Non-Verbal Reasoning Mock Test 14 Answers

Q#	Answer	Explanation
1	B	The hammer is flipped **upside down**: its head goes to the bottom, but its handle stays on the left. So the key must be flipped upside down too: its teeth move from underneath to **on top**, and its head stays on the **left**: B. A has its teeth on top but its head on the right, which is a half turn; C has its head on the right; D stands on end; and E is the key unchanged but black.
2	A	The triangle moves from the top of the circle to the **bottom** and still points the same way - it has moved, not turned. So the arrow must move to the bottom of the hexagon and still point **up and to the right**: A. B is at the bottom but points down and to the left, which is the whole picture turned; C is at the bottom but points up and to the left, which is a flip; D has only reached the middle; and E is still at the top and white.
3	D	Two things happen: the dot is taken away, **and** the square's outline becomes dashed. So the star must go and the trapezium become dashed, still grey: D. A has lost the star but is still solid, B is dashed but has kept the star, C is dashed but white, and E has kept the star and lost the trapezium.
4	C	Two things happen, in opposite directions: the circle gets **smaller** while the square inside it gets **bigger**. So the pentagon must shrink and the star grow: C. A has shrunk the pentagon but not grown the star, B has grown the star but not shrunk the pentagon, D has the right sizes but a white star, and E has done it the wrong way round.

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5	E	Two things happen: the triangle is reflected in a mirror rising from the bottom left to the top right, which stands its long bottom side up on the **left**, **and** it is filled with stripes. Do the same to the trapezium: its long side stands up on the left and its short upright side lies along the **top**, and it is striped: E. A is reflected but still white, B is striped but not reflected, C uses the other slanting mirror, with its long side on the right and its short side along the bottom, and D is a quarter turn anticlockwise, with its long side on the right.
6	B	Two things happen: the trapezium is turned a quarter turn **anticlockwise**, **and** it and its dot swap shadings - the grey shape turns black and the black dot turns grey. So the triangle must turn a quarter turn anticlockwise, which stands its long side up on the right with its square corner at the **bottom right**, and turn **black**, with a **grey** square inside: B. A is turned but has not swapped its shadings, C has swapped them but not turned, D has turned the wrong way, so its square corner is at the top left, and E is turned but has a white square.
7	D	Two things happen: the triangle is turned a quarter turn **clockwise**, **and** it shrinks. A quarter turn clockwise turns the semicircle's curve to face **right** and carries its shaded half from the left to the **top**, and it must shrink: D. A is turned but not smaller, B is smaller but not turned, C has turned the other way, facing left with its bottom half shaded, and E has turned but grown.
8	E	The circle at the **left** end of the line moves to the **right** end, and the other two each move one place left; nothing turns. So the arrow goes to the right end, still pointing right, and the semicircle and the triangle move up one place each: E. A reverses the whole line and flips each shape, so the arrow points left; B moves the right-hand shape to the front instead; C only swaps the two end shapes; and D is the whole picture turned upside down.

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9	C	A quarter turn anticlockwise stands the key on its head: the square head goes to the **bottom**, the teeth, which hung underneath, now stick out to the **right**, and the shaded half goes from the right to the top: C. D also stands on its head with its top half shaded, but its teeth stick out to the left, which makes it a mirror image. A has its head on the right, B has its teeth on top, and E stands with its head at the top.
10	E	A quarter turn clockwise carries the triangle from the top left of the square round to the **top right**, and turns it so that its square corner, which was at its bottom left, is now at its **top left**: E. A is in the top right too, but its square corner is at its bottom right - a mirror image. B is at the bottom left, C at the bottom right and D at the top left.
11	A	A half turn turns the hammer upside down - its head at the **bottom** and its handle on the **right** - and carries the shading from the bottom half to the top half: A. C is upside down with its top half shaded too, but its handle is still on the left, so it has been flipped; B has its handle on the right but is still the right way up. D and E lie on their sides.
12	D	Follow both pieces. A quarter turn anticlockwise carries the arrow from the upper left down to the **lower left**, now pointing **up**, and the grey square from the lower right up to the **upper right**: D. C also has the arrow pointing up and the square at the top, but the arrow is on the right and the square on the left - a mirror image. A points left, B points right, and E points down.
13	B	A quarter turn clockwise turns the semicircle's curve to face **right**, and carries the triangle, which sat low on the left, up to the **top**, now pointing right: B. D also faces right, but its triangle is at the bottom - a mirror image. A still faces up, C faces down and E faces left.
14	E	The hexagon looks the same after a sixth of a turn, so everything rests on the two marks. Turn each option until the dot is on the left, a little above the middle. In the starting figure the square is then **below** and to the right of the middle. Only E comes back like that; in the four mirror images the square comes back on the right but a little above the middle.

