

PRACTICE EXAM 12: CCAT 7 LEVEL 9 SIMULATION (170 QUESTIONS)

This independent practice exam has 170 original questions across the verbal, quantitative, and nonverbal batteries. Allow 10 minutes for each of the nine subtests if timed practice is permitted by your school. There is no universal passing score. Complete the required figure artwork before using visual items.

1. Clock is to time as compass is to which word?
 - A. direction
 - B. painting
 - C. paintings
 - D. rainfall
2. Thermometer is to temperature as scale is to which word?
 - A. colony
 - B. burrow
 - C. weight
 - D. person
3. Speedometer is to speed as clock is to which word?
 - A. head
 - B. time
 - C. song
 - D. beat
4. Rain Gauge is to rainfall as ruler is to which word?
 - A. museum
 - B. school
 - C. length
 - D. colony
5. Flour is to bread as leather is to which word?
 - A. leaf
 - B. deer
 - C. fawn
 - D. shoe
6. Wood is to table as metal is to which word?
 - A. spoon
 - B. bread
 - C. clock
 - D. petal
7. Paper is to book as cotton is to which word?
 - A. shirt
 - B. field
 - C. pilot
 - D. chick
8. Metal is to spoon as wool is to which word?
 - A. compass
 - B. paddler
 - C. sweater

D. kitchen

9. Library is to books as gallery is to which word?

- A. rain gauge**
- B. paintings**
- C. librarian**
- D. astronaut**

10. Orchard is to trees as museum is to which word?

- A. paintings**
- B. direction**
- C. rainfall**
- D. artifacts**

11. Garage is to cars as library is to which word?

- A. chick**
- B. spoon**
- C. books**
- D. clock**

12. Aquarium is to fish as garden is to which word?

- A. plants**
- B. flower**
- C. cotton**
- D. bakery**

13. Garden is to plants as aquarium is to which word?

- A. bear**
- B. fish**
- C. book**
- D. drum**

14. Captain is to ship as engineer is to which word?

- A. cloud**
- B. broom**
- C. sound**
- D. train**

15. Rider is to bicycle as sailor is to which word?

- A. stir**
- B. head**
- C. page**
- D. boat**

16. Engineer is to train as driver is to which word?

- A. ear**
- B. bus**
- C. hat**
- D. ant**

17. Paddler is to canoe as captain is to which word?

- A. ship**
- B. time**

- C. beat
- D. poem

18. Puppy is to dog as kitten is to which word?

- A. leg
- B. fin
- C. cat
- D. hen

19. Calf is to cow as fawn is to which word?

- A. hand
- B. deer
- C. boat
- D. book

20. Lamb is to sheep as cub is to which word?

- A. bear
- B. foal
- C. clay
- D. sock

21. Cub is to bear as lamb is to which word?

- A. table
- B. cloud
- C. ruler
- D. sheep

22. Page is to book as leaf is to which word?

- A. bear
- B. shoe
- C. tree
- D. fawn

23. During a holiday, consider this sentence: Although the path was covered in ice, the walkers moved ____.

- A. carefully
- B. rapidly
- C. carelessly
- D. loudly

24. During a holiday, consider this sentence: The glass was so ____ that everyone could see through it.

- A. rough
- B. clear
- C. heavy
- D. opaque

25. During a holiday, consider this sentence: Because the seed had no water, it began to ____.

- A. sing
- B. float
- C. wilt
- D. sparkle

26. During a holiday, consider this sentence: The library was quiet, so Mina spoke in a ____.

- A. cheer

- B.** shout
- C.** song
- D.** whisper

27. During a holiday, consider this sentence: The team shared the work, making the task ____ to finish.

- A.** longer
- B.** harder
- C.** heavier
- D.** easier

28. During a holiday, consider this sentence: The rain stopped, and a ____ appeared in the sky.

- A.** tunnel
- B.** ladder
- C.** rainbow
- D.** pillow

29. During a holiday, consider this sentence: A map helps travellers find the correct ____.

- A.** colour
- B.** route
- C.** flavour
- D.** sound

30. During a holiday, consider this sentence: The puppy was tired after running and soon fell ____.

- A.** asleep
- B.** apart
- C.** upward
- D.** inside

31. During a holiday, consider this sentence: The gardener placed the young plant where it would receive ____.

- A.** noise
- B.** sunlight
- C.** darkness
- D.** dust

32. During a holiday, consider this sentence: The box was fragile, so Lena carried it ____.

- A.** wildly
- B.** suddenly
- C.** roughly
- D.** gently

33. During a holiday, consider this sentence: The instructions were ____ enough for everyone to follow.

- A.** clear
- B.** hidden
- C.** silent
- D.** broken

34. During a holiday, consider this sentence: The rabbit hid when it heard an unfamiliar ____.

- A.** colour
- B.** taste
- C.** noise
- D.** shape

35. During a holiday, consider this sentence: After practising every day, Omar became more ____ at skipping rope.

- A. skilled
- B. distant
- C. sleepy
- D. confused

36. During a holiday, consider this sentence: The road was blocked, so the bus took a different ____.

- A. recipe
- B. number
- C. season
- D. route

37. During a holiday, consider this sentence: The muddy boots left ____ across the clean floor.

- A. shadows
- B. prints
- C. songs
- D. clouds

38. During a holiday, consider this sentence: The hikers rested because the climb was ____.

- A. silent
- B. empty
- C. steep
- D. flat

39. During a holiday, consider this sentence: Nora checked the clock because she did not want to be ____.

- A. late
- B. round
- C. quiet
- D. short

40. During a holiday, consider this sentence: The soup was too hot, so Jay waited for it to ____.

- A. grow
- B. cool
- C. shine
- D. rise

41. During a holiday, consider this sentence: The bridge was narrow, so the cyclists crossed it one at a ____.

- A. colour
- B. song
- C. time
- D. shape

42. During a holiday, consider this sentence: The audience clapped to show that they ____ the performance.

- A. missed
- B. avoided
- C. forgot
- D. enjoyed

43. Oak, birch, and cedar belong together. Which word belongs in the same group?

- A. banana
- B. guitar
- C. elm
- D. shirt

44. Robin, finch, and eagle belong together. Which word belongs in the same group?
- A. spoon
 - B. owl
 - C. pastel
 - D. fly
45. Hammer, wrench, and pliers belong together. Which word belongs in the same group?
- A. rake
 - B. trolley
 - C. thunder
 - D. creek
46. Violin, trumpet, and guitar belong together. Which word belongs in the same group?
- A. grape
 - B. swimming
 - C. lagoon
 - D. clarinet
47. Cup, mug, and fork belong together. Which word belongs in the same group?
- A. bowl
 - B. triangle
 - C. oak
 - D. ant
48. Carrot, broccoli, and celery belong together. Which word belongs in the same group?
- A. sparrow
 - B. spinach
 - C. square
 - D. crayon
49. River, stream, and ocean belong together. Which word belongs in the same group?
- A. marker
 - B. daisy
 - C. pond
 - D. crow
50. Jacket, vest, and shirt belong together. Which word belongs in the same group?
- A. wrench
 - B. subway
 - C. fog
 - D. skirt
51. Triangle, hexagon, and octagon belong together. Which word belongs in the same group?
- A. banana
 - B. moth
 - C. rectangle
 - D. fork
52. Pencil, chalk, and charcoal belong together. Which word belongs in the same group?
- A. pastel
 - B. bat
 - C. nurse
 - D. spoon

53. Train, subway, and ferry belong together. Which word belongs in the same group?
- A. rake
 - B. thunder
 - C. yacht
 - D. trolley
54. Apple, plum, and banana belong together. Which word belongs in the same group?
- A. shovel
 - B. grape
 - C. socks
 - D. clarinet
55. Ant, butterfly, and moth belong together. Which word belongs in the same group?
- A. cup
 - B. bee
 - C. oak
 - D. soccer
56. Baker, farmer, and teacher belong together. Which word belongs in the same group?
- A. square
 - B. crayon
 - C. carpenter
 - D. maple
57. Canoe, sailboat, and raft belong together. Which word belongs in the same group?
- A. crow
 - B. drill
 - C. tram
 - D. ferry
58. Gold, iron, and tin belong together. Which word belongs in the same group?
- A. zinc
 - B. subway
 - C. plum
 - D. cricket
59. Dog, cow, and whale belong together. Which word belongs in the same group?
- A. bat
 - B. banana
 - C. moth
 - D. octagon
60. Rose, lily, and orchid belong together. Which word belongs in the same group?
- A. rectangle
 - B. iris
 - C. fly
 - D. elm
61. Rain, fog, and storm belong together. Which word belongs in the same group?
- A. yacht
 - B. rake
 - C. thunder
 - D. swan

62. Soccer, cricket, and baseball belong together. Which word belongs in the same group?

- A.** clarinet
- B.** shuttle
- C.** shovel
- D.** swimming

63. 15 is to 20 as 17 is to 22. Using the same rule, 13 is to which number?

- A.** 23
- B.** 18
- C.** 28
- D.** 21

64. 24 is to 19 as 26 is to 21. Using the same rule, 23 is to which number?

- A.** 18
- B.** 17
- C.** 23
- D.** 21

65. 15 is to 60 as 17 is to 68. Using the same rule, 15 is to which number?

- A.** 64
- B.** 68
- C.** 56
- D.** 60

66. 16 is to 22 as 18 is to 24. Using the same rule, 13 is to which number?

- A.** 31
- B.** 25
- C.** 19
- D.** 22

67. 26 is to 20 as 28 is to 22. Using the same rule, 24 is to which number?

- A.** 12
- B.** 18
- C.** 30
- D.** 21

68. 16 is to 80 as 18 is to 90. Using the same rule, 15 is to which number?

- A.** 70
- B.** 78
- C.** 80
- D.** 75

69. 17 is to 24 as 19 is to 26. Using the same rule, 13 is to which number?

- A.** 20
- B.** 27
- C.** 23
- D.** 19

70. 28 is to 21 as 30 is to 23. Using the same rule, 25 is to which number?

- A.** 32
- B.** 21
- C.** 18
- D.** 17

71. 17 is to 34 as 19 is to 38. Using the same rule, 15 is to which number?

- A.** 30
- B.** 29
- C.** 34
- D.** 33

72. 18 is to 26 as 20 is to 28. Using the same rule, 13 is to which number?

