Singapore Math Kangaroo Contest 2017
Primary 2 Contest Paper

Name:__________________________________________________________

School:________________________________________________________

INSTRUCTIONS:

1. Please **DO NOT OPEN** the contest booklet until the Proctor has given permission to start.

2. **TIME**: 1 hour and 30 minutes

3. There are 30 questions in this paper. 3 points, 4 points and 5 points will be awarded for each correct question in Section A, Section B and Section C respectively. No points are deducted for Unanswered question. 1 point is deducted for Wrong answer.

4. Shade your answers neatly in the answer entry sheet.

5. **PROCTORING**: No one may help any student in any way during the contest.

6. **No calculators** are allowed.

7. All students must fill and _shade_ in your **Name, Index number, Level and School** in the Answer sheet provided.

8. **MINIMUM TIME**: Students must stay in the exam hall for at least 1 hour and 15 minutes.

9. Students must show detailed working and transfer answers to the answer entry sheet.

10. No spare papers can be used in writing this contest. Enough space is provided for your working of each question.

11. You must return this contest paper to the proctor.
Rough Working
Section A  (Correct – 3 points | Unanswered – 0 points | Wrong – deduct 1 point)

Question 1
Who caught the fish?

(A) Adam  (B) Basil  (C) Charlie  (D) David  (E) Edgar

Question 2
In the picture below, there are 5-pointed, 6-pointed and 7-pointed stars. How many 5-pointed stars are there?

(A) 2  (B) 3  (C) 4  (D) 5  (E) 9
Question 3
The picture below shows a pie that is divided among some children. Each child receives a piece of the pie with three cherries on top. How many children are there?

(A) 3  (B) 4  (C) 5  (D) 6  (E) 8

Question 4
Ellen wants to decorate the butterfly in the picture below:

With the following stickers:

Which butterfly can she make?

(A)  
(B)  
(C)  
(D)  
(E)  
Question 5
The rope is cut along the dotted line as shown in the picture below. How many parts of rope are there after the rope have been cut?

(A) 5  (B) 6  (C) 7  (D) 8  (E) 9

Question 6
The shape of a brick is: □. The bricks are used to form an igloo as shown in the picture below. How many bricks are missing in the igloo?

(A) 6  (B) 7  (C) 8  (D) 9  (E) 10

Question 7
The drawing below shows a necklace four beads(Figure 1). Which strings below shows the untangled necklace (Figure 1)?

(A)  (B)  (C)  (D)  (E)

(Figure 1)

Question 8
4 digits are selected from the 5 digits (1, 3, 4, 5, 7). Each square is replaced with different digits such that the equation below is correct. Which of the 5 digits is not used?

\[
\begin{array}{ccc}
\text{□} & + & \text{□} \\
\text{□} & + & \text{□} \\
\end{array}
\]

(A) 1  (B) 3  (C) 4  (D) 5  (E) 7
Section B  (Correct – 4 points | Unanswered – 0 points | Wrong – deduct 1 point)

Question 9
In the country of Jewelries, you can trade three sapphires for one ruby (picture 1). For one sapphire you can trade two flowers (picture 2). How many flowers can be traded for two rubies?

\[
\begin{align*}
\text{diamond} & = \text{sapphires} \quad \text{picture 1} \\
\text{sapphire} & = \text{flowers} \quad \text{picture 2}
\end{align*}
\]

(A) 6  (B) 8  (C) 10  (D) 12  (E) 14

Question 10
Jim and Ben sat on a ferris wheel in the picture below. When the ferris wheel turned, Ben moved to the place where Jim previously sat. At Ben’s new position, where will Jim be?

[Diagram of ferris wheel with options (A) to (E)]

(A)  (B)  (C)  (D)  (E)
Question 11
How many triangles are there in total in the picture below?

(A) 8  (B) 9  (C) 10  (D) 11  (E) 12

Question 12
Alfred was rotating a figure. The first three rotations are shown in the picture below. He did six rotations in total. How does the figure look like at the end?

(A)  (B)  (C)  (D)  (E)
**Question 13**
Which picture below shows that the number of apples are twice as much the number of carrots, and the number of carrots are twice as much the number of pears?

(A)  
(B)  
(C)  
(D)  
(E)  

**Question 14**
Brian and William stand in a queue. Brian knows that there are 7 people in front of him. William knows that there are in total 11 people in the queue. If Brian is right in front of William, how many people are in the queue behind William?

(A) 2  
(B) 3  
(C) 4  
(D) 5  
(E) 6
Question 15
The time of the clock below is half past one. What is the time when it was two and a half hours ago?

(A) 7:30  (B) 5:30  (C) 3:30  (D) 1:30  (E) 9:30

Question 16
Liz used the following stickers: +, ● and ———— to form a paper crown:

The stickers come in two separated sheets:

If she wants to make 3 crowns, what is the minimum number of sheets that she should use?

(A) 3  (B) 4  (C) 5  (D) 6  (E) 7
Section C  (Correct – 5 points | Unanswered – 0 points | Wrong – deduct 1 point)

Question 17
In the table, the correct additions were performed in the squares according to the pattern shown. What number should replace the question mark?

\[
\begin{array}{ccc}
+ & 10 & 7 \\
5 & 15 & 12 \\
14 & ? & \\
\end{array}
\]

(A) 10  (B) 11  (C) 12  (D) 13  (E) 15

Question 18
There are one horse, two cows and three pigs in McDonald’s farm. How many more cows does McDonald’s farm need so that the total number of animals is twice as the number of cows?

(A) 0  (B) 1  (C) 2  (D) 3  (E) 4

Question 19
Which figure can you make by combining the following pieces:

(A)  
(B)  
(C)  
(D)  
(E)  

(A)  (B)  (C)  (D)  (E)
Question 20
A Kangaroo makes 10 jumps in 1 minute and rests 3 minutes after. Then he makes 10 more jumps in 1 minute and rests 3 minutes, and so on. What is the shortest possible time (in minutes) he needs to make 30 jumps?

(A) 4  (B) 5  (C) 7  (D) 8  (E) 9

Question 21
Which stamp has been used to get the picture below?

(A)  (B)  (C)  

(D)  (E)
Question 22
Each of the 4 keys fits only one of the 4 padlocks and the numbers on the keys refer to the letters on the padlocks. What is written on the last padlock?

(A) GDA  (B) ADG  (C) GAD  (D) GAG  (E) DAD

Question 23
Ann put six toys in a six-slot shelf as shown below.

When you look at the shelf, you can see that:
• is between and
• is right above
• is at left of and at right of

Which toy is in the shaded slot?

(A) (B) (C) (D) (E)
Question 24
In a stack of three cards with holes, the top of each card is white and the bottom is grey. Basil threaded these cards on a rope as shown below. Basil rearranged the cards without untieing the rope. Which option below is possible to obtain the same threaded cards?

(A) ![Option A](image)
(B) ![Option B](image)
(C) ![Option C](image)
(D) ![Option D](image)
(E) ![Option E](image)
Rough Working
Rough Working
Rough Working