**Name:** _____

**Date:** _____

**School Name:** _____

## General Instructions:

**Read the instructions below before answering the following questions.**

1. This test contains 10 questions. Questions are taken from four strands:
   - ✓ Number,
   - ✓ Measurement,
   - ✓ Geometry
   - ✓ Statistics & Probability
   - ✓ Algebra

Space is provided for you to answer each question.

2. Questions may be anyone of the following item type: Table Grid, Single/multiple Selected Response, complete work/explanation.

3. All questions must be answered in the provided space and remember to explain your answer where it is required.

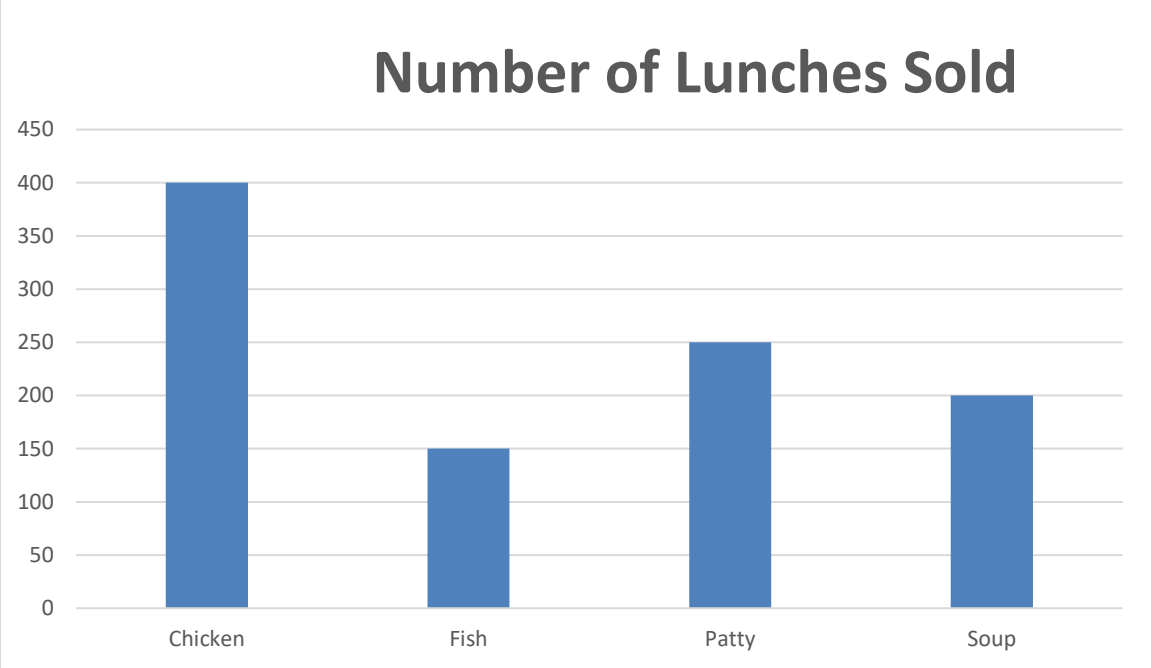
4. Read each question carefully. Then answer questions based on instructions given.

5. For each question, where options are given to choose from, indicate the answer(s) you have selected for each question by circling the corresponding letter from the given options.

**Answer ALL the questions as instructed.**

**Read each statement and question carefully before attempting to answer the following question.**

1. After checking the canteen records at a primary school for the first week of September 2018, the data was placed on a bar chart, as displayed below.




A. Which lunch is sold the most?

_____

_____

_____

B. Which lunch is sold the least?

_____

_____

_____

C. How many more patties were sold than fish lunches?

D. How many lunches were sold in all?

E. What is probability of s soup being bought?

F. Why do you think this data was collected?

_____
_____
_____
_____
_____
_____

G. The price list showed chicken - $250, Fish - $300, Patty - $150 and Soup – S100. If 150 fish lunches were bought, how many chicken lunches could be bought for that number of fish lunches?

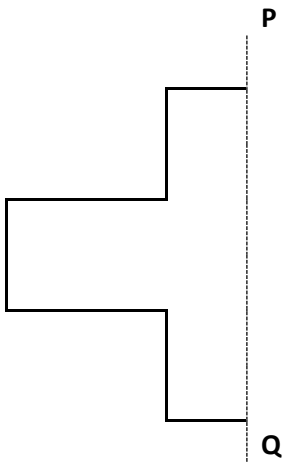
2. Correctly insert true (T) or false (F) in the given table with number types.

| | 3 | 4 | 7 | 9 | 11 |
|---|---|---|---|---|---|
| Composite Number | | | | | |
| Even Number | | | | | |
| Odd Number | | | | | |
| Prime Number | | | | | |

3. A. The volume of a fish tank is 84,000cm³. If the height of the fish tank is 70cm, what is the area of the base of the fish?

B. Given that the base is a rectangle. What is the possible length and width of the base?

4. Line PQ is a line of symmetry. Complete the shape and insert the other line symmetry.




5. Given that p = 1, q = 2 and r = 3, insert an inequality sign or equal sign to make the statements true (<, > or =).

| Statements | Sign |
|---|---|
| **P _____ 4** | |
| **r _____ q** | |
| **5 _____ q** | |
| **p + 2 _____ r** | |
| **6 _____ pqr** | |
| **P + q 2r _____ 10** | |
| **qr _____ 5** | |
| **$r^4$ _____ 8** | |

Examine the table below carefully.
Use this information in the table to answer questions A through D.

6.

| A | B |
|---|---|
| On day one you are given $100, and for the next six days you receive $260 each day. | On day one, you are given $400, and for the next six days you receive $180 each day. |

A. Which is the better option? Explain your answer.

B. On which days are the options the closest? Explain….

C. On which day does the better option becomes more than the other?

D. How much you receive on the seventh day for each option?

E. Model the responses for the options using a chart?

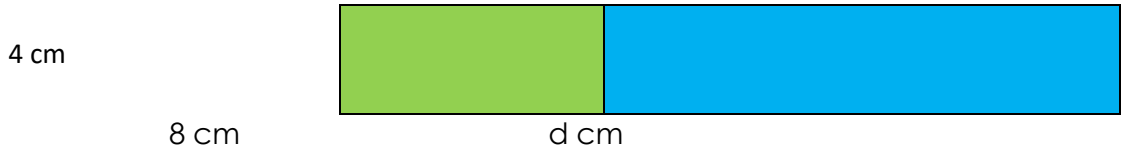
F. Write an algebraic expression for the amount of money you would receive on any given day for both options.

7. In your own words, explain the relationship that exists among Speed, Distance and Time? Use diagrams and examples if needed.

8. Use a protractor to draw the angles below.

**→ 60°** **→38°** **→125°** **→256°**

9. The two rectangles below are fused into one. Examine the rectangles, then answer the questions A and B.




A. Complete the two expressions that can be used to determine the area.

4(_____ + _____)

and

4(_____) + 4(_____)

B. If the total area of the two rectangles is 112 cm², find the value of d.

10. Geologist have created an algorithm that predicts the probability of aftershocks after an earthquake.

**Within one day: 30%** **From 2-7 days: 45%** **After a week: 25%**

Is it more or less likely for an aftershock to occur during the 2nd to 7th days after an earthquake, compared to the day after?