- A.** 37
- B.** 22
- C.** 20
- D.** 21

73. 30 is to 22 as 32 is to 24. Using the same rule, 26 is to which number?

- A.** 21
- B.** 19
- C.** 18
- D.** 34

74. 18 is to 54 as 20 is to 60. Using the same rule, 15 is to which number?

- A.** 42
- B.** 45
- C.** 51
- D.** 48

75. 19 is to 21 as 21 is to 23. Using the same rule, 13 is to which number?

- A.** 17
- B.** 15
- C.** 16
- D.** 13

76. 25 is to 23 as 27 is to 25. Using the same rule, 20 is to which number?

- A.** 19
- B.** 20
- C.** 21
- D.** 18

77. 19 is to 76 as 21 is to 84. Using the same rule, 15 is to which number?

- A.** 60
- B.** 63
- C.** 59
- D.** 56

78. 20 is to 23 as 22 is to 25. Using the same rule, 13 is to which number?

- A.** 13
- B.** 15
- C.** 16
- D.** 19

79. 27 is to 24 as 29 is to 26. Using the same rule, 21 is to which number?

- A.** 18
- B.** 21
- C.** 24
- D.** 17

80. 20 is to 100 as 22 is to 110. Using the same rule, 15 is to which number?

- A.** 80
- B.** 76
- C.** 75
- D.** 74

81. Which number makes this equation true: $20 + 7 = \square + 2$?

- A.** 24
- B.** 25
- C.** 27
- D.** 32

82. Which number makes this equation true: $\square - 7 = 20 + 2$?

- A.** 31
- B.** 22
- C.** 36
- D.** 29

83. Which number makes this equation true: $21 + 7 = \square + 7$?

- A.** 23
- B.** 21
- C.** 19
- D.** 28

84. Which number makes this equation true: $\square - 7 = 21 + 7$?

- A.** 36
- B.** 37
- C.** 34
- D.** 35

85. Which number makes this equation true: $4 + 8 = \square + 12$?

- A.** 2
- B.** -1
- C.** 0
- D.** 8

86. Which number makes this equation true: $\square - 8 = 4 + 12$?

- A.** 24
- B.** 16
- C.** 26
- D.** 23

87. Which number makes this equation true: $5 + 8 = \square + 6$?

- A.** 6
- B.** 5
- C.** 8
- D.** 7

88. Which number makes this equation true: $\square - 8 = 5 + 6$?

- A.** 21
- B.** 27
- C.** 19
- D.** 20

89. Which number makes this equation true: $6 + 8 = \square + 11$?

- A.** 1
- B.** 3
- C.** 4
- D.** 2

90. Which number makes this equation true: $\square - 8 = 6 + 11$?

- A.** 25
- B.** 33
- C.** 24
- D.** 17

91. Which number makes this equation true: $7 + 8 = \square + 5$?

- A.** 12
- B.** 10
- C.** 9
- D.** 18

92. Which number makes this equation true: $\square - 8 = 7 + 5$?

- A.** 20
- B.** 21
- C.** 18
- D.** 19

93. Which number makes this equation true: $8 + 8 = \square + 10$?

- A.** -2
- B.** 5
- C.** 6
- D.** 8

94. Which number makes this equation true: $\square - 8 = 8 + 10$?

- A.** 25
- B.** 28
- C.** 27
- D.** 26

95. Which number makes this equation true: $9 + 8 = \square + 4$?

- A.** 14
- B.** 13
- C.** 21
- D.** 15

96. Which number makes this equation true: $\square - 8 = 9 + 4$?

- A.** 29
- B.** 20
- C.** 21
- D.** 23

97. What number comes next in the series 14, 19, 24, 29, ____?

- A.** 37
- B.** 44
- C.** 39
- D.** 34

98. What number comes next in the series 14, 19, 25, 32, ____?

- A.** 40
- B.** 43
- C.** 35
- D.** 41

99. What number comes next in the series 17, 35, 71, 143, ____?

- A.** 286
- B.** 287
- C.** 297
- D.** 282

100. What number comes next in the series 15, 20, 25, 30, ____?

- A.** 36
- B.** 30
- C.** 35
- D.** 38

101. What number comes next in the series 15, 20, 26, 33, ____?

- A.** 41
- B.** 42
- C.** 40
- D.** 51

102. What number comes next in the series 18, 37, 75, 151, ____?

- A.** 298
- B.** 313
- C.** 308
- D.** 303

103. What number comes next in the series 16, 21, 26, 31, ____?

- A.** 41
- B.** 39
- C.** 31
- D.** 36

104. What number comes next in the series 16, 21, 27, 34, ____?

- A.** 52
- B.** 42
- C.** 41
- D.** 43

105. What number comes next in the series 19, 39, 79, 159, ____?

- A.** 319
- B.** 324
- C.** 314
- D.** 320

106. What number comes next in the series 17, 22, 27, 32, ____?

- A.** 38
- B.** 47
- C.** 37
- D.** 32

107. What number comes next in the series 17, 22, 28, 35, ____?

- A. 43
- B. 42
- C. 53
- D. 48

108. What number comes next in the series 20, 41, 83, 167, ____?

- A. 336
- B. 338
- C. 334
- D. 335

109. What number comes next in the series 18, 23, 28, 33, ____?

- A. 48
- B. 33
- C. 38
- D. 37

110. What number comes next in the series 18, 23, 29, 36, ____?

- A. 47
- B. 44
- C. 49
- D. 54

111. What number comes next in the series 21, 43, 87, 175, ____?

- A. 354
- B. 351
- C. 361
- D. 350

112. What number comes next in the series 19, 24, 29, 34, ____?

- A. 39
- B. 40
- C. 42
- D. 38

113. What number comes next in the series 19, 24, 30, 37, ____?

- A. 46
- B. 40
- C. 48
- D. 45

114. What number comes next in the series 22, 45, 91, 183, ____?

- A. 377
- B. 366
- C. 367
- D. 368

115. In this hexagon matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

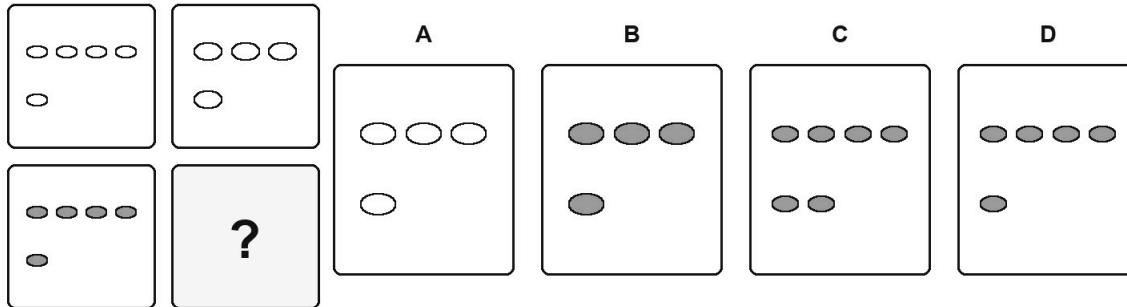


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

116. In this oval matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

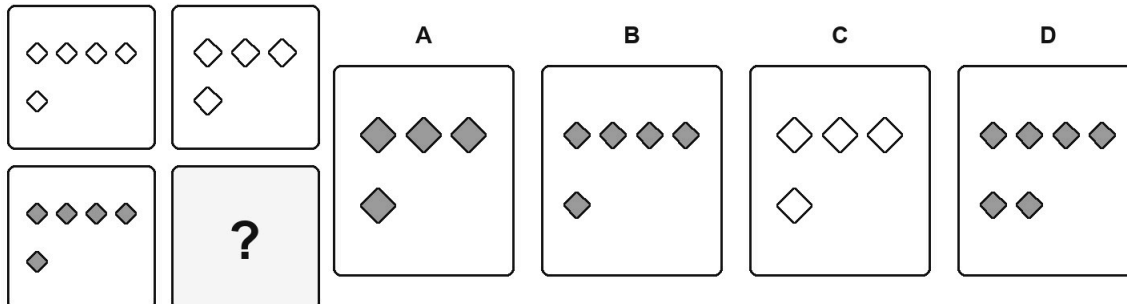
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

117. In this diamond matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

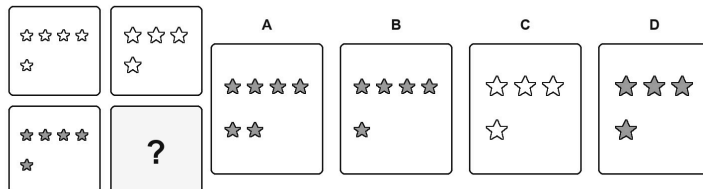
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

118. In this star matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

Complete the matrix

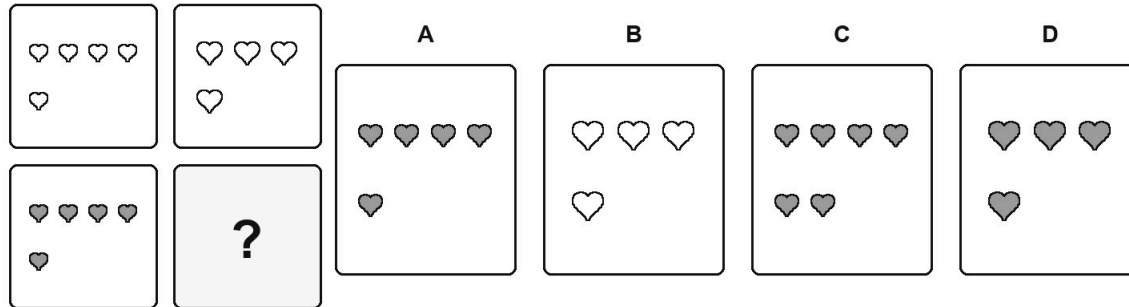


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

119. In this heart matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

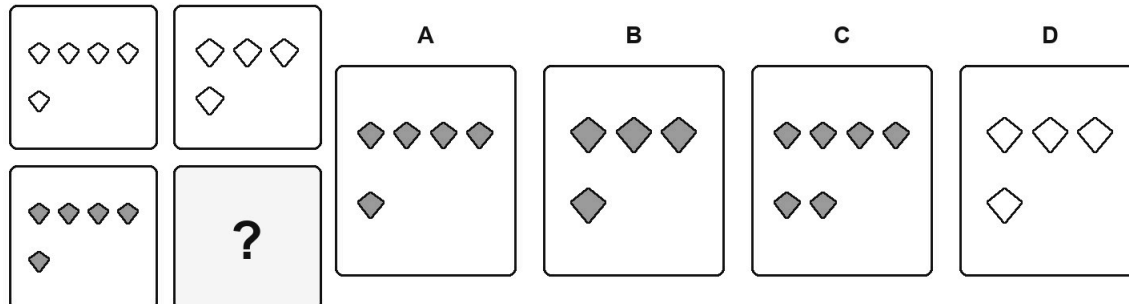
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

