$$
\begin{gathered}
\text { CogAT } \\
3^{\text {rd }} \text { Grade } \\
\text { Sample } \\
\text { Test }
\end{gathered}
$$

## Verbal Battery

1. The first pair of words are related in a certain way. Choose the word that completes the second pair of words so that they are related in the same way.

Peach $\rightarrow$ fruit : lily $\rightarrow$
A. Flower
B. Seed
C. Tree
D. Iris
E. Pit
2. Choose the word that best fits with the group:
shirt jacket socks
A. Pockets
B. Pants
C. Laundry
D. Style
E. Closet
3. Choose the word that best completes the sentence.

Andrew put the shirt back in the clothes dryer as it was still $\qquad$ .
A. Damp
B. Warm
C. Fresh
D. Fair
E. Broken

## Quantitative Battery

1. Choose the number that completes the third pair so that it demonstrates the same relationship as the first two pairs.
$[2 \rightarrow 4] \quad[17 \rightarrow 19] \quad[20 \rightarrow ?]$
A. 20
B. 22
C. 25
D. 30
E. 40
2. Choose the number that completes the third pair so that it demonstrates the same relationship as the first two pairs.
$[10 \rightarrow 7] \quad[26 \rightarrow 23] \quad[58 \rightarrow ?]$
A. 55
B. 54
C. 40
D. 38
E. 60
3. What is the next number in the series?
0.5
1
1.5
2
2.5
3
3.5 ?
A. 4
B. 4.5
C. 5
D. 5.3
E. 45
4. Which number belongs in the question mark?
$26=?+9$
A. 35
B. 34
C. 16
D. 17
E. 18

## Non-Verbal Battery

1. Look at how a square piece of paper is folded and where holes are punched in it. Then you must figure out how the paper will look when it is completely unfolded.

A.

B.

C.

D.
E.

2. The given shapes have a certain pattern. Choose the answer choice that follows the same pattern.

A.

B.

C.

D.

E.

3. Choose the picture that belongs with the bottom picture in the same way the pictures on top belong together.

A.

B.

C.

D.

E.


## Solutions and Explanations

## Verbal

1. The correct answer is flower.

A peach is a type of fruit like a lily is a type of flower.
2. The correct answer is pants.

Shirts, jackets, socks and pants are all articles of clothing.
3. The correct answer is damp, which means slightly wet. Andrew put the shirt back in the clothes dryer because it was still damp.

## Quantitative

1. The answer is 22.

Look for the pattern in the first series of numbers.
The difference between 2 and 4 is +2 .
The difference between 17 and 19 is also +2 .

The next series of numbers should follow the same pattern, meaning that the difference between 20 and ? should be +2 as well: $\mathbf{2 0 + 2 =}$ 22 , meaning that the correct answer will be 22 .
? $=22$
2. The answer is $\mathbf{5 5}$.

Look for the pattern in the first series.

The difference between 10 and 7 is -3 .
The difference between 26 and 23 is -3 .

The next series of numbers should follow the same pattern, meaning that the difference between 58 and ? should be -3 as well: 58-3=55, meaning that the correct answer will be 55 .

$$
\text { ? = } 55
$$

## 3. The correct answer is 4 .

In this series, every number is larger than the number before it by onehalf (0.5).

The pattern is: $\mathbf{+ 0 . 5}, \mathbf{+ 0 . 5}, \mathbf{+ 0 . 5}, \ldots$
The last number in this series is 3.5 , so the next number in the series should be larger than 3.5 by 0.5 .
$3.5+0.5=4$
Therefore, $\mathbf{4}$ is the correct answer.

## 4. The correct answer is 17 .

The first thing to notice when solving this type of question is that both sides of the equation must be equal. Since we are trying to solve for the '?', we must get it by itself on one side of the equation. To do this, we must subtract 9 from the right side of the equation, and since both sides of the equation must be equal, we must also subtract 9 from the left side of the equation.

26-9=?+9-9
On the right side of the equation, we have our '?' by itself. We now have:

26-9 = ?

To solve for the '?', simply subtract 9 from 26 . Be sure to line up the numbers correctly to perform the subtraction:

1
216
$\begin{array}{r}-\quad 9 \\ \hline 17\end{array}$
17
This means that $\mathbf{-} \boldsymbol{?}=17$.

## Non-verbal

1. The correct answer is $C$.

- First, the rectangular paper is folded in half lengthwise.
- Then, a small parallelogram is cut out of the folded paper.
- Consequently, the unfolded paper will have two parallelogram cutouts which eliminates answer choices A and B.
- Since the paper is folded lengthwise, the second parallelogram must mirror horizontally the cut parallelogram which eliminates answer choices D and E.

We are left with the answer $\mathbf{C}$, which is the correct answer.

## 2. The correct answer is $E$.

All three arrows are the same size. Choices A, B, C and D are different in their sizes than the three given arrows. In addition, the arrows are rotating in a clockwise direction, so the missing arrow should be rotated 90 degrees clockwise from the previous image, like in answer E.

Hence, $\mathbf{E}$ is the correct answer.

## 3. The correct answer is B.

In the above analogy, the figure on the right is the inverse of the figure on the left. The colors/shading of the outer shape switch with the color/shading of the inner shape.

Thus, the answer must be a white triangle with a black arrow inside.

