" type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>
E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>
Example 2	Q6	Q7	Q8	Q9	Q10
A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>
B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>
C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>
D <input checked="" type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>
E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>
Example 3	Q11	Q12	Q13	Q14	Q15
A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>
B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>
C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>
D <input checked="" type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>
E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>
Example 4	Q16	Q17	Q18	Q19	Q20
A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>
B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>
C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>
D <input checked="" type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>
E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>

THE END