120. In this kite matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

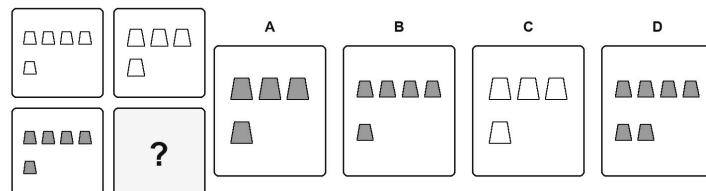
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

121. In this trapezoid matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

Complete the matrix

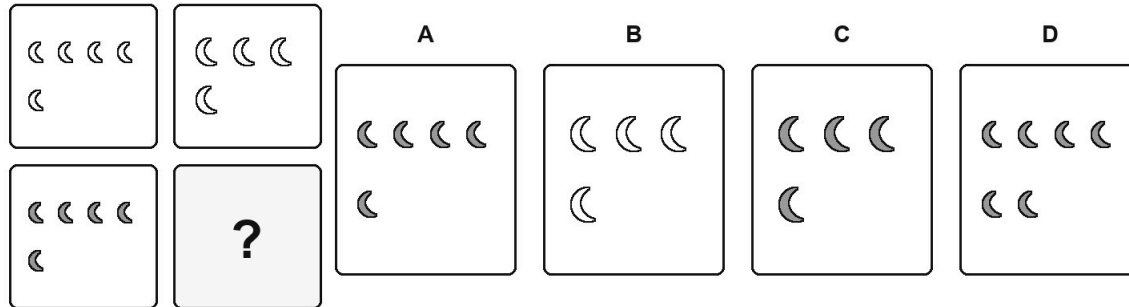


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

122. In this crescent matrix with grey symbols below, the top row has 5 then 4 symbols. Which panel completes the lower-right cell?

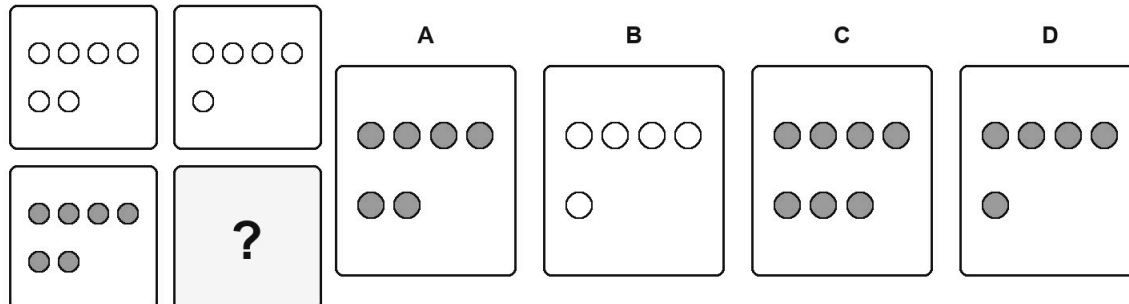
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

123. In this circle matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

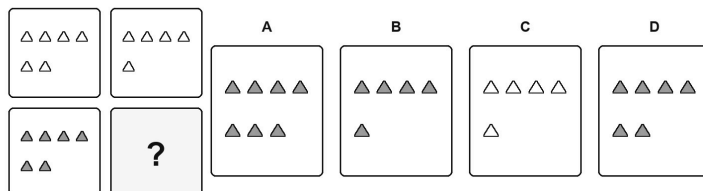
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

124. In this triangle matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

Complete the matrix

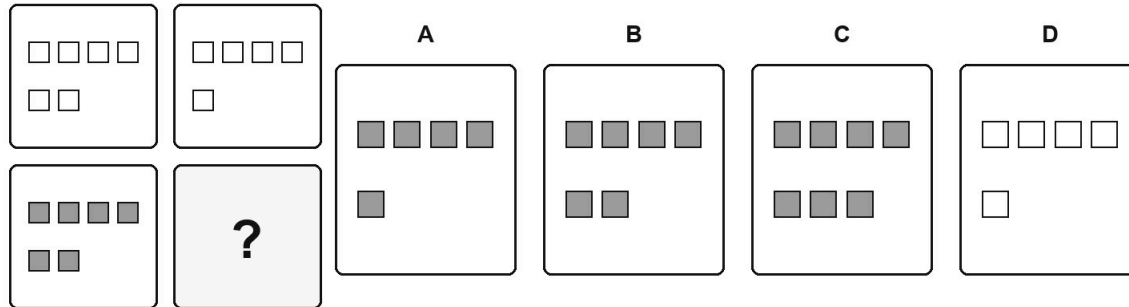


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

125. In this square matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

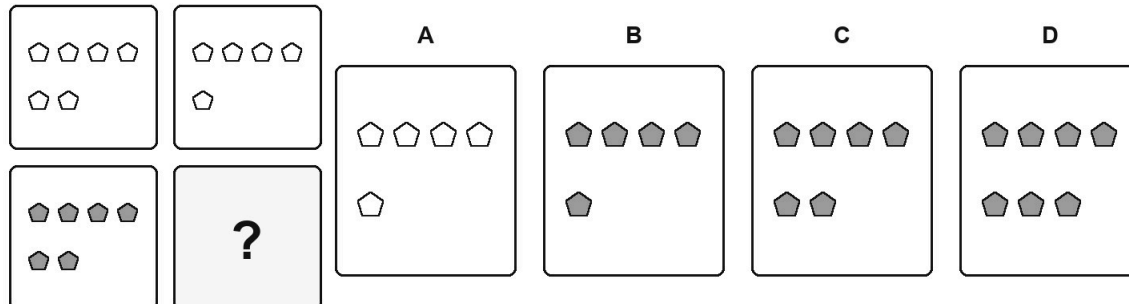
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

126. In this pentagon matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

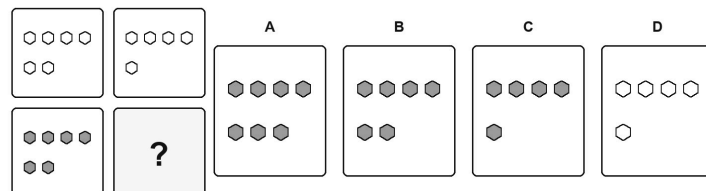
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

127. In this hexagon matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

Complete the matrix

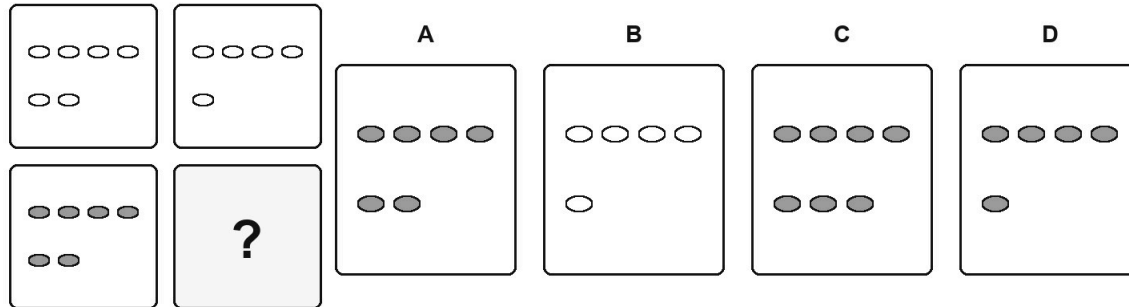


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

128. In this oval matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

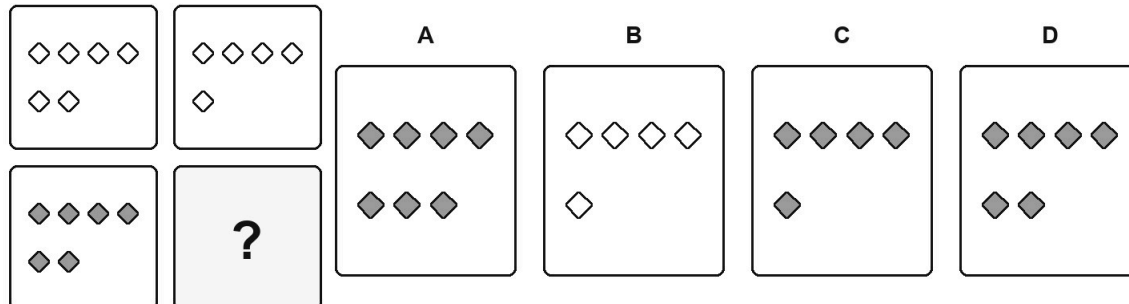
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

129. In this diamond matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

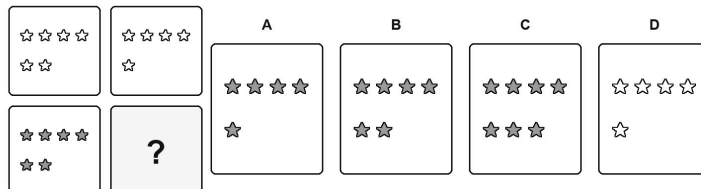
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

