GAYAZA JUNIOR SCHOOL

P. 7 REVISION EXERCISE SET II

MATHEMATICS

SUBTRACTION OF FRACTIONS.

1. Subtract $\frac{2}{9}$ from $\frac{5}{9}$.

$$\frac{5}{9} - \frac{2}{9} = \frac{5 - 2}{9}$$

$$= \frac{\cancel{3}}{\cancel{9}}$$

$$= \frac{1}{3}$$

2. Subtract: $7 - \frac{4}{7}$

$$\frac{7}{1} - \frac{4}{7} = \frac{(7 \times 7) - (4 \times 1)}{7}$$

$$= \frac{49 - 4}{7}$$

$$= \frac{45}{7}$$

$$= 6\frac{3}{7}$$

```
      06
  7 | 45
     - 42
        3
```

3. Subtract: $5\frac{1}{3} - 2\frac{2}{7}$

$$5\frac{1}{3} - 2\frac{2}{7} = \frac{(16 \times 7) - (6 \times 3)}{21}$$

LCM OF 3, 7

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3 | 3  7
  |
```

$$= \frac{112 - 48}{21}$$

$$= \frac{64}{21}$$

$$= 3\frac{1}{21}$$

```
  7  1  7
     1  1
```

```
      03
   ┌──────
 2 │ 64
   − 63
   ──────
      01
```

Exercise:

Subtract the following;

1. $\frac{6}{8}$ - $\frac{5}{6}$

2. 4 - $\frac{3}{4}$

3. 11 - $2\frac{2}{3}$

4. 4⅓ - 3⅔

5. 1½ - ⅘

6. 2⅓ - 1⅖

7. $4^{7}/_{10}$ - $1\frac{4}{5}$

8. $2\frac{3}{5}$ - $1\frac{1}{3}$

Work out the following:

1. $\frac{2}{5}$ - $\frac{2}{3}$ + $\frac{3}{4}$ BODMAS ✓

$\frac{2}{5}$ + $\frac{3}{4}$ - $\frac{2}{3}$ LCM of 5, 4, 3

$\dfrac{(\,2\times\,2) + (\,3\times15) - (\,2\times20\,)}{60}$

2	5	4	3
2	5	2	3
3	5	1	3
5	5	1	1
	1	1	1

$= \dfrac{(\,24 + 45) - 40}{60}$ LCM = 2 x 2 x 3 x 5

$= \dfrac{69\ - 40}{60}$ = 4 x 15

                = 60

$= \dfrac{29}{60}$

2. $2\frac{2}{5}$ - $2^{3}/_{4}$ + $3\frac{1}{3}$ BODMAS

$2\frac{2}{5}$ + $3\frac{1}{3}$ - $2^{3}/_{4}$ = $^{12}/_{5}$ + $^{10}/_{3}$ - $^{11}/_{4}$

$$= \frac{(12 \times 12) + (10 \times 20) - (11 \times 45)}{60}$$

$$= \frac{144 + 200 + 165}{60}$$

$$= \frac{344 - 165}{60}$$

$$= \frac{179}{60}$$

$$= 2\tfrac{59}{60}$$

$$\begin{array}{r} 002 \\ 60\,\overline{)179} \\ \underline{120} \\ 09 \end{array}$$

========================

Exercise:
Work out the following.

1. $\tfrac{2}{3} - \tfrac{5}{6} + \tfrac{1}{4}$

2. $\tfrac{7}{12} - \tfrac{5}{6} + \tfrac{1}{2}$

3. $\tfrac{5}{12} - \tfrac{1}{4}$

4. $1\frac{1}{2} + 2\frac{1}{3} - \frac{1}{4}$

5. $6\frac{2}{5} - 3\frac{3}{10} + 1\frac{3}{5}$

6. $3\frac{3}{4} - 1\frac{1}{5}$ $1\frac{1}{2}$

Work out the following fraction with multiplication.

1. $1\frac{1}{2} \times 3$

$1 \frac{1}{2} \times 3 = \frac{3}{2} \times \frac{3}{1}$

$\qquad = \frac{9}{2}$

$\qquad = 4\frac{1}{2}$

