



# Answers to Assessment Test 1 — CGP 11+ Non-Verbal Reasoning Practice Book

## Section 1 — Find the Figure Like the First Two

- B**  
All figures must be triangles with a flat side at the bottom.
- C**  
All figures must have the same number of dots as inside lines.
- D**  
All figures must have a black shape at the front.
- B**  
All figures must have two shapes and an arrow pointing up.
- B**  
All figures must have a dot directly next to the middle of the flat side of the large white shape.
- B**  
All figures must have a large shape with the same small shape overlapping it on the left hand side.
- E**  
All figures must have a large shape with five sides. There must be the same number of raindrops as the number of shapes with dashed outlines inside the five-sided shape.
- D**  
All figures must have the same number of lines at the bottom as the number of dots at the top. There must be black and white dots at the top. All the vase shapes must be shaded black up to the same level.
- B**  
All figures must have one less inner line than the number of sides of the shape.
- E**  
In all figures, the shaded parts of the two inner shapes must equal one whole inner shape.

## Section 2 — Complete the Series

- E**  
The circle rotates 90 degrees clockwise in each series square.
- C**  
The whole series square reflects across each time.
- C**  
All of the circles move up one row in each series square. When they reach the top, they go back to the bottom in the next series square.
- A**  
The cube turns one face in each series square. The front cube face becomes the left hand cube face, and a new cube face appears at the front.

- A**  
In each series square, the grey square in the previous series square becomes white, and one of the black squares becomes grey.
- E**  
The four-headed arrow shape rotates 45 degrees in each series square. The black dot moves anticlockwise round the corners of the series square. The two-headed arrow shape gets smaller in each series square.
- B**  
The circle in the bottom left hand corner gets bigger, and the centre circle gets smaller in each series square. The two circles alternate colours between black and white. The star gets an extra point in each series square.
- A**  
The hatching rotates 45 degrees anticlockwise in each series square. The raindrop rotates 90 degrees anticlockwise, and alternates between being white and transparent.
- C**  
The two-headed arrow rotates 90 degrees in each series square. The line with the squares and the circles rotates 45 degrees clockwise each time. The circles swap colours in each series square.
- A**  
The column with only two dots moves one place left in each series square. The white dot moves one place to the right.

## Section 3 — Find the Figure Like the First Three

- A**  
All figures must be shapes with a line going through them which shows a line of symmetry.
- D**  
All figures must be made of two straight lines and two curved lines.
- A**  
All figures must be identical apart from rotation.
- C**  
All figures must be grey with one white quarter.
- E**  
All figures must have a line which crosses both shapes.
- D**  
In all figures, the number of sides of the overlapping shapes must add up to eleven (ignoring the inner shapes created by the overlaps).
- A**  
In all figures, the shape with the smallest number of sides must have a dashed outline.
- E**  
All figures must have the same number of small lines crossing the outline of the shape as the number of sides of the shape (including curved sides). There must be the same number of crosses as the number of curved lines.

**9. A**

All figures must have a large arrow shape with ten sides, with a four-sided black shape inside it.

**10. E**

In all figures, it must be possible to arrange the shapes into a square. There must be at least one grey and one white shape.

**Section 4 — Odd One Out**

**1. D**

All other figures have a black dot.

**2. E**

All other figures are hatched in the same direction.

**3. B**

All other figures are made of two identical shapes.

**4. B**

In all other figures, the two shapes are overlapping.

**5. D**

All other figures have an arrow pointing towards the grey semicircle.

**6. A**

All other figures have an arrowhead which is touching the outline of the right hand shape.

**7. E**

In all other figures, the two shapes cut out from the large shape are reflections of each other.

**8. E**

All other figures have one less shape in each row than in the row below.

**9. C**

All other figures have a small triangle inside the right hand side of the hourglass shape.

**10. D**

All other figures have one less dot than the number of curved sides of the shape immediately around the dots.

**Section 5 — Vertical Code**

**1. C (PY)**

$\underline{P}$  = solid outline,  $\overline{R}$  = long-dashed outline,  
 $\underline{S}$  = short-dashed outline.  
 $X$  = ellipse,  $\underline{Y}$  = circle.

**2. E (LR)**

$K$  = vertical rectangle,  $\underline{L}$  = horizontal rectangle.  
 $P$  = hatched rectangle,  $\overline{R}$  = cross-hatched rectangle.

**3. E (AY)**

$\overline{A}$  = outside shape has the most sides,  
 $B$  = inner shape has the most sides.  
 $X$  = black inner shape,  $\underline{Y}$  = white inner shape.

**4. D (PZ)**

$\underline{P}$  = inner triangle,  $R$  = inner circle,  $S$  = inner square.  
 $X$  = arrow pointing down,  $Y$  = arrow pointing right,  
 $\underline{Z}$  = arrow pointing left.

**5. E (GNX)**

$F$  = jagged inner line,  $\underline{G}$  = straight inner line.  
 $M$  = one black dot,  $\underline{N}$  = two black dots.  
 $\underline{X}$  = six big rectangles,  $Y$  = five big rectangles.

**6. B (JX)**

$G$  = central shape divided into three,  $H$  = divided into four,  
 $\underline{J}$  = divided into six,  $K$  = divided into two.  
 $L$  = curved brackets,  $P$  = square brackets,  
 $\underline{X}$  = hexagonal brackets.

**7. C (BV)**

$A$ ,  $\underline{B}$ ,  $C$  and  $D$  = different rotations of the cross in the circle.  
 $U$  = two black circles,  $\underline{V}$  = one black circle,  
 $W$  = three black circles.

**8. B (BS)**

$A$  = grey square,  $\underline{B}$  = white square.  
 $P$  = bottom v-shape is on the right,  
 $R$  = in the middle,  $\underline{S}$  = on the left.

**Section 6 — Complete the Grid**

**1. A**

Working from top to bottom, the outer shape shrinks to fit inside the star.

**2. C**

Working from top to bottom, each shape moves one grid square left. The shape in the left hand grid square disappears, and a new shape appears in the right hand grid square.

**3. A**

Working from left to right, the two shapes swap places, sizes and shadings.

**4. E**

Working from left to right, the outer shape reflects across. The whole inner shape shrinks, and the shaded half splits into quarters. The shaded quarters move to the top and bottom of the inner shape.

**5. C**

Working from left to right, the contents of the grid square rotate 45 degrees clockwise.

**6. E**

Working from left to right, the line in the circle rotates 45 degrees anticlockwise. The rest of the arrow rotates 90 degrees clockwise.

**7. C**

Working from left to right, the grid square rotates 90 degrees anticlockwise.

**8. E**

Working from left to right, the number of corners in the arrow line increases by one in each grid square. The three different arrangements of the black and white shapes each only appears once in each row.