PRIMARY 2

NAME OF PARTICIPANT: _____ **DATE**: _____

SCHOOL NAME: _____

GENERAL INSTRUCTIONS:

1. Do not open the booklet until you are told to do so.
2. You are given 90 minutes to attempt all 25 questions.
3. Ensure to enter the necessary information asked in the Answer Sheet such as your name, participant number, country, and year level.
4. Record your answers neatly on the Answer Sheet provided.
5. Marks are awarded for correct answers only. There is no penalty for incorrect answers.
6. Calculators are not allowed.
7. All figures are not drawn to scale. They are intended only as aids.
8. Start answering when the proctor gives the signal.

Part 1 (Questions 1 to 10):
   There are 10 multiple-choice questions. Choose the best answer from the four possible choices
   Each question carries 2 marks
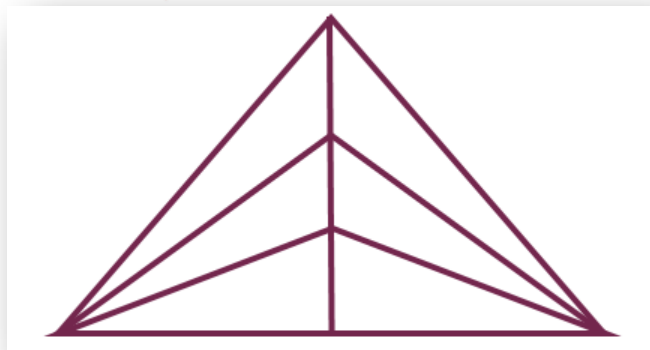
Part 2 (Questions 11 to 25):
   There are 20 open-ended questions, each requiring a single answer. Write your answer on the box provided in the Answer Sheet
   Questions 11 to 20, each carries 3 marks
   Questions 21 to 25, each carries 5 marks

Part 1: 1st to 10th Multiple-choice Questions

1. Which set is in order from least to greatest?

    (a)   0.1231 , 0.1210 , 0.2131 , 1.0012

    (b)   1.3211 , 1.3705 , 1.4501 , 0.9123

    (c)   0.5   , 0.612 , 0.81   , 1

    (d)   12.12 , 13.13 , 1.313   , 21.21

2. Luis wants to set up 221 chairs in rows such that each row must have an equal number of chairs. Which of the following could be the method Luis uses to set up the chairs?

    (a) 20 rows of 21 chairs

    (b) 21 rows of 20 chairs

    (c) 19 rows of 9 chairs

    (d) 17 rows of 13 chairs

3. Find the number of triangles in the figure below .

    (a) 12   (b) 13   (c) 14   (d) 15

4. Find the perimeter of the figure below.

2 cm

4 cm

(a) 40   (b) 42   (c) 44   (d) 46

5. Evaluate the sum of the first ten terms of the sequence

$$1 \ , \quad 3 \ , \quad 5 \ , \quad 7 \ , \quad 9 \ , \quad 11 \ , \ ...$$

(a) 100   (b) 120   (c) 81   (d) 121

6. What is the sum of the 6th term and the 10th term of the sequence

$$566 \ , \ 563 \ , \ 560 \ , \ 557 \ , \ 554 \ , \ ...$$

(a) 1093   (b) 1090   (c) 1087   (d) 1084

7.   Cynthia wants to send a box of dragon fruits to John. The box of dragon fruits cannot exceed a mass of 8000 grams. If each dragon fruit weighs 300 grams, what is the maximum number she can send?

= 300 grams

(a)   2   (b)   26   (c)   27   (d)   30

8.   The scale on a map indicates that 1 centimetre on the map represents 2 kilometres on the land. Estimate the distance between Town A and Town B.

1 centimetre

(a)   8 cm   (b)   5 km   (c)   3 km   (d)   8 km

9. The coconut tree grows 1.5 centimetres every month. It is now 2000 centimetres tall. How tall was it a year ago?

2000 cm

?

(a) 1982   (b) 1999   (c) 1998.5   (d) 1950

10. How many digits are needed to write down all the numbers from 5 to 102?

(a) 194   (b) 190   (c) 192   (d) 193

Part 2: 11th to 25th Open-ended Questions

11. Find the value of 36 tens + 2 hundreds + 56 ones —105 ones.

12. What number is modelled in the place-value chart below? (• represents 1)

Thousands	• • • •
Hundreds	• •
Tens	
Ones	• • • • • • • • • • • • • •
Tenths	• •
Hundredths	• • •

13. If "−" means "+", "+" means "−", "×" means "÷", and "÷" means "×". What number should be placed in the box to make the following number sentence correct?

$$15 + 6 \div 2 - 24 \times 8 = \square \div 2$$

14. If

⑤ = 10,

④ = 14

⑥ = 16.

Find the value of **⑥** + **⑥** + **④** + **⑤** − **⑥**

15. The blue and red bocks are stacked in an alternating position to form the figure below. How many blue blocks are there?

