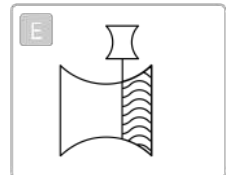
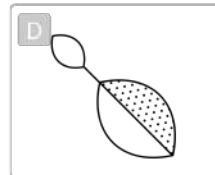
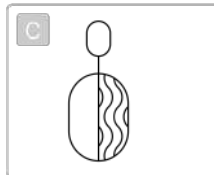
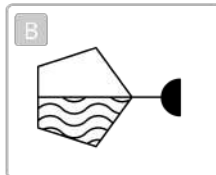
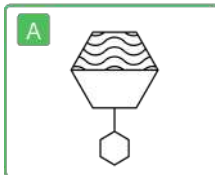
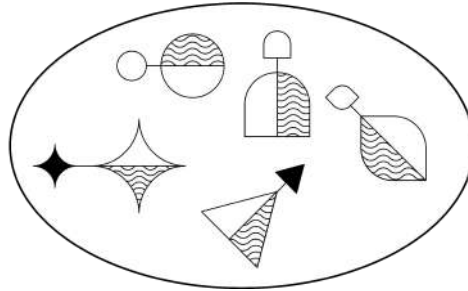




Non-Verbal Reasoning Answers & Explanations

1. Which option best matches this group?



Explanation

Linking Element 1:

- **Shape:** The smaller shape is the same shape as the larger shape.
- This means we can rule out B.

Linking Element 2:

- **Pattern:** Every shape should have a horizontal wave pattern across half of the larger shape.
- We can rule out D because it has a dotted pattern.
- We can rule out E because the pattern does not cover half the shape.
- We can rule out C because the waves are not horizontal.

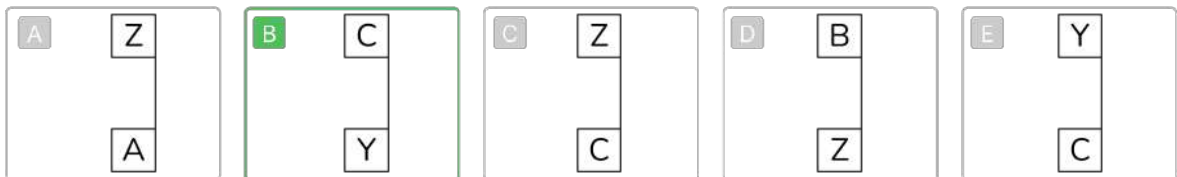
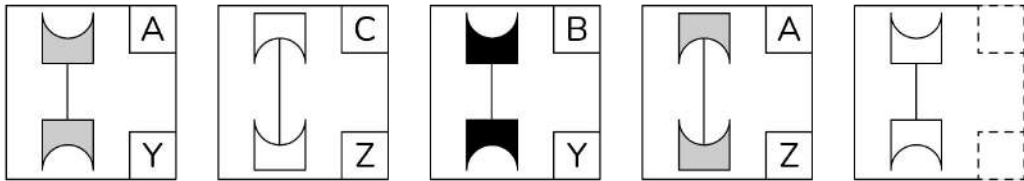
Correct:

- The shape that best matches the group is A.

11+ Non-Verbal Reasoning



2. Each letter represents a feature of the image.
Select the code that applies to the final image.



11+ Non-Verbal Reasoning



Explanation

Top Letter:

- **Colour:** The top letter represents the **colour** of the shapes.
- 'A' codes for grey, 'B' codes for black, and 'C' codes for white.

Bottom Letter:

- **Direction:** The bottom letter represents the **orientation** of the shapes.
- 'Y' means the shapes face away from each other and 'Z' means the shapes face each other.

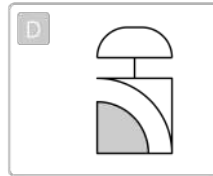
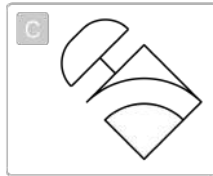
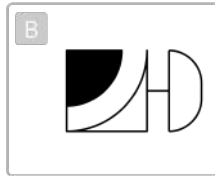
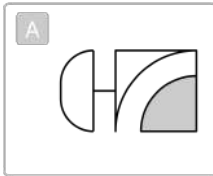
Correct:

- Answer option B - 'CY' - is correct because the shapes in the final image are **white** ('C') and face away from each other ('Y').