```
    4
  ┌─────
2 │ 9
  - 8
─────────
    1
```

2. $3\frac{3}{4} \times \frac{2}{3}$

$3\frac{3}{4} \times \frac{2}{3} \qquad = \qquad \frac{15}{4} \times \frac{2}{3}$

$\qquad = \qquad \dfrac{15 \times 2}{4 \times 3}$

$\qquad = \qquad \dfrac{\cancel{30}}{\cancel{12}}$

$\qquad = \qquad \dfrac{5}{2}$

$\qquad = \qquad 2\frac{1}{2}$

```
    2
  ┌─────
2 │ 5
  - 4
─────────
    1
```

3. $2\frac{3}{4} \times 1\frac{3}{5}$

$2\frac{3}{4} \times 1\frac{3}{5} = \frac{11}{4} \times \frac{8}{5}$

$\qquad = \frac{22}{5}$

$\qquad = 4\frac{2}{5}$

```
     04
   ┌─────
5  │ 22
   − 20
─────────
     2
```

Exercise:
Work out the following fractions with multiplication.

1. $1 \frac{3}{4} \times 6$

2. $2 \times \frac{3}{8}$

3. $5 \times 1 \frac{1}{2}$

4. $1 \frac{2}{3} \times 6$

5. $2 \frac{2}{3} \times 4$

6. 3 $\times$ 1 ⅙

7. 3 ¾ $\times$ ½

8. 1 ¾ $\times$ 1 ⅔

9. 2 ²⁄₇ $\times$ 1 ¾

10. $2\,^2/_7$ x $1\,^5/_{10}$

11. $2\,^1/_2$ x $^6/_{15}$

12. $^3/_5$ x 35

13. $^5/_7$ x 42

14. $^3/_4$ x 1 $^3/_5$

Fractions with division:

1. Divide $^2/_3$ by 4.

    $^2/_3$ ÷ 4   (Use reciprocal)

    $^2/_3$ ÷ $^4/_1$ = $^2/_3$ x $^1/_4$

             = $^1/_3$ x $^1/_2$

             = $^1/_6$

2. $^4/_7$ ÷ 20   (Use reciprocal)

  $^4/_7$ ÷ $^{20}/_1$ = $^4/_7$ x $^1/_{20}$

            = $\dfrac{1 \ x \ 1}{7 \ x \ 5}$

            = $^1/_{35}$

3. $^5/_8$ ÷ $^2/_3$ LCM of 8, 3   (Multiply both sides by LCM)

  $^5/_8$ ÷ $^2/_3$ = ($^5/_8$ x $^5/_8$) ÷ ($^2/_3$ x 24)

2	8	3

$$= (3 \times 5) \div (2 \times 8)$$
$$= 15 : 16$$
$$= \underline{15}$$
$$16$$

2	4	3
2	2	3
3	1	2
	1	1

LCM = 2 x 2 x 2 x 3
= 8 x 3
LCM = 24

4. $2 \tfrac{1}{3} \div {}^{3}/_{10}$ (Use reciprocal)

$2 \tfrac{1}{3} \div 3/10$ = ${}^{7}/_{3} \div 3/10$

= ${}^{7}/_{3} \times {}^{10}/_{3}$

= ${}^{70}/_{9}$

= $7 {}^{7}/_{9}$

```
       07
    _____
 9 | 70
    - 63
    _____
       07
```

5. How many $2 \tfrac{1}{4}$ are in $6 \tfrac{1}{2}$?

$6 \tfrac{1}{2} : 2 \tfrac{1}{4}$ = ${}^{13}/_{2} \div {}^{9}/_{4}$

= ${}^{13}/_{2} \times {}^{4}/_{9}$

= ${}^{26}/_{9}$

= $2 {}^{8}/_{9}$