16. How many different geometric figures can you formed by joining 4 identical equilateral triangles side by side? Note that the sides must be joined completely like this ⟁ not like this ⟁

17. There are 3 distinct rays in a plane having the same endpoint such as the figure below. How many different angles are formed?

25°

36°

18. There are 120 students who were asked in a survey to choose at most one sport from the 5 choices they like to play. The graph below shows the result of the survey.

SPORT	Number of Students
Basketball	☺ ☺ ☺ ☺ ☺ ☺
Volleyball	☺ ☺ ☺ ☺ ☺
Baseball	☺ ☺ ☺ ☺ ☺ ☺
Soccer	☺ ☺ ☺ ☺ ☺ ☺
Badminton	☺ ☺ ☺ ☺ ☺

KEY: ☺ represents 4 students

How many students did not choose any of the 5 sports?

19. B is a three digit number such that no digit is 0. Two of its digits are odd and one is even. The sum of the digits in units and tens place is 9. The sum of the three digits is 18. Find the maximum possible value of B.
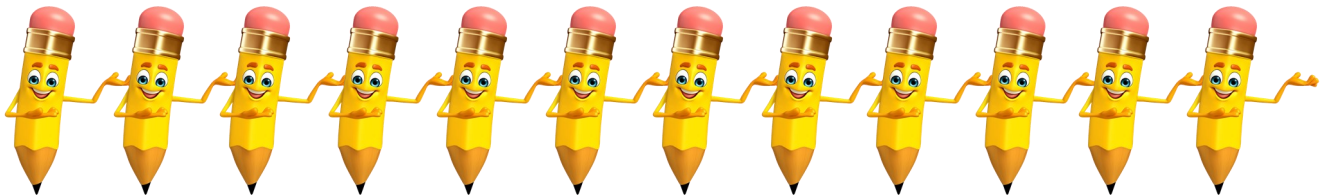
20. Annie has 12 pencils. She gave 1/3 of the pencils to Jack and gave the rest to Allison. How many pencils did Annie give to Allison?

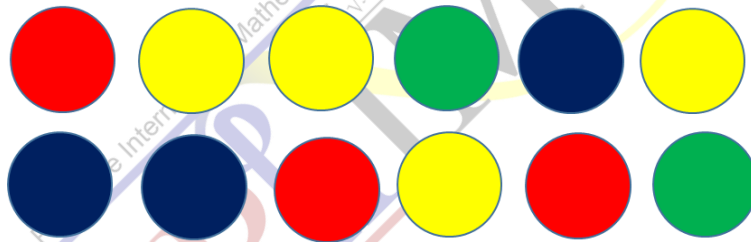21. The following figures has their corresponding values as follows:

$$\square\square = 22$$

$$\lozenge = 15$$

$$\pentagon = 12$$

Evaluate the value of the following:

$$(\square\square\square - \lozenge) \times (\pentagon\pentagon\pentagon - \lozenge\lozenge)$$

22. A box contains the following coloured balls:

Which colour ball is least likely to be drawn at random?

23. A Trans Oceanica bus travels from Peru to Brazil for 102 hours. Every 6 hours, the bus made a 30-minute pit stop so the passengers could eat and rest before continuing the trip. How many pit stops were made until the bus reaches Brazil?

PERU   BRAZIL

Lima

Bolivia   Brasilia

24. 2 chimpanzees can consume 12 kilograms of bananas for 2 days. How many days can 2 chimpanzees consume all 36 kilograms of bananas?

= 12 kg of
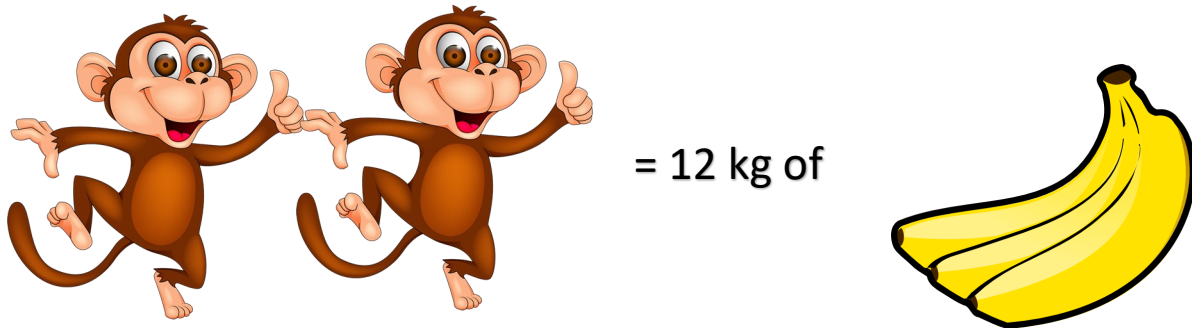
25. A kangaroo is chasing a rabbit. The kangaroo starts at the 1st mark and jumps 3 meters every time while the rabbit starts at the 6th mark and jumps 2 meters every time. The distance between two adjacent marks is 1 meter. If they both started at the same time, how many jumps is required for the kangaroo to catch the rabbit?