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3. From these five images, select the option that is most unlike the others.



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Explanation

Identifying Element:

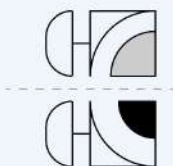
- **Rotation:** In all but one of the options, the shapes are rotations of each other.

Red Herring:

- **Colour:** The colour of the quarter-circle is not relevant - the same colour is not shared by all but one of the options.

Correct:

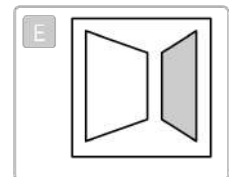
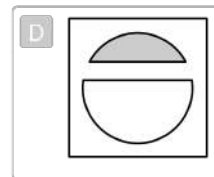
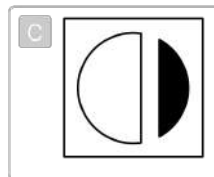
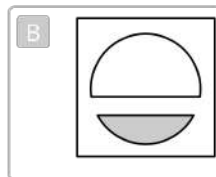
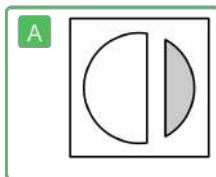
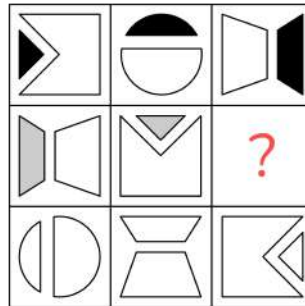
- The right answer is E because it is a **reflection**, not a rotation.
- We can see this by comparing options A and C. E has been reflected in the horizontal axis:



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4. Select the option that will complete this matrix.



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Explanation

Linking Element 1:

- **Colour:** Each horizontal **row** uses the same accent colour. The top row uses black, the middle row uses grey and the bottom row uses white.
- This means that we can rule out C.

Linking Element 2:

- **Shape:** The shapes stay the same in each box **diagonally down and to the right**.
- We can rule out E because it contains the wrong shapes.

Linking Element 3:

- **Rotation:** Moving **diagonally down and to the right**, each box is rotated 90° clockwise.
- This means that we can rule out B (180° rotation) and D (no rotation).

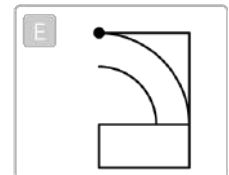
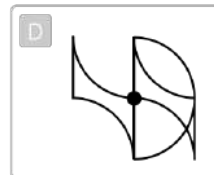
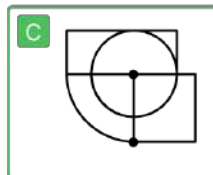
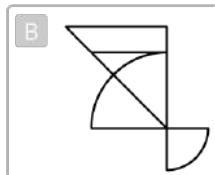
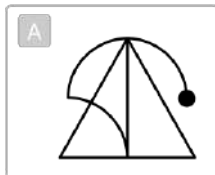
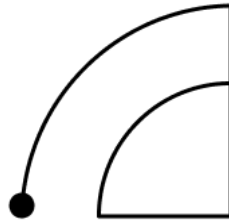
Correct:

- A is the right answer.

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5. In which of the options below is this shape hidden?