```
       02
    _____
 9 | 26
    - 18
    _____
        8
```

Exercise:

Work out the following fractions with division.

1. $\frac{1}{3} \div 4$

2. $\frac{3}{5} \div 27$

3. $\frac{2}{9} \div \frac{3}{4}$

4. $\frac{7}{10} \div \frac{1}{5}$

5. $4 \div 1\frac{1}{2}$

6. $3 \div 1\frac{1}{4}$

7. $2\frac{1}{5} \div \frac{2}{3}$

8. $3\frac{1}{3} \div 1\frac{1}{4}$

9. $3\frac{2}{3} \div 1\frac{1}{5}$

10.   How many 2 ½ kg packets are in 8 ¼ kg?

11. 10 ½ kg of salt was shared amongst 6 girls. How many kg did each girl get?

Mixed operations on fractions. Use BODMAS to work out the following fractions.

1. ⅖ + ¼ of ⅓ (BODMAS)

   ⅖ + (¼ of ⅔) = ⅖ + (¼ x ⅔)

                 = ⅖ + ⅙   LCM = 30

                 = $\frac{(2 \ x \ 6) \ + \ (\ 6 \ x \ 5)}{30}$

                 = $\frac{12 \ + \ 5}{30}$

                 = $\frac{17}{30}$

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2. (¾ - ¼) + ¼ ÷ 1 ½   (BODMAS)

   (¾ - ¼) + ¼ ÷ 1 ½

   $(\frac{3 \ - \ 1}{4})$ + ¼ ÷ ³/₂

   ²/₄ + (¼ ÷ ³/₂) = ²/₄ + ¼ x ⅔)   LCM = 6

                 = ²/₄ + ⅙

                 = ½ + ⅙

                 = $\frac{(1 \ x \ 3) \ + (1 \ x \ 1)}{6}$

                 = $\frac{3 \ + \ 1}{6}$

$$= \frac{4}{6}$$

$$= \frac{2}{3}$$

Exercise:

Work out the following using **BODMAS**.

1. ½ + ¾ ÷ ⅔

2. ¾ - ½ ÷ ¾

3. ½ + ¾ of ⅓ ÷ ¼

4. ¾ of ²⁄₆ ÷ ⅓ + ⅘

5. $\frac{3}{5}$ of $3\frac{1}{2} \div \frac{7}{2}$

6. $\frac{2}{3}$ of $\frac{3}{4} - \frac{1}{3}$ x $(\frac{1}{2} - \frac{1}{5})$

7. $(\frac{5}{6} - \frac{3}{4}) \div 1\frac{1}{2}$

8. $\frac{1}{2} \div (\frac{1}{3} - \frac{1}{4})$ of $\frac{1}{6}$

Work out the following:

1. $\dfrac{0.21 \times 0.08}{0.04 \times 0.7}$

$\dfrac{0.21 \times 0.08}{0.04 \times 0.7} = (0.21 \times 0.08) \div (0.004 \times 0.7)$

$= \left(\dfrac{21}{100} \times \dfrac{8}{100}\right) \div \left(\dfrac{4}{100} \times \dfrac{7}{10}\right)$

$= \dfrac{21}{100} \times \dfrac{8}{100} \times \dfrac{100}{4} \times \dfrac{10}{7}$