130. In this star matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

Complete the matrix

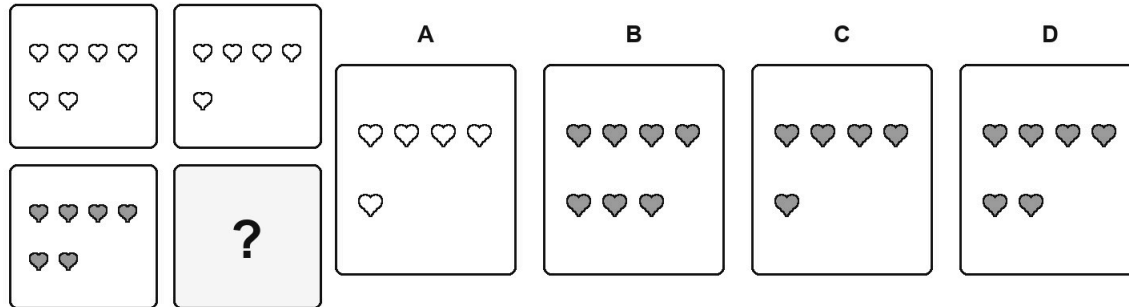


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

131. In this heart matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

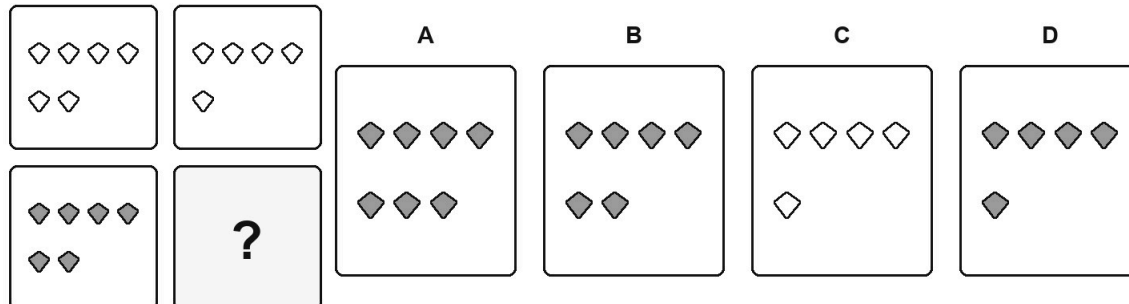
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

132. In this kite matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

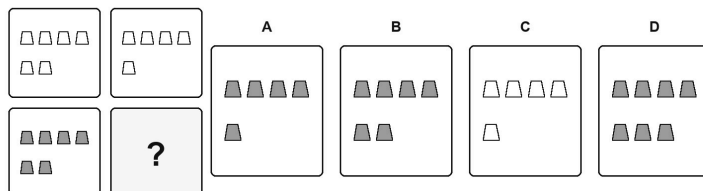
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

133. In this trapezoid matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

Complete the matrix

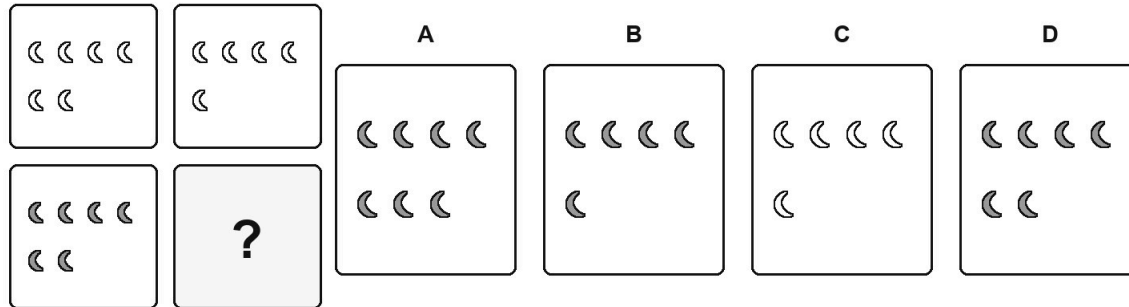


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

134. In this crescent matrix with grey symbols below, the top row has 6 then 5 symbols. Which panel completes the lower-right cell?

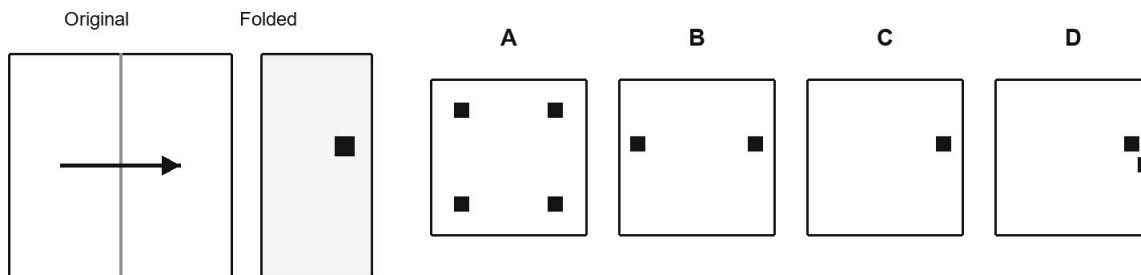
Complete the matrix



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

135. The paper is folded once along the vertical line and a square hole is punched at grid point (5,3). Which panel shows the opened paper?

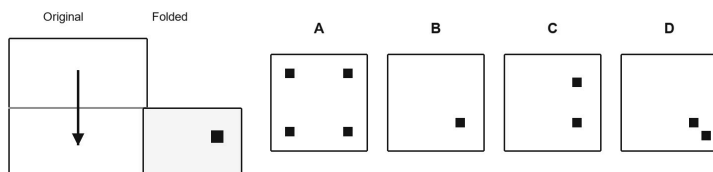
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

136. The paper is folded once along the horizontal line and a square hole is punched at grid point (5,3). Which panel shows the opened paper?

Fold, punch, then unfold



- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

137. The paper is folded once along the vertical line and a square hole is punched at grid point (6,3). Which panel shows the opened paper?

Fold, punch, then unfold

Original

Folded

A

B

C

D

The diagram shows a square piece of paper being folded vertically. An arrow points from the left side to the right side, indicating the fold direction. The 'Folded' state shows a single vertical rectangle with a small square hole on the right edge. Four options (A, B, C, D) show the possible unfolded states. Option A has one hole on the right edge. Option B has one hole on the right edge. Option C has four holes, one in each quadrant. Option D has two holes, one on each of the long vertical edges.

- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

138. The paper is folded once along the horizontal line and a square hole is punched at grid point (6,3). Which panel shows the opened paper?

Fold, punch, then unfold

Original

Folded

A

B

C

D

The diagram shows a square piece of paper being folded horizontally. An arrow points from the top side to the bottom side, indicating the fold direction. The 'Folded' state shows a single horizontal rectangle with a small square hole on the right edge. Four options (A, B, C, D) show the possible unfolded states. Option A has two holes, one on each of the long vertical edges. Option B has two holes, one on each of the long vertical edges. Option C has four holes, one in each quadrant. Option D has one hole on the right edge.

- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

139. The paper is folded once along the vertical line and a square hole is punched at grid point (1,4). Which panel shows the opened paper?

Fold, punch, then unfold

Original

Folded

A

B

C

D

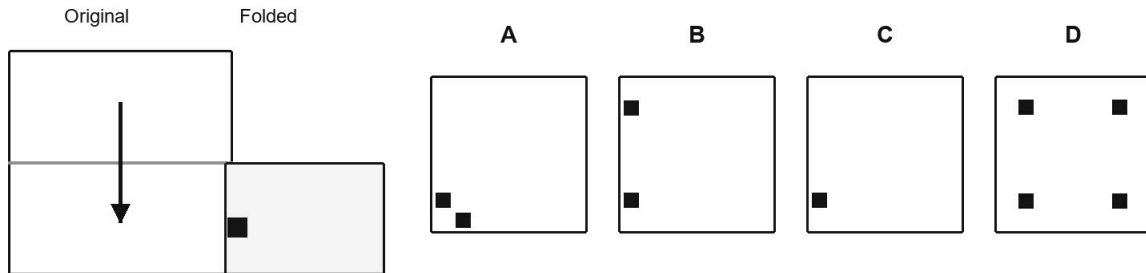
The diagram shows a square piece of paper being folded vertically. An arrow points from the left side to the right side, indicating the fold direction. The 'Folded' state shows a single vertical rectangle with a small square hole on the left edge. Four options (A, B, C, D) show the possible unfolded states. Option A has one hole on the left edge. Option B has two holes, one in each quadrant. Option C has four holes, one in each quadrant. Option D has one hole on the right edge.

- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

140. The paper is folded once along the horizontal line and a square hole is punched at grid point (1,4). Which panel shows the opened paper?

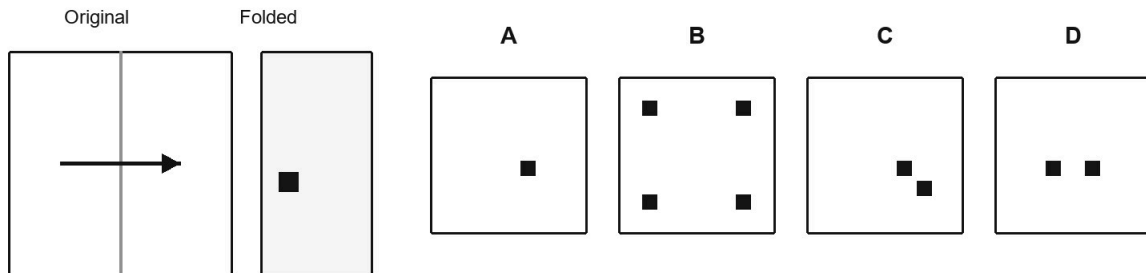
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

141. The paper is folded once along the vertical line and a square hole is punched at grid point (2,4). Which panel shows the opened paper?

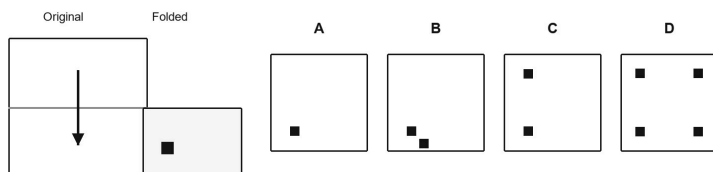
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

142. The paper is folded once along the horizontal line and a square hole is punched at grid point (2,4). Which panel shows the opened paper?

Fold, punch, then unfold

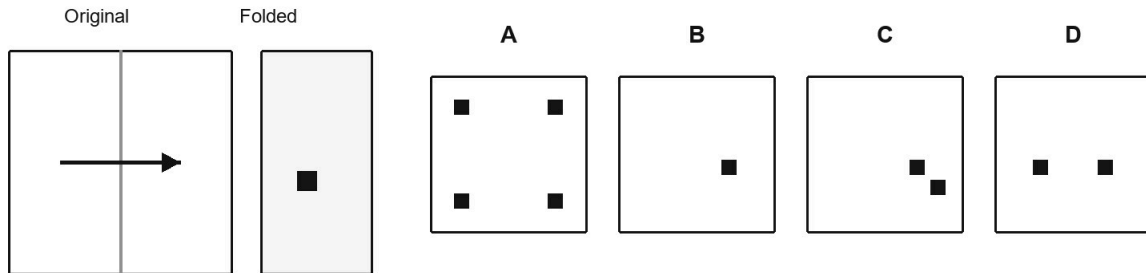


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

143. The paper is folded once along the vertical line and a square hole is punched at grid point (3,4). Which panel shows the opened paper?

