



CBT-TEST PAPER #1

General Instructions:

Read the instructions below before answering the following questions.

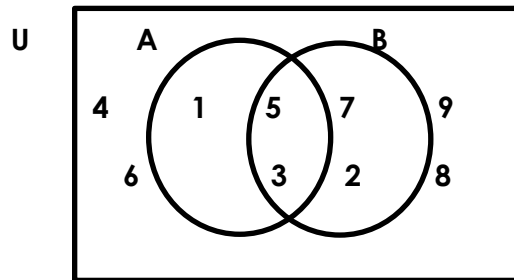
1. This test contains 20 questions. Questions are taken from four strands: Number, Measurement, Geometry and Statistics & Probability. space is provided for you to answer each question.
2. Questions may be anyone of the following item type: Table Grid, Single/multiple Selected Response, complete work/explanation.
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.

Use the diagram to answer questions 3 and 4.

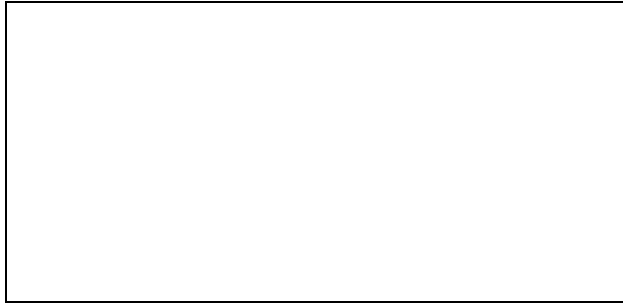


- Which statement best defines the above diagram?
 - A universal set
 - A Venn Diagram
 - An equivalent set
 - Members of two sets
- What is represented by the diagram?
 - Elements in a set.
 - An equal set
 - The intersection and union of a set.
 - The relationship between the sets.
- If two given sets are: -
 $A = \{a, b, c, d, e, f, i, o, u\}$
 $B = \{a, e, i, o, u\}$
What does **$\{a, e, i, o, u\}$** and **$\{a, b, c, d, e, f, i, o, u\}$** represent?

- Let $U = \{\text{circle, triangle, square, star, pentagon}\}$
 $A = \{\text{circle, star, triangle}\}$
 $B = \{\text{circle, star, square, pentagon}\}$



- a. Use a Venn diagram to represent the above information

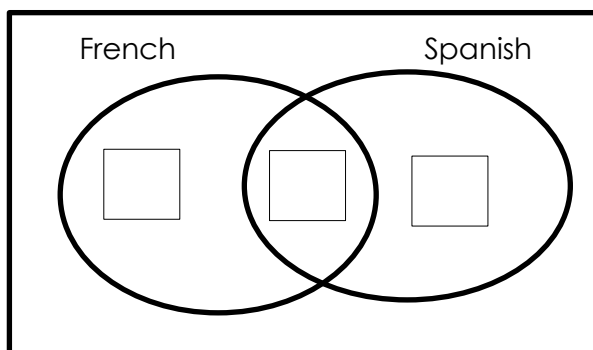


- b. What is the **intersection** of Set A and Set B?

- c. What is the **union** of Set A and Set B?

5. A survey was conducted among 100 high school students to find out whether they took Spanish and French classes. The following was found:
- 10 students took both classes.
 - 30 students did not take Spanish nor French and
 - 40% of the students took Spanish but not French.

Using the information above, complete the venn diagram below.



Show your work here.



6. Mr. Brown has 46 metres of fence. He is thinking of fencing a piece of land around the back of his house for a garden.

A. What shape garden could Mr. Brown create?

B. What is the dimension of the garden that Mr. Brown could create?

C. How much fence would Mr. Brown need to fence the garden?

D. Does Mr. Brown have any of the fences remaining after fencing the garden?
If yes, how much does he have remaining?



7. Complete the following table, given the following measurements:

Shape	Length	Width	Perimeter
	2cm		8cm
	15cm	10cm	
		7cm	30cm
Square		6cm	

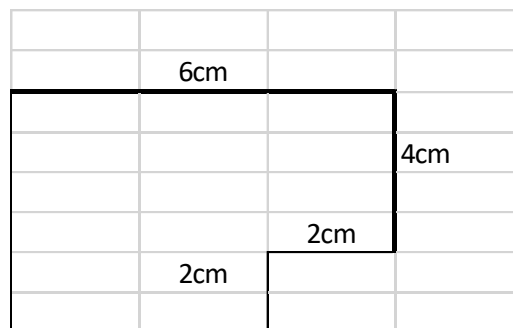
8. On his test paper, Samuel saw the following,

“True or false: 4 p.m. can be represented on the 24-hour clock as 16:00 hours”.