$= \dfrac{6}{10}$

$= 0.6$

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2. Work out:

$\dfrac{0.28 + 1.72}{0.2}$

$\dfrac{0.28 + 1.72}{0.2} = \dfrac{2.00}{0.2}$

$= \dfrac{200}{100} \div \dfrac{2}{10}$

$= \dfrac{200}{100} \times \dfrac{10}{2}$

$= 10$

OR

$$\frac{0.28 \ + \ 1.72}{0.2} \ = \ \frac{2}{0.2}$$

$$= \ 2 \div 0.2$$

$$= \ 2 \div \frac{2}{10}$$

$$= \ 2 \times \frac{10}{2}$$

$$= \ 10$$

<u>Exercise</u>:

Work out the following:

1. $\dfrac{0.36 \ \times \ 0.4}{0.018}$

2. $\dfrac{0.24 \ \times \ 0.3}{0.08}$

3. $\dfrac{0.24 \quad + \quad 0.6}{1.2 \quad \text{x} \quad 0.01}$

4. $0.27 \quad \text{x} \quad 0.8$
   $~~~~\cancel{0.4 \quad \text{x} \quad 0.9}$

Solve the following algebraic equations:

1. Solve: $3(m + 2) = 21$

   $3m + 6 = 21$

   $3m + 6 - 6 = 21 - 6$

   $\dfrac{3m}{3} = \dfrac{15}{3}$

   $m = 5$

2. Solve: $7(2x - 3) - 5(6x - 1) = 0$

$$7(2x - 3) - 5(6x - 1) = 0$$
$$14x - 21 - 30x + 5 = 0$$
$$14x - 30x + 5 - 21 = 0$$
$$^-16x - 16 = 0$$
$$^-16x - 16 + 16 = 0 + 16$$
$$^-16x = {}^+16$$
$$\frac{^-16x}{-16} = \frac{{}^+16}{-16}$$
$$x = -1$$

Exercise:

1. Solve: $3(y + 1) = 12$

2. Solve: $7(3x - 2) = 50$

3. Solve: $3(y - 3) = 21$

4. Solve: $5(m - 4) = 50$

5. Solve: $5(2y - 6) - 3(x - 6) = 40$

6. Solve: $2(x + 6) - 3(x - 6) = 0$

7. Solve: $2(2p - 1) -2(p - 3) = 4$

8. Solve: $3(3x - 1) -6(x - 2) = 24$

Solving equations"

Examples:

1. Solve: $15y = 90$

$15y = 90$

$\dfrac{\cancel{15}y}{\cancel{15}} = \dfrac{\cancel{90}}{\cancel{15}}$ (Divide both sides by 15)

$y = 6$

2. Solve: $-4x = 24$

$$-4x = 24$$

$$\underline{-4x} = \underline{24} \qquad \text{(Divide both sides by -4)}$$
$$-4 \qquad -4$$

$$x = 6$$

NB: + ÷ + = +

- ÷ - = +

+ ÷ - = -

- ÷ + = -

Exercise:

1. Solve: 7y = 42

2. Solve: 8t = 96

3. Solve: 13m = 260

4. Solve: ⁻6x = 72

5. Solve: -9y = 81

Solving fractional equations:

a) Obtain the LCM of the denominators.
b) Multiply each term by the LCM.
c) Then solve the equation.

Examples:

1. Solve: $\dfrac{3x}{13}$ = 12

 $\dfrac{3x}{13}$ = 12   LCM = 13

 $\dfrac{\cancel{13}}{3} \times \dfrac{3x}{\cancel{13}}$ = $\dfrac{12 \times 13}{1}$ (Multiply both sides by LCM)

$$\frac{\cancel{3}x \times 13}{\cancel{3}} = \frac{\cancel{12} \times 13}{\cancel{3}} \quad \text{(Divide both sides by 3)}$$

$$x = 4 \times 13$$

$$x = 52$$

$$\begin{array}{r} 13 \\ \times \quad 4 \\ \hline 52 \end{array}$$

2. Solve: $1\frac{2}{3}\,m = 15$

$$1\frac{2}{3}\,m = 15 \qquad\qquad \text{LCM} = 3$$

$$\frac{3 \times 5\,m}{3} = \frac{15 \times 3}{1} \qquad \text{(Multiply both sides by LCM)}$$

$$\frac{5\,m}{5} = \frac{15 \times 3}{5} \qquad \text{(Divide both sides by 5)}$$

$$m = 3 \times 3$$

$$m = 9$$

Exercise:

1. Solve: $\dfrac{m}{7} = 8$

2. Solve: $\dfrac{5\,x}{7} = 20$

3. Solve: $\dfrac{t}{7} = 12$

4. Solve: $1\frac{1}{8}\,x = 24$

5. Solve: $1.4\,p = 84$

<u>Solving equations:</u>

<u>Examples:</u>

1. Solve:
$$
\begin{aligned}
3(2x - 2) &= 2(x - 9) \\
3(2x - 2) &= 2(x - 9) \\
6x - 6 &= 2x + 6 - 18 \\
6x &= 2x - 12 \\
6x - 2x &= 2x - 2x - 12 \\
4x &= {}^-12 \\
\underline{4}x &= {}^-\underline{12}
\end{aligned}
$$

$$\frac{4}{x} = \frac{4}{^-3}$$

2. Solve: $2(4x + 4) = 4x - 12$

$$2(4x + 4) = 4x - 12$$

$$8x + 8 = 4x - 12$$

$$8x + 8 - 8 = 4x - 12 - 8$$

$$8x = 4x - 20$$

$$8x - 4x = 4x - 4x - 20$$

$$4x = {}^-20$$

$$\frac{4x}{4} = \frac{{}^-20}{4}$$

$$x = {}^-5$$

Exercise:

1. Solve: $5(p - 2) = 2(p - 4)$

2. Solve: $3(t - 2) = 2(t - 1)$

3. Solve: $6(x - 1) = 4(2x - 12)$

4. Solve: $6(x + 4) = 4(6x - 20)$

5. Solve: $6(p + 4) = 3(p - 2)$

P. 7 MATHEMATICS HOME WORK

1. Set P = { 0, 1, 2, 3, 4}
(a) Find the number of subsets in set P.

(b) Find the number of proper subsets in set P.   Shade $(A \cap B)^1$

2.(a)   A   B   (b)   A

B
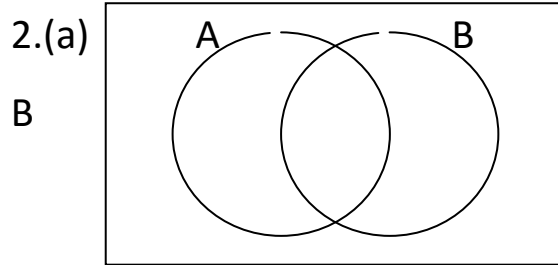
(ii) Shade (A - B)
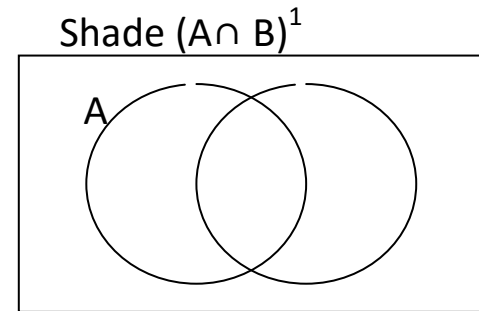
3. When a dice is rolled once. Find the probability of picking.

(a) a prime number

(b) a composite number