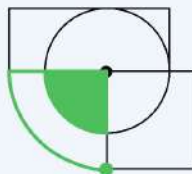


11+ Non-Verbal Reasoning



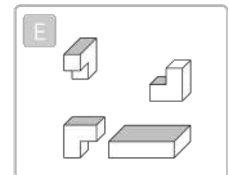
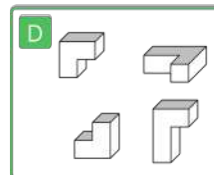
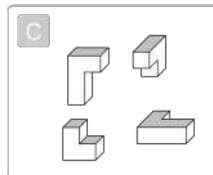
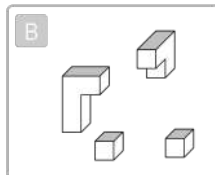
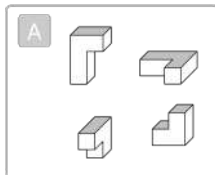
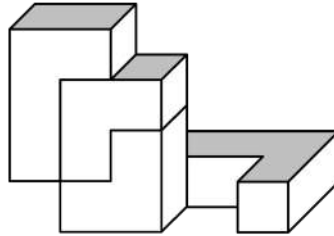
Explanation

- The main shape is made up of a curved 'antenna' attached to a quarter-circle.
- The main shape appears in the bottom-left corner of C. This is shown in the image below.



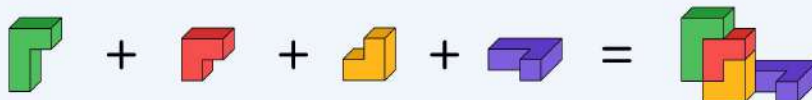
6. This shape is made out of blocks.

If none of the blocks have been rotated, which set of blocks could have made it?



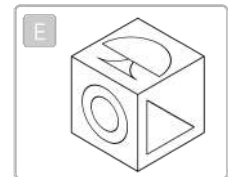
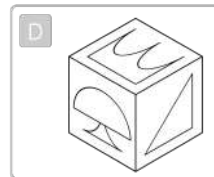
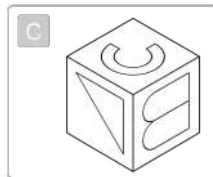
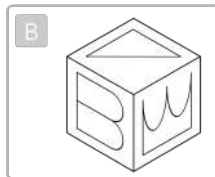
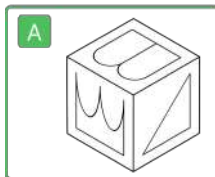
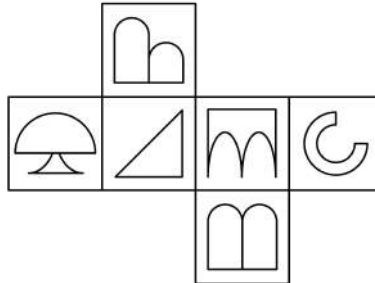
Explanation

- We can see that the shape is made from 4 'L'-shaped blocks.
- There are two small 'L'-shaped blocks made from 3 cubes each and two longer 'L'-shaped blocks made from 4 cubes.
- We can rule out B and E because they show the incorrect types of blocks.
- D is the correct answer. It is the only option that shows all of the necessary blocks and has all the blocks in the correct orientation.





7. Which cube can be made from this net?



Explanation

Duds:

- E is a **dud cube** because it shows a shape which is **not present** on the net. There are no circles on the net.

Opposites:

- C and D break the **opposites rule**: they show faces **next to** each other that are in **opposite positions** on the net.
- The **three-quarter ring** and **triangle** should not be next to each other in C. The **crown** and **mushroom** should be opposite, not next to, each other in D.

Orientation:

- B breaks the **orientation rule**. On the net, the **crown** points **away** from the **triangle** whereas in B, the **crown** is pointing **towards** the **triangle**.

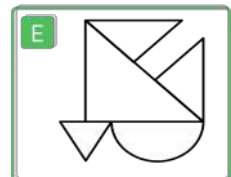
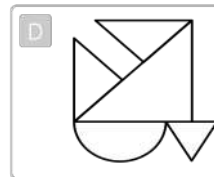
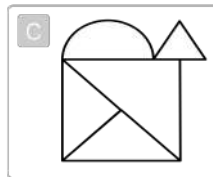
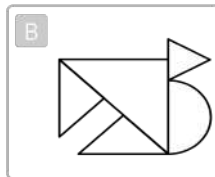
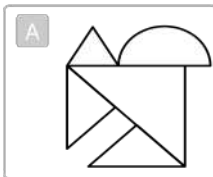
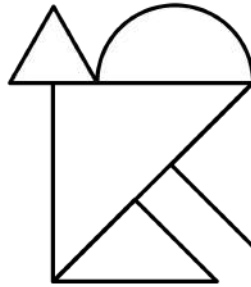
Correct:

- We are left with A which is the correct answer.