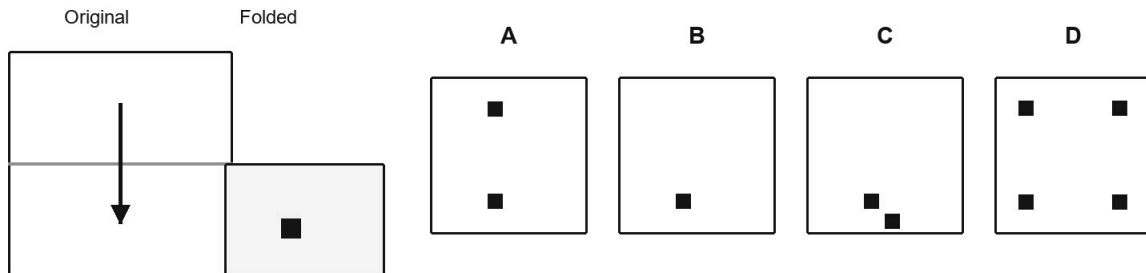
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

144. The paper is folded once along the horizontal line and a square hole is punched at grid point (3,4). Which panel shows the opened paper?

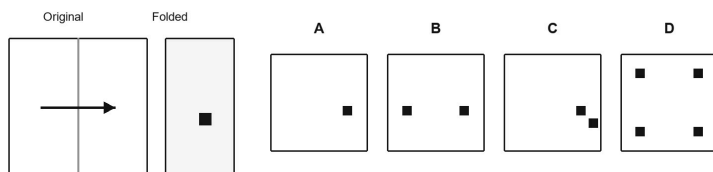
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

145. The paper is folded once along the vertical line and a square hole is punched at grid point (4,4). Which panel shows the opened paper?

Fold, punch, then unfold

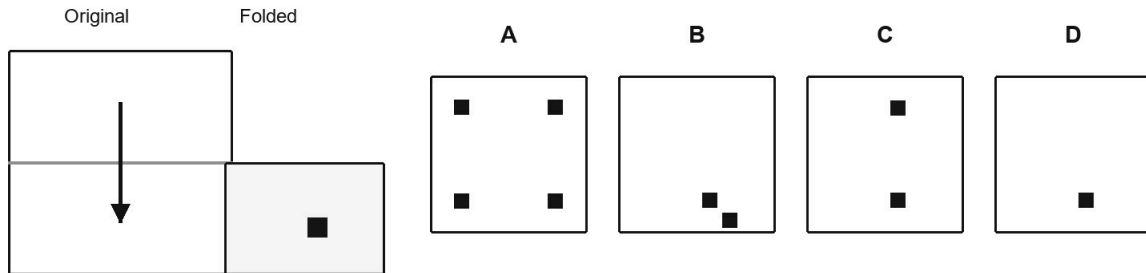


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

146. The paper is folded once along the horizontal line and a square hole is punched at grid point (4,4). Which panel shows the opened paper?

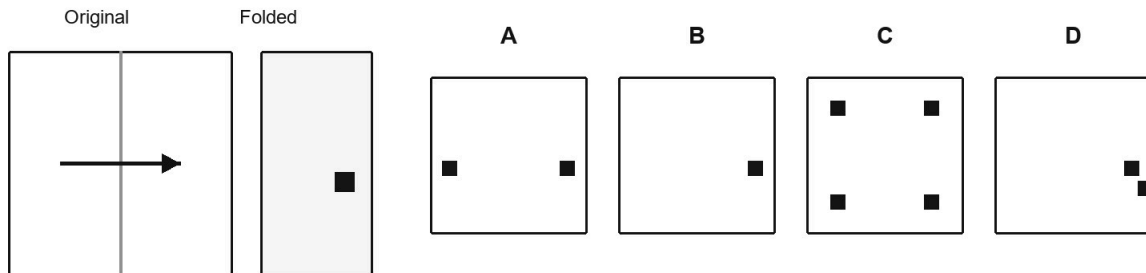
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

147. The paper is folded once along the vertical line and a square hole is punched at grid point (5,4). Which panel shows the opened paper?

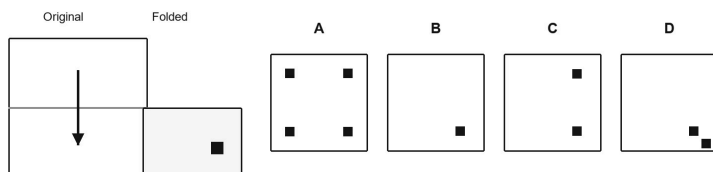
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

148. The paper is folded once along the horizontal line and a square hole is punched at grid point (5,4). Which panel shows the opened paper?

Fold, punch, then unfold

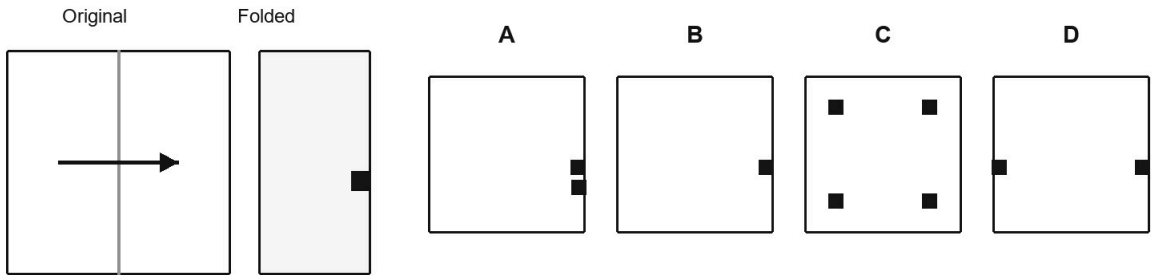


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

149. The paper is folded once along the vertical line and a square hole is punched at grid point (6,4). Which panel shows the opened paper?

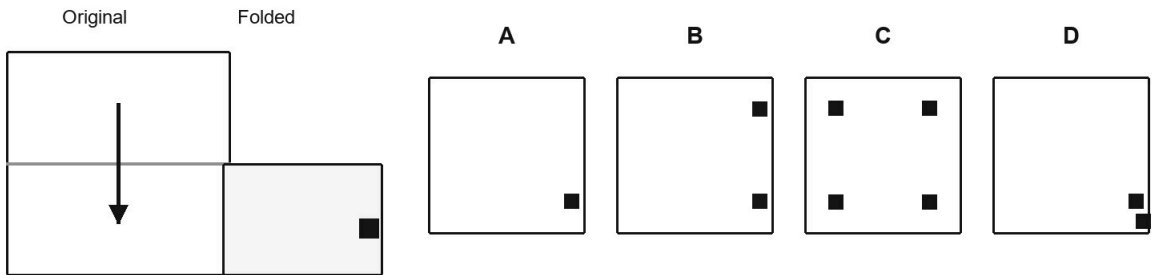
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

150. The paper is folded once along the horizontal line and a square hole is punched at grid point (6,4). Which panel shows the opened paper?

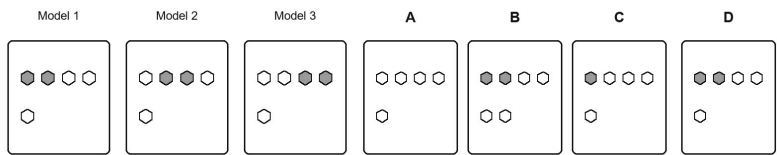
Fold, punch, then unfold



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

151. These three hexagon panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

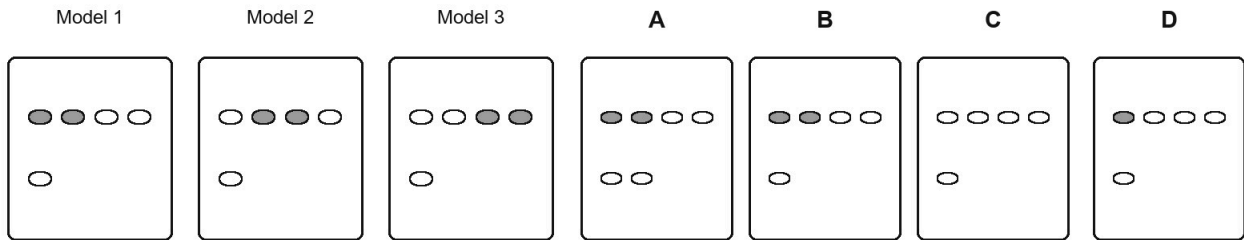


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

152. These three oval panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

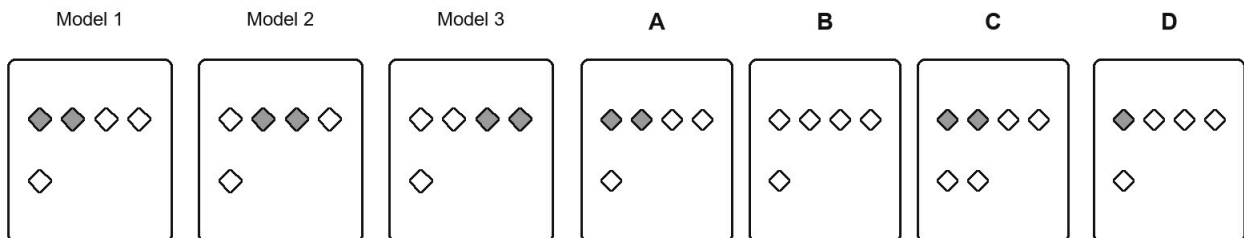
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

153. These three diamond panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

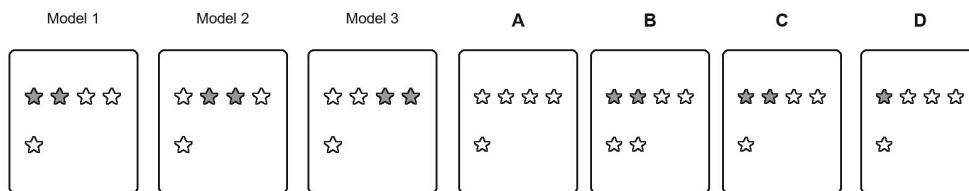
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