Samuel underline the word 'false'. Do you agree with him? Why or Why not?

Explain your reasoning.

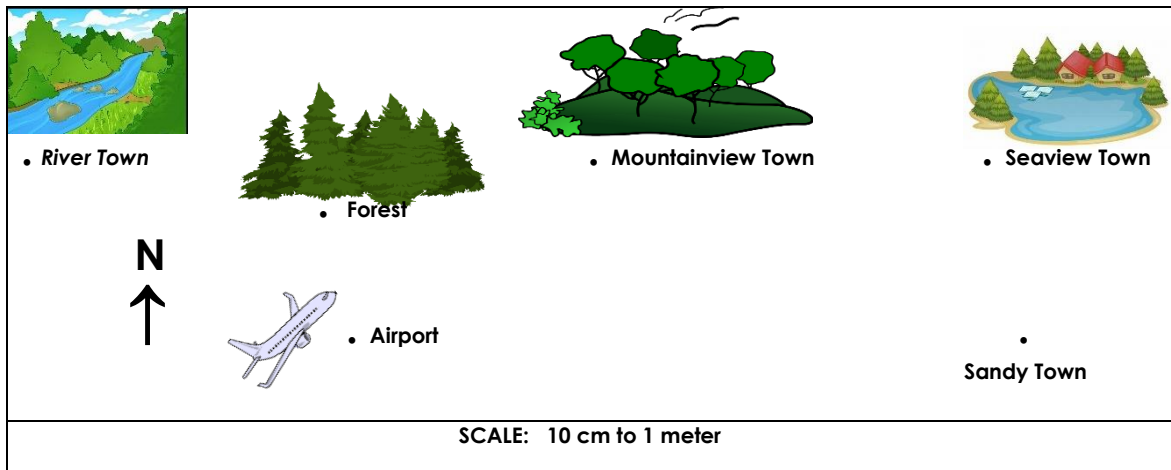
9. John was asked to find the perimeter of the image below:



What is the perimeter of this figure? How did you determine the answer?



10. Look at the map below and answer the questions that follows:



Mr. Marsh lives in River Town. He wants to get to Sandy Town, but he does not want to travel through Mountainview Town to get there.

He can either travel to the airport and then on to Sandy Town, or he can go to Seaview Town and then unto Sandy Town.

A. Which route would be the shortest?

B. Justify your thinking for your answer above.

C. Provide the estimated distance in km.



11. There are two solids in a large bag. If 13 vertices are counted, which two solids below could they be?

Choose all that applies.

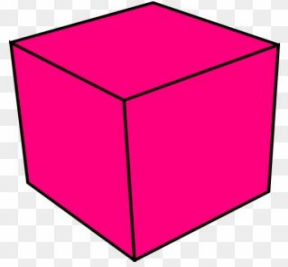

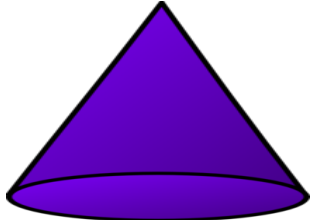

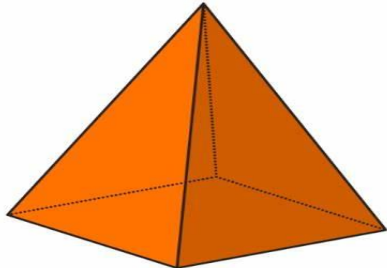
- A. A cube and a square based pyramid.
- B. A tetrahedron and a cuboid
- C. A square based pyramid and a cuboid
- D. A tetrahedron and a square based pyramid

12. A. Latoya felt a solid figure in a bag and described one of its characteristics by saying that it had a square face. Which solid could she have picked up? Define the solid. Then, draw the shape that correctly represents this solid.

- B. Mathew did the same and said his solid had a flat circular face. Name the solid he may have picked up. Define the solid. Then, draw the shape that correctly represents this solid.