11+ Non-Verbal Reasoning



8. Select the option which is a **reflection** of the main image.



11+ Non-Verbal Reasoning



Explanation

Shape:

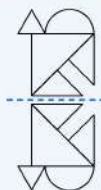
- C is incorrect because the triangles are touching whereas in the main shape, the triangles are clearly separated.
- A can be ruled out because only the bottom part of the main shape has been reflected.

Rotation:

- We can rule out B and D because they are **rotations** of the main shape, not reflections.
- B is a 90° clockwise rotation of the main image and D is a 180° rotation of the main image.

Correct:

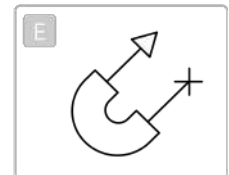
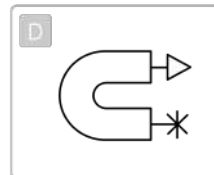
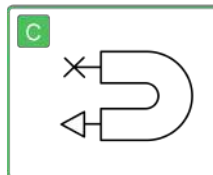
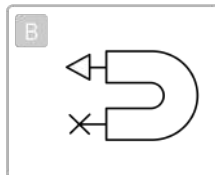
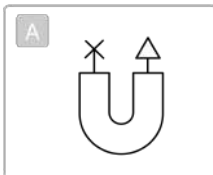
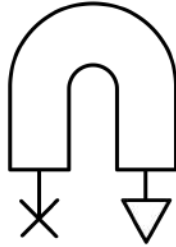
- E is a reflection of the main image across a **horizontal line**.



11+ Non-Verbal Reasoning



9. Select the option which is a **rotation** of the main image.



11+ Non-Verbal Reasoning



Explanation

Shape:

- E is incorrect because the 'U' shape gets much shorter.
- B looks like a **90° anticlockwise** rotation of the main image. However, the triangle and cross are on the wrong sides!
- D is incorrect because the cross at the end of the shape becomes a star.

Reflection:

- A is a **reflection** of the main shape across a horizontal line.

Correct:

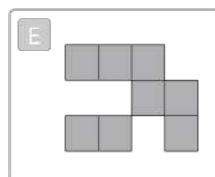
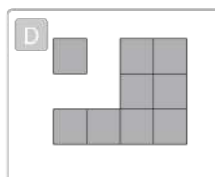
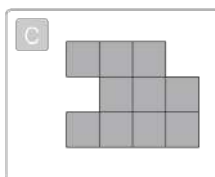
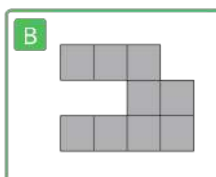
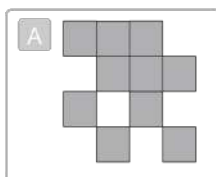
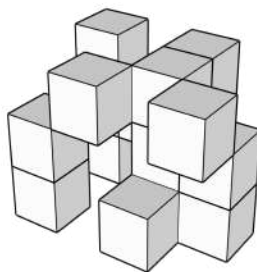
- C is the correct answer. It is a **90° anticlockwise** rotation of the main image.



11+ Non-Verbal Reasoning



10. Which 2D image shows what this 3D object would look like from above?



11+ Non-Verbal Reasoning



Explanation

Dimensions:

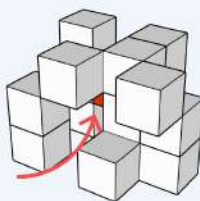
- The shape is 4 blocks wide and 3 blocks long: it is a 4×3 shape. This means we can rule out A.

Number:

- There are 4 top blocks in the **front row**: we can rule out E.
- There are 2 top blocks in the **middle row**: we can rule out C.
- There are 3 top blocks in the **back row**. Watch out for the **partially hidden block** highlighted in the image below! This means we can rule out D.

Correct:

- B is the correct answer.





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