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15	A	Turn each option back until the sole of the boot lies flat along the bottom, with the leg standing up. At the start the toe points to the **right**. Only A comes back like that; the four mirror images all come back with the toe pointing left.
16	C	Turn each option back until the pentagon's flat side is at the top and its point at the bottom. At the start the **right** half is shaded and the dot sits low on the left, in the white half. Only C comes back like that; the mirror images come back with the shading on the left and the dot on the right.
17	B	Four of the shapes are **crosses**, shaded and turned different ways. B is a star.
18	D	Every picture has two parts. In four of them **both** parts are striped, whichever way the stripes run. D has a striped kite, but its circle is dotted.
19	A	Every picture has three parts, and in four of them they are a **circle**, a **square** and a **triangle** - in a row or one inside another, shaded any way. A has a pentagon where the triangle should be.
20	E	Four pictures are made of exactly two **stars** - side by side or one inside the other, any size and any shading. E has a star and a cross.
21	C	Four of the shapes are the same shape turned and flipped different ways: a trapezium with one side standing **straight up** from its base, making two square corners. C is an ordinary trapezium: both of its sloping sides lean in, so it has no square corners.
22	B	Add up the sides in each picture. Three pentagons make 5 + 5 + 5 = 15, a pentagon, a square and a hexagon make 5 + 4 + 6 = 15, a heptagon and two squares make 7 + 4 + 4 = 15, and two hexagons and a triangle make 6 + 3 + 6 = 15. B, a square holding two pentagons, makes only 4 + 5 + 5 = 14.
23	D	Every picture has four parts. In four of them exactly **two** are black - whatever the other two are shaded. D has three black marks inside its hexagon.

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24	A	Every picture has four parts. In four of them **three** parts have curved edges - circles, dots and semicircles - and one is made of straight lines. A has only two curved parts, the circle and the dot.
25	C	Each shape has **one more side** than the one before: three, four, five, six. So the next has **seven**: C, the heptagon. A has six sides, the same as the last, B has eight, and D and E go back to five and four.
26	A	Each hammer is the one before turned a quarter turn **clockwise**: its head goes from the top, to the right, to the bottom. So next the head stands up on the **left**, with the handle sticking out to the right: A. B goes back to the second hammer and C back to the first; D is the third flipped over, and E is the third not dotted.
27	D	Two things happen at every step: the black square **rises** a step up the frame, **and** it gets **bigger**. So next it is the biggest yet, and higher than the middle: D. A has risen but not grown, B has grown but not risen, C has grown but gone back down, and E is the right size in the right place but grey.
28	B	Two things happen at every step: the key is flipped left to right, so its head swaps sides, **and** it changes between white and dotted. The fourth key is dotted with its head on the right, so the next is **white** with its head on the **left** and its teeth underneath, like the first: B. A has its head on the left but is still dotted, C is white but its head is still on the right, and D and E have their teeth on top.
29	E	Two things happen at every step: the heptagon **grows**, **and** its outline switches between solid and dashed. The fourth is dashed, so the next is the biggest yet with a **solid** outline, still grey: E. A has grown but is still dashed, B is solid but has not grown, C is solid but has shrunk, and D is white.

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30	C	Two things happen at every step: the trapezium turns a quarter turn **clockwise**, **and** it gets a shade darker - white, light grey, grey, dark grey. After four quarter turns it is back the way it started, long side at the bottom and upright side on the right, so the next is that way up and **black**: C. A is the right way up but still dark grey, B is black but has not turned, D is black but upside down, and E is the right way up but has gone back to grey.
31	A	Each mark turns a quarter turn **anticlockwise** where it stands, and neither one moves. The arrow points right, up, then left, so next it points **down**, still on the left, and the triangle turns with it, still on the right: A. B has turned the whole picture, so the arrow has gone to the bottom; C has turned the marks back the other way; D has swapped them over; and E has turned them twice, back to the start.
32	D	Two things happen at every step: the triangle **grows**, **and** its shading moves a quarter of the way round **clockwise** - the left half, the top half, the right half, the bottom half. So next it is the biggest yet with its **left** half shaded: D. A has grown but is still shaded on the bottom, B is shaded on the left but has not grown, C has moved the shading back to the right, and E has jumped it to the top.
33	C	Along the top row the **bottom half** of the circle is shaded, and nothing else changes. So the kite must have its bottom half shaded: C. A has its top half shaded, B its left half, D is shaded all over, and E has only turned on its side.
34	B	Along the top row the triangle is turned an eighth of a turn **clockwise**. The arrowhead points down, so an eighth of a turn clockwise makes it point **down and to the left**: B. A has turned the other way and points down to the right, C has turned a quarter turn and points left, D has turned too far and points up to the left, and E points up.
35	E	Along the top row the square becomes a **hexagon** of the same size and shading, and the star inside stays as it was. So the circle must become a grey hexagon, still holding its black triangle: E. A has become a pentagon, B has turned the triangle into a hexagon instead, C has turned both into hexagons, and D has a white hexagon.