13. Fill out the table below by inserting **YES** or **NO**, where appropriate.

Shape	Able to Roll	Able to Stack (pack one on top of the other)
		
		
		
		
		



14. A. How many cubes of different sizes could you make if you have multilink cubes? Make a sketch of each.



- B. How many rectangular prisms of different sizes could you make with eight multilink cubes?

15. There was an unknown number of solids in a bag. When you reach in, you can feel 7 total flat circular faces. What is a combination of solids that can be in the bag?



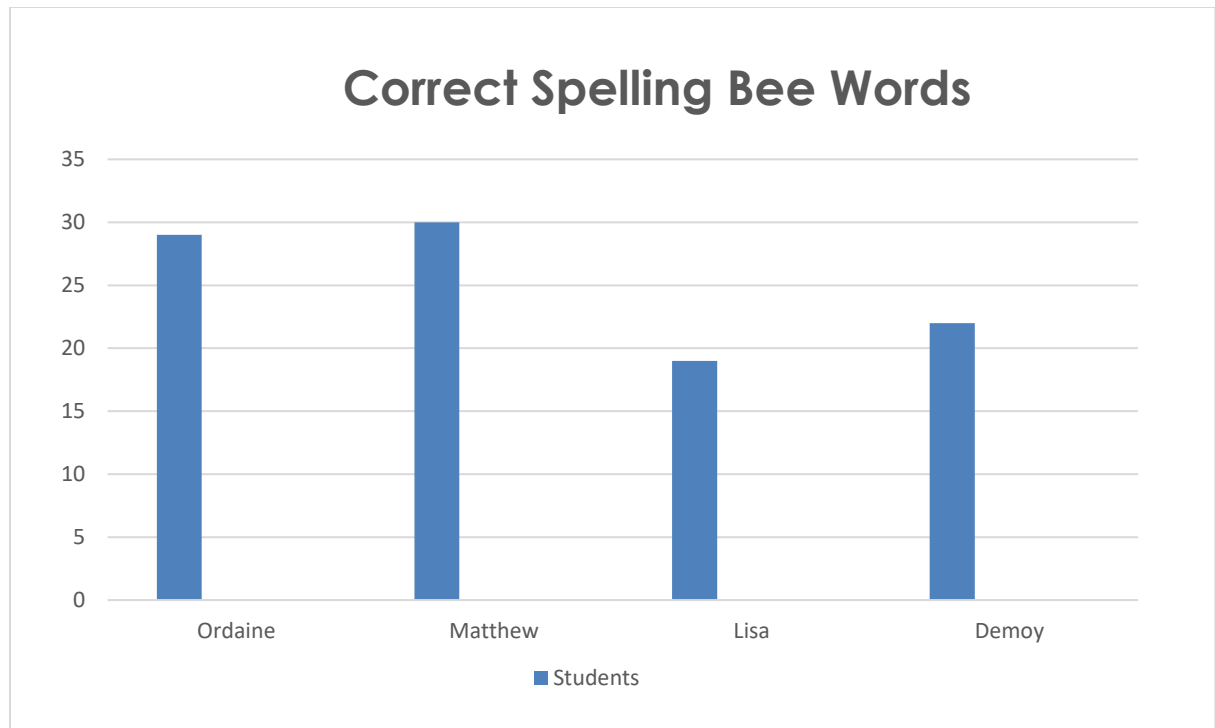
16. The mean of three numbers is 12. Two of the numbers are 14 and 9, what is the third number?
- A. 3
 - B. 12
 - C. 13
 - D. 36
17. Martin is a new student at St. Catherine Primary School, who is trying to know more about his classmates. There are 30 other students in his class. Each student shared the name of his/her favourite pet, as shown below:

Fish Dog Cats Birds and Lizards

What two type of graphs would be best used to display the information? State the reason(s) for your answer.

Use the table below to answer question 18 to 20.

Ordaine's class has spelling bee each week. He and three other classmates keep track of how many words they spelled correctly so far this year. Their results are shown in the table below.



18. Approximately, how many words are correctly spelt in total? Show how up come up with your answer.

19. Who spelt the least correct number of words? How many words did he/she get correct?



20. Complete the table below from the bar chart shown above.

Correct Spelling Bee Words	
Name	Number of Words
Ordaine	29
Matthew	
Lisa	
Demoy	