154. These three star panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

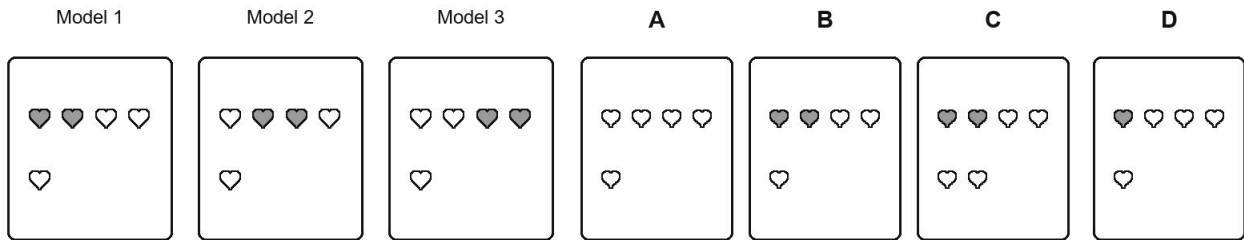


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

155. These three heart panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

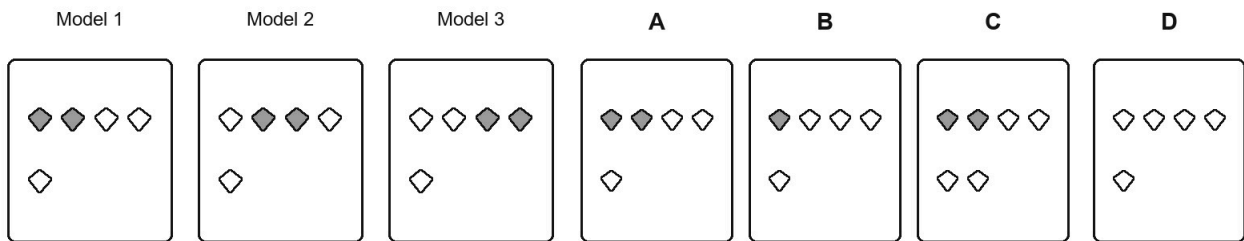
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

156. These three kite panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

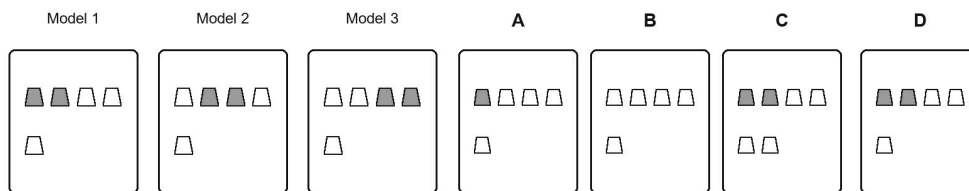
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

157. These three trapezoid panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

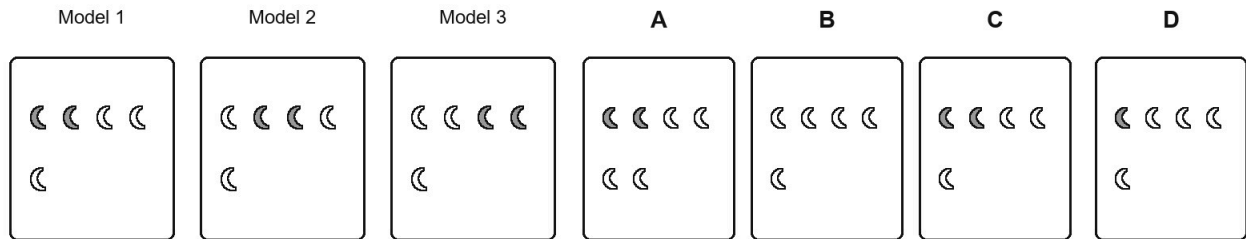


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

158. These three crescent panels each show 5 symbols with 2 grey mark(s). Which new panel belongs in their group?

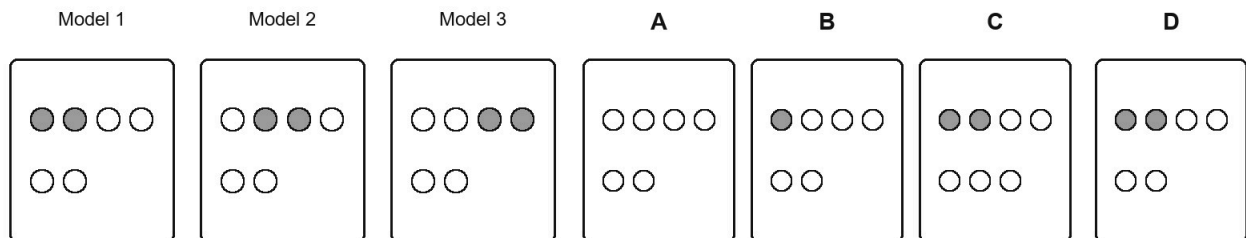
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

159. These three circle panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

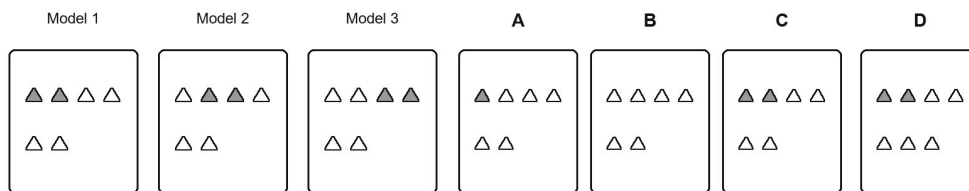
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

160. These three triangle panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

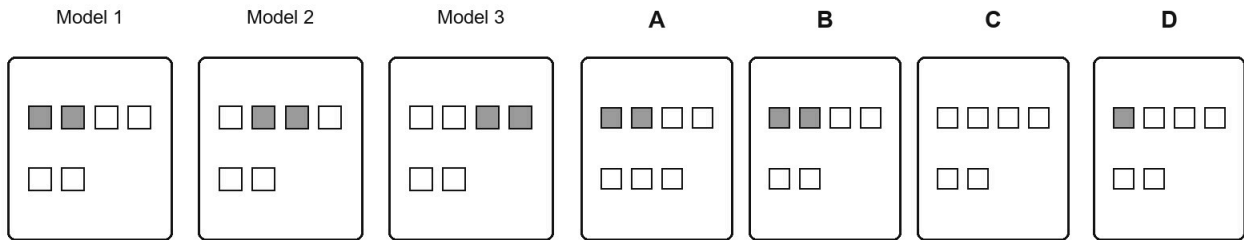


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

161. These three square panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

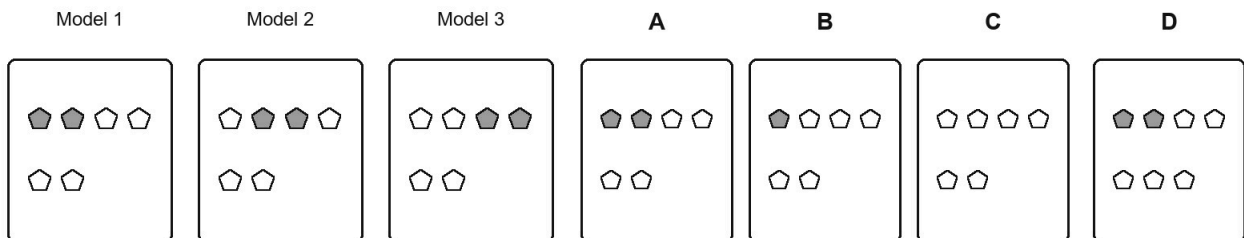
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

162. These three pentagon panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

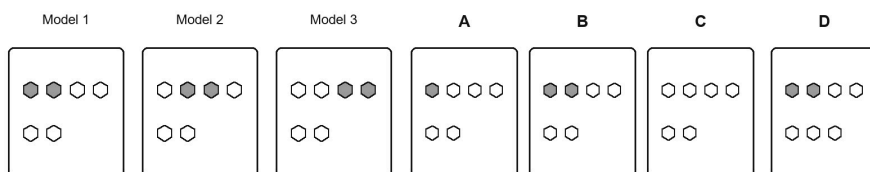
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

163. These three hexagon panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

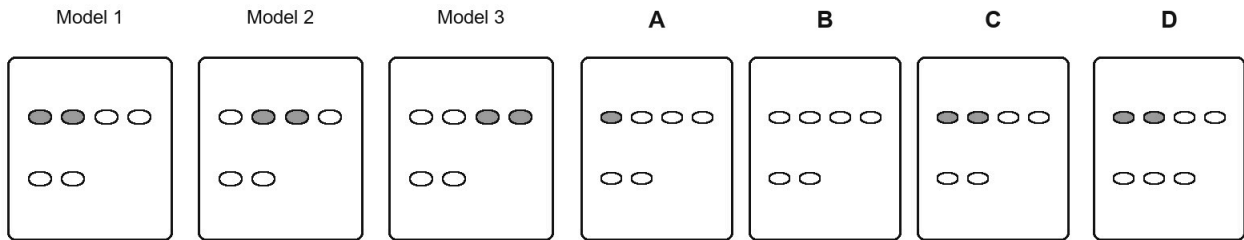


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

164. These three oval panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

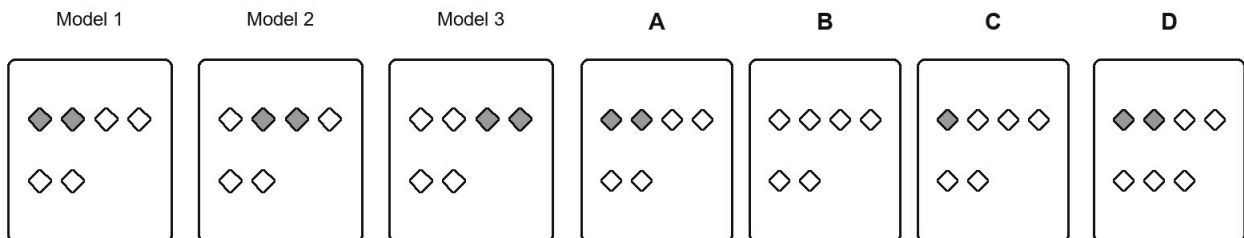
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

