## Sample 11+ Assessment Test for CEM (Durham University) Tests - Non-Verbal Reasoning

If you want to answer these questions in multiple-choice format, use the separate multiple-choice answer sheet. If you'd prefer to answer them in standard write-in format, just circle the letter underneath the answer. The test should take around 20 minutes.

## Section 1 - Changing Bugs

Look at how the first bug changes to become the second bug.
Then work out which option would look like the third bug if you changed it in the same way.

## Example:



Answer: c
(1)

-

a

b

c

d
(2)

(3)

(4)

a

b

c

d
(5)

(6)
$8 \rightarrow 8: 8 \rightarrow 0$



(7)

(8)

(9)

(10)

## Section 2 - Odd One Out

Find the figure in each row that is most unlike the other figures.

## Example:


(1)

a

b

c

d

e
(2)

a

b

c

d

e
(3)

a

b

c

d

e
(4)

(5)

(6)

a

b

c

d

e
(7)

a

b

c

d

e
(8)

(9)

a

b

c

d

e
(10)

a

b

C

d

e

## Section 3 - Cubes and Nets

Work out which of the six cubes can be made from the net.

## Example:



b

c

d

Answer: c
(1)


b

c

d
(2)


d
(3)

(4)

(5)

(6)

(7)

(8)


## Section 4 - Reflect the Figure

Work out which option would look like the figure on the left if it was reflected over the line.
Example:
Reflect


b

c

d

## Answer: a

(1)

Reflect


a

b

c

d
(2)

Reflect

a

b

c

d
(3)

Reflect


a

b

c

d
(4)

(5)

Reflect

(6)

Reflect

(7) Reflect
-

d
(8)

Reflect



c

d
(9)

Reflect


a

b


C

d
(10)

Reflect


## Section 5 - 2D Views of 3D Shapes

Work out which option is a top-down 2D view of the 3D figure on the left.

## Example:



a

b

c

d

Answer: c
(1)


a

b

c

d
(2)


c

d
(3)


a

b

c

d
(4)



C

d
(5)


a

b


C

d
(6)


a

b

c

d
(7)

(8)


END OF TEST


| 18 | Total |
| :--- | :--- |