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36	A	Along the top row the trapezium is reflected in a mirror rising from the bottom left to the top right, which stands its long bottom side up on the **left** and lays its upright side along the top. Do the same to the triangle: its long side stands up on the left, its short upright side lies along the **bottom**, and its square corner stays at the **bottom left**, with the dot beside it: A. B has its square corner at the top right, C at the bottom right with its long side on the right, D at the top left, and E at the bottom right with its long side still along the bottom.
37	C	Along the top row the three marks stay where they are, but their colours move round: black turns **grey**, grey turns **white** and white turns **black**. So the white star turns black, the black dot turns grey and the grey cross turns white: C. A has moved the colours round the other way, B has made them all black, D has not changed them, and E has blackened the star but left the dot black and the cross grey.
38	E	Two things happen along the top row: the triangle is flipped **upside down** in a flat mirror - so its dot, low on the left, goes high on the **left - and** the dot grows. So the semicircle must be flipped upside down, carrying the square from low on the right to high on the **right**, and the square must grow: E. A is flipped but the square has not grown, B has a bigger square but is not flipped, C has the square high on the left, which is a half turn, and D has done both but turned the square white.
39	B	Two things happen along the top row: the star on the **right** is taken away, **and** the square on the left grows where it stands. So the dot must go and the triangle on the left must grow: B. A has kept the dot and grown it instead, C has lost the dot but not grown the triangle, D has grown the triangle but kept the dot, and E has moved the grown triangle into the middle.

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40	D	Two things happen along the top row: the triangle is turned a quarter turn **clockwise**, **and** it is filled with dots. So the boot must be turned a quarter turn clockwise - its leg now lies along the **top** and its foot hangs down on the left, toe pointing **down** - and dotted: D. A is turned but still white, B is dotted but not turned, C has turned the other way, so its leg lies along the bottom and its toe points up, and E is upside down.
41	C	The semicircles take M and the hexagon takes N, so the top letter is the shape. The black shape takes X and the striped ones take Y, so the bottom letter is the filling. A black hexagon is NX.
42	A	One kite on its own takes D and two kites take E, so the top letter counts the kites. The grey kites take S and the white ones take T, so the bottom letter is the shading. One white kite is DT.
43	B	Every shape is a circle holding a white mark. The top letter is the mark: a star takes J, a square K and a triangle L. The bottom letter is the circle's shading: white takes X, grey Y and black Z. The test shape is a white circle holding a square, so KX.
44	B	Some pairs sit one inside the other and some side by side, which is not coded. The top letter is the **pair of shapes**: a circle with a triangle takes P, and a square with a star takes Q. The bottom letter counts the **shaded** shapes: none takes V, one takes W and two take X. The test shape is a white circle holding a black triangle - one shaded shape - so PW.
45	E	The square and the kite share D and the two different triangles share E, so the top letter is not the kind of shape but how many **sides** it has: four take D, three take E and six take F. The bottom letter is the dot: black takes J and white takes K. The test shape is a trapezium - four sides - holding a white dot, so DK.
46	A	Some shapes sit inside others and some sit in a row, which is not coded: the top letter counts **all** the shapes. Two take L, three take M and four take N. The bottom letter says whether any of them is **curved**: none takes S and one takes T. The test shape is a row of four with a circle among them, so NT.

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47	D	Add up the sides. A square and a triangle make 4 + 3 = 7 and take Q, however they are set out; a pentagon and a triangle, or two squares, make 8 and take R. So the top letter is the **total number of sides**. The bottom letter counts the dashed outlines: none takes V, one takes W and two take X. The test shape is a dashed triangle holding a dashed square - 7 sides, two dashed - so QX.
48	B	The top letter is which **pair of shapes** there is, counted by sides: two triangles of any kind take D, a triangle and a four-sided shape take E, and two four-sided shapes take F. The bottom letter says whether a shape is shaded over **half**: none takes X and one takes Y. The test shape is a rectangle half shaded, holding a triangle, so EY.

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