165. These three diamond panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

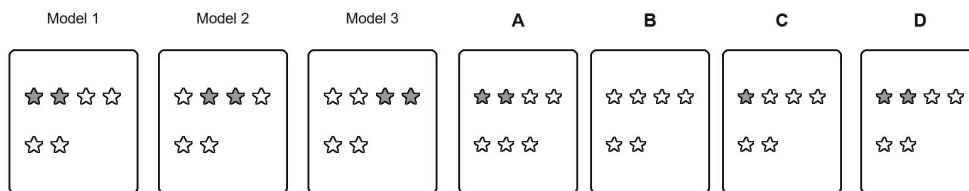
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

166. These three star panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

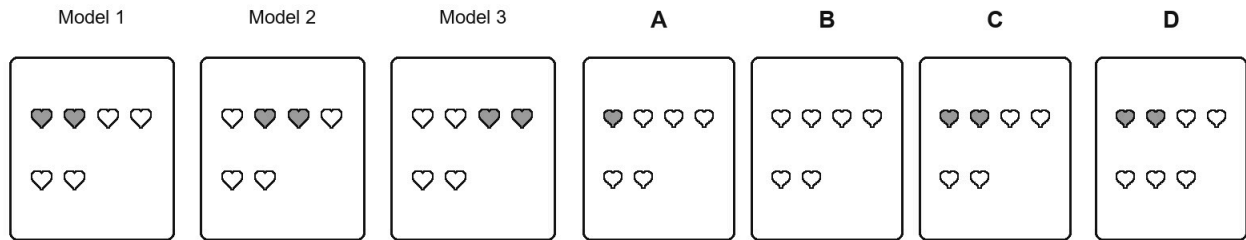


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

167. These three heart panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

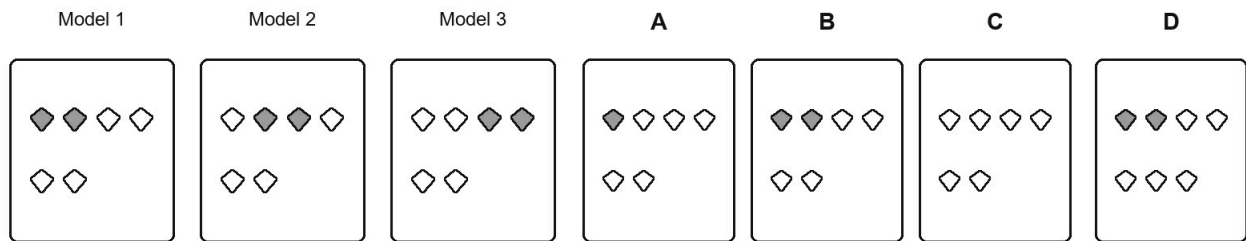
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

168. These three kite panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

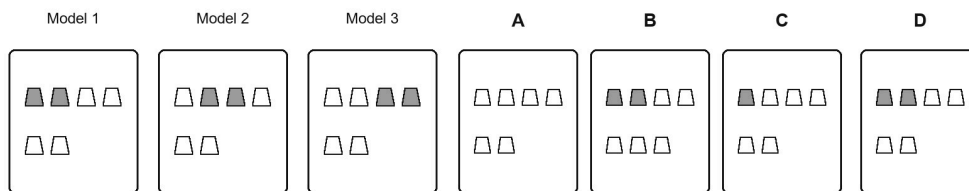
Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

169. These three trapezoid panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group

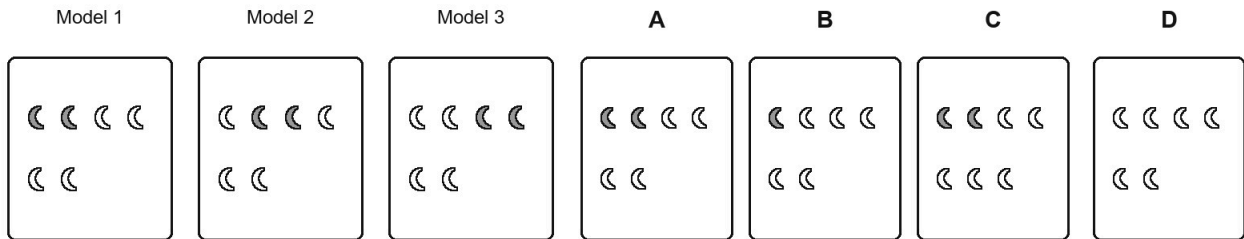


- A. Panel A

- B. Panel B
- C. Panel C
- D. Panel D

170. These three crescent panels each show 6 symbols with 2 grey mark(s). Which new panel belongs in their group?

Find the matching group



- A. Panel A
- B. Panel B
- C. Panel C
- D. Panel D

Practice Exam 12: Answer Key And Explanations

- 1. A** — Clock and time show an instrument to measurement relationship. Applying that same relationship to compass gives direction. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 2. C** — Thermometer and temperature show an instrument to measurement relationship. Applying that same relationship to scale gives weight. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 3. B** — Speedometer and speed show an instrument to measurement relationship. Applying that same relationship to clock gives time. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 4. C** — Rain Gauge and rainfall show an instrument to measurement relationship. Applying that same relationship to ruler gives length. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 5. D** — Flour and bread show a material to product relationship. Applying that same relationship to leather gives shoe. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 6. A** — Wood and table show a material to product relationship. Applying that same relationship to metal gives spoon. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 7. A** — Paper and book show a material to product relationship. Applying that same relationship to cotton gives shirt. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 8. C** — Metal and spoon show a material to product relationship. Applying that same relationship to wool gives sweater. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 9. B** — Library and books show a place to collection relationship. Applying that same relationship to gallery gives paintings. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 10. D** — Orchard and trees show a place to collection relationship. Applying that same relationship to museum gives artifacts. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 11. C** — Garage and cars show a place to collection relationship. Applying that same relationship to library gives books. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 12. A** — Aquarium and fish show a place to collection relationship. Applying that same relationship to garden gives plants. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 13. B** — Garden and plants show a place to collection relationship. Applying that same relationship to aquarium gives fish. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.

- 14. D** — Captain and ship show an operator to vehicle relationship. Applying that same relationship to engineer gives train. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 15. D** — Rider and bicycle show an operator to vehicle relationship. Applying that same relationship to sailor gives boat. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 16. B** — Engineer and train show an operator to vehicle relationship. Applying that same relationship to driver gives bus. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 17. A** — Paddler and canoe show an operator to vehicle relationship. Applying that same relationship to captain gives ship. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 18. C** — Puppy and dog show a young animal to adult animal relationship. Applying that same relationship to kitten gives cat. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship.
- 19. B** — Calf and cow show a young animal to adult animal relationship. Applying that same relationship to fawn gives deer. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship.
- 20. A** — Lamb and sheep show a young animal to adult animal relationship. Applying that same relationship to cub gives bear. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship.
- 21. D** — Cub and bear show a young animal to adult animal relationship. Applying that same relationship to lamb gives sheep. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship.
- 22. C** — Page and book show a part to whole relationship. Applying that same relationship to leaf gives tree. The order matters because the first word supplies the starting point and the second supplies its connected result. A related word alone is insufficient; both pairs must express one precise relationship. Check the direction before accepting a choice.
- 23. A** — Carefully completes the sentence because The contrast between ice and safe movement calls for a careful manner. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.
- 24. B** — Clear completes the sentence because Seeing through glass requires transparency. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.
- 25. C** — Wilt completes the sentence because A plant without water loses firmness. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.
- 26. D** — Whisper completes the sentence because A quiet place calls for a soft voice. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.
- 27. D** — Easier completes the sentence because Sharing work reduces the effort for each person. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.
- 28. C** — Rainbow completes the sentence because Sunlight after rain can make a rainbow visible. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.
- 29. B** — Route completes the sentence because A map gives directions along a route. Reading the words around the blank

provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

30. A — Asleep completes the sentence because Tiredness after activity supports falling asleep. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

31. B — Sunlight completes the sentence because Plants generally need sunlight to grow. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

32. D — Gently completes the sentence because A fragile object should be handled gently. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

33. A — Clear completes the sentence because Followable instructions must be understandable. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

34. C — Noise completes the sentence because Hearing relates to sound or noise. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

35. A — Skilled completes the sentence because Regular practice commonly improves skill. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

36. D — Route completes the sentence because A blocked road requires another path. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

37. B — Prints completes the sentence because Mud on boots can transfer marks to a floor. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

38. C — Steep completes the sentence because A steep climb requires more effort. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

39. A — Late completes the sentence because Checking time helps avoid lateness. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

40. B — Cool completes the sentence because Waiting allows hot soup to become cooler. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

41. C — Time completes the sentence because A narrow crossing may only fit one cyclist at a time. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

42. D — Enjoyed completes the sentence because Applause commonly shows enjoyment or approval. Reading the words around the blank provides the clue. The other options are either inconsistent with the situation, use the wrong kind of meaning, or make the whole sentence unnatural. Test every choice inside the full sentence; a partial fit is insufficient.

43. C — Oak, birch, and cedar are all trees. Elm belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

44. B — Robin, finch, and eagle are all birds. Owl belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

45. A — Hammer, wrench, and pliers are all tools. Rake belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model

words, not just one. A broad association is insufficient.

46. D — Violin, trumpet, and guitar are all instruments. Clarinet belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

47. A — Cup, mug, and fork are all tableware. Bowl belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

48. B — Carrot, broccoli, and celery are all vegetables. Spinach belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

49. C — River, stream, and ocean are all bodies of water. Pond belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

50. D — Jacket, vest, and shirt are all clothing. Skirt belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

51. C — Triangle, hexagon, and octagon are all polygons. Rectangle belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

52. A — Pencil, chalk, and charcoal are all drawing tools. Pastel belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

53. D — Train, subway, and ferry are all public transport. Trolley belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

54. B — Apple, plum, and banana are all fruits. Grape belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

55. B — Ant, butterfly, and moth are all insects. Bee belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

56. C — Baker, farmer, and teacher are all occupations. Carpenter belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

57. D — Canoe, sailboat, and raft are all watercraft. Ferry belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

58. A — Gold, iron, and tin are all metals. Zinc belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

59. A — Dog, cow, and whale are all mammals. Bat belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

60. B — Rose, lily, and orchid are all flowers. Iris belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

61. C — Rain, fog, and storm are all weather events. Thunder belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

62. D — Soccer, cricket, and baseball are all sports. Swimming belongs to that same category. The group is defined by the shared property of all three model words, not by a connection to just one member. Test the category against all three model words, not just one. A broad association is insufficient.

63. B — The given pairs both add 5 the first number to make the second. Applying the same operation to 13 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

64. A — The given pairs both subtract 5 the first number to make the second. Applying the same operation to 23 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

65. D — The given pairs both multiply by 4 the first number to make the second. Applying the same operation to 15 gives 60. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number.

66. C — The given pairs both add 6 the first number to make the second. Applying the same operation to 13 gives 19. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

67. B — The given pairs both subtract 6 the first number to make the second. Applying the same operation to 24 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

68. D — The given pairs both multiply by 5 the first number to make the second. Applying the same operation to 15 gives 75. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number.

69. A — The given pairs both add 7 the first number to make the second. Applying the same operation to 13 gives 20. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

70. C — The given pairs both subtract 7 the first number to make the second. Applying the same operation to 25 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

71. A — The given pairs both multiply by 2 the first number to make the second. Applying the same operation to 15 gives 30. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number.

72. D — The given pairs both add 8 the first number to make the second. Applying the same operation to 13 gives 21. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

73. C — The given pairs both subtract 8 the first number to make the second. Applying the same operation to 26 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

74. B — The given pairs both multiply by 3 the first number to make the second. Applying the same operation to 15 gives 45. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number.

75. B — The given pairs both add 2 the first number to make the second. Applying the same operation to 13 gives 15. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

76. D — The given pairs both subtract 2 the first number to make the second. Applying the same operation to 20 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

77. A — The given pairs both multiply by 4 the first number to make the second. Applying the same operation to 15 gives 60. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number.

78. C — The given pairs both add 3 the first number to make the second. Applying the same operation to 13 gives 16. The

rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

79. A — The given pairs both subtract 3 the first number to make the second. Applying the same operation to 21 gives 18. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number. A one-pair coincidence is insufficient.

80. C — The given pairs both multiply by 5 the first number to make the second. Applying the same operation to 15 gives 75. The rule is confirmed by both complete pairs before it is used on the unfinished pair. Check both given pairs before applying the operation to the final number.

81. B — To keep both sides equal, 20 plus 7 is 27; subtracting 2 leaves 25 for the box. Substituting 25 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

82. D — To keep both sides equal, 20 plus 2 is 22; adding back 7 gives 29 for the box. Substituting 29 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

83. B — To keep both sides equal, 21 plus 7 is 28; subtracting 7 leaves 21 for the box. Substituting 21 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

84. D — To keep both sides equal, 21 plus 7 is 28; adding back 7 gives 35 for the box. Substituting 35 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

85. C — To keep both sides equal, 4 plus 8 is 12; subtracting 12 leaves 0 for the box. Substituting 0 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

86. A — To keep both sides equal, 4 plus 12 is 16; adding back 8 gives 24 for the box. Substituting 24 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

87. D — To keep both sides equal, 5 plus 8 is 13; subtracting 6 leaves 7 for the box. Substituting 7 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

88. C — To keep both sides equal, 5 plus 6 is 11; adding back 8 gives 19 for the box. Substituting 19 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

89. B — To keep both sides equal, 6 plus 8 is 14; subtracting 11 leaves 3 for the box. Substituting 3 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

90. A — To keep both sides equal, 6 plus 11 is 17; adding back 8 gives 25 for the box. Substituting 25 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

91. B — To keep both sides equal, 7 plus 8 is 15; subtracting 5 leaves 10 for the box. Substituting 10 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

92. A — To keep both sides equal, 7 plus 5 is 12; adding back 8 gives 20 for the box. Substituting 20 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

93. C — To keep both sides equal, 8 plus 8 is 16; subtracting 10 leaves 6 for the box. Substituting 6 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

94. D — To keep both sides equal, 8 plus 10 is 18; adding back 8 gives 26 for the box. Substituting 26 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making

the full equation true. Substitute the choice into the printed equation and calculate both sides.

95. B — To keep both sides equal, 9 plus 8 is 17; subtracting 4 leaves 13 for the box. Substituting 13 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

96. C — To keep both sides equal, 9 plus 4 is 13; adding back 8 gives 21 for the box. Substituting 21 into the printed equation makes the left and right sides agree. A nearby number can look plausible, but it changes one side without making the full equation true. Substitute the choice into the printed equation and calculate both sides.

97. D — In this series, each term increases by 5. Following that rule from the last shown number gives 34. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

98. A — In this series, the increases are 5, 6, and 7, so the next increase is 8. Following that rule from the last shown number gives 40. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading.

99. B — In this series, each term is doubled and then 1 added. Following that rule from the last shown number gives 287. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

100. C — In this series, each term increases by 5. Following that rule from the last shown number gives 35. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

101. A — In this series, the increases are 5, 6, and 7, so the next increase is 8. Following that rule from the last shown number gives 41. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading.

102. D — In this series, each term is doubled and then 1 added. Following that rule from the last shown number gives 303. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

103. D — In this series, each term increases by 5. Following that rule from the last shown number gives 36. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

104. B — In this series, the increases are 5, 6, and 7, so the next increase is 8. Following that rule from the last shown number gives 42. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading.

105. A — In this series, each term is doubled and then 1 added. Following that rule from the last shown number gives 319. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

106. C — In this series, each term increases by 5. Following that rule from the last shown number gives 37. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

107. A — In this series, the increases are 5, 6, and 7, so the next increase is 8. Following that rule from the last shown number gives 43. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading.

108. D — In this series, each term is doubled and then 1 added. Following that rule from the last shown number gives 335. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

109. C — In this series, each term increases by 5. Following that rule from the last shown number gives 38. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

110. B — In this series, the increases are 5, 6, and 7, so the next increase is 8. Following that rule from the last shown number gives 44. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading.

111. B — In this series, each term is doubled and then 1 added. Following that rule from the last shown number gives 351. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

112. A — In this series, each term increases by 5. Following that rule from the last shown number gives 39. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

113. D — In this series, the increases are 5, 6, and 7, so the next increase is 8. Following that rule from the last shown number gives 45. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading.

114. C — In this series, each term is doubled and then 1 added. Following that rule from the last shown number gives 367. Checking every change from the beginning confirms the pattern rather than relying only on the final transition. Compare all neighbouring terms, since one final change can be misleading. The complete sequence must fit.

115. C — Across each row the number of hexagons decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey hexagons. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

116. B — Across each row the number of ovals decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey ovals. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

117. A — Across each row the number of diamonds decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey diamonds. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

118. D — Across each row the number of stars decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey stars. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

119. D — Across each row the number of hearts decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey hearts. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

120. B — Across each row the number of kites decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey kites. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

121. A — Across each row the number of trapezoids decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey trapezoids. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

122. C — Across each row the number of crescents decreases from 5 to 4. Down each column the fill changes from white to grey. The missing panel must therefore contain 4 grey crescents. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

123. D — Across each row the number of circles decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey circles. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

124. B — Across each row the number of triangles decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey triangles. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

125. A — Across each row the number of squares decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey squares. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

126. B — Across each row the number of pentagons decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey pentagons. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

127. C — Across each row the number of hexagons decreases from 6 to 5. Down each column the fill changes from white

to grey. The missing panel must therefore contain 5 grey hexagons. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

128. D — Across each row the number of ovals decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey ovals. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

129. C — Across each row the number of diamonds decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey diamonds. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

130. A — Across each row the number of stars decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey stars. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

131. C — Across each row the number of hearts decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey hearts. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

132. D — Across each row the number of kites decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey kites. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

133. A — Across each row the number of trapezoids decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey trapezoids. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

134. B — Across each row the number of crescents decreases from 6 to 5. Down each column the fill changes from white to grey. The missing panel must therefore contain 5 grey crescents. A panel that matches only the number or only the fill is incomplete. Compare every model panel and reject choices that satisfy only one feature.

135. B — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

136. C — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

137. D — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

138. A — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

139. A — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

140. B — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

141. D — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

142. C — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

143. D — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on

opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

144. A — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

145. B — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

146. C — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

147. A — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

148. C — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

149. D — A single vertical fold creates two layers at the punch. Opening the paper reflects the hole across the vertical crease, producing two holes mirrored across the vertical crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

150. B — A single horizontal fold creates two layers at the punch. Opening the paper reflects the hole across the horizontal crease, producing two holes mirrored across the horizontal crease. The two holes stay the same distance from the crease on opposite sides. A single hole ignores the second layer, while four holes would require another ordinary fold.

151. D — Each model panel has exactly 5 hexagons and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 hexagons with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

152. B — Each model panel has exactly 5 ovals and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 ovals with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

153. A — Each model panel has exactly 5 diamonds and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 diamonds with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

154. C — Each model panel has exactly 5 stars and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 stars with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

155. B — Each model panel has exactly 5 hearts and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 hearts with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

156. A — Each model panel has exactly 5 kites and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 kites with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

157. D — Each model panel has exactly 5 trapezoids and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 trapezoids with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

158. C — Each model panel has exactly 5 crescents and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 5 crescents with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

159. D — Each model panel has exactly 6 circles and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 circles with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

160. C — Each model panel has exactly 6 triangles and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 triangles with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

161. B — Each model panel has exactly 6 squares and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 squares with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

162. A — Each model panel has exactly 6 pentagons and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 pentagons with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

163. B — Each model panel has exactly 6 hexagons and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 hexagons with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

164. C — Each model panel has exactly 6 ovals and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 ovals with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

165. A — Each model panel has exactly 6 diamonds and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 diamonds with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

166. D — Each model panel has exactly 6 stars and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 stars with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

167. C — Each model panel has exactly 6 hearts and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 hearts with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

168. B — Each model panel has exactly 6 kites and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 kites with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

169. D — Each model panel has exactly 6 trapezoids and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 trapezoids with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.

170. A — Each model panel has exactly 6 crescents and exactly 2 grey. The position of the marked symbols changes, so position is not the defining feature. The matching panel is 6 crescents with 2 grey. A choice with the right count but wrong shading, or the right shading but wrong count, does not fit the group.