(c) an even number

4. There are 38 pupils in a primary seven class, 15 pupils like playing
table tennis (T), 28 like playing basket ball (B) and y like playing both, 1
pupil plays neither of the two games.
(a) Complete the Venn diagram.

        N(Ɛ) =
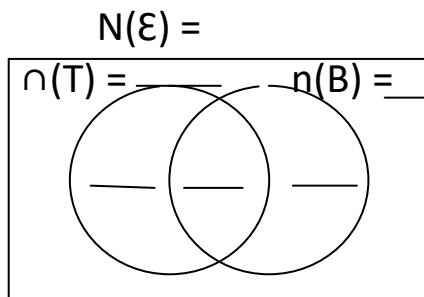
∩(T) = ____   n(B) = ___   (b) How many pupils like playing

                                            both games?

 (c)   How many pupils play basket ball only?

(d) How many pupils play only one game?

5. The Venn diagram below shows the number of pupils who like mathematics (M), English (E)) and those who like neither of the two subjects.

n(Ɛ) = _____

n(M) =20   n(Ɛ) =____   (a) Find the value of x.

2x + 2   x   10
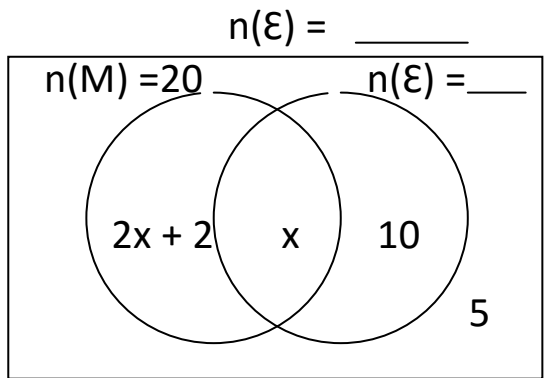
5   (b) How many pupils like English?

(c) Find the number of pupils in the whole class.

(d) What is the probability of getting a pupil who likes English only?

6. Use the Venn diagram to illustrate the following information.

n (€) = 84, ∩ (P) = 64 ∩(Q) = 43, ∩(P ∩ Q) = 27, ∩ (P U Q)' = ∩

n(Ɛ) = _____

n(P) = ____   n(Q) =____

____   ____   ____

____
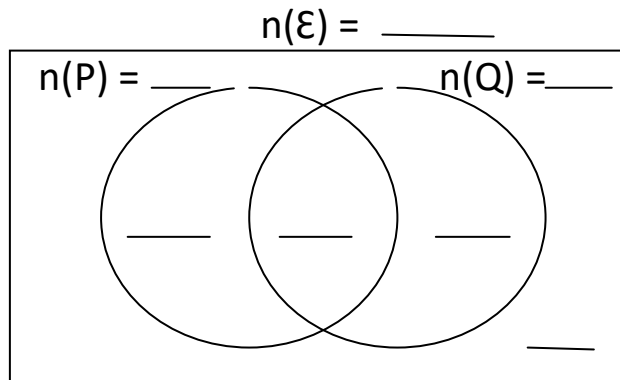
(b) Find the value of n.

(c) Find ∩ (P)'

(d) What is the probability of picking a member in (P U Q)'?

7. Study the Venn diagram below and answer the questions that following.

N(Ɛ) = _____

N(M) = ⎯⎯   n(E) =___

x – 10   5   28

4
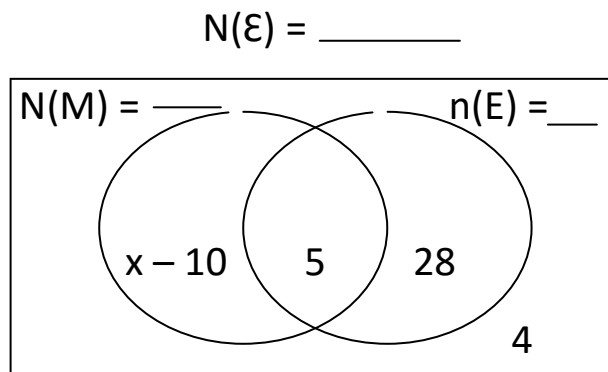
(a) If the number of pupils who like Maths only is 24. Complete the Venn diagram.

(b)   Find the number of pupils in the whole class.

8. Write twenty eight thousand fifty two in figures.

9. Change 54 in Roman numerals.

10. Expand 2870 using powers of 10.

11. In a line of P. 1 pupils Marion was the 10th from each end of the line. How many children were in the line?

12. Write MMXIII in Hindu Arabic numerals.

13. Given that 123_{four} = 52_x. Find the value of x.

14. (a) Write 53600 in standard form.

(b)　Write 0.00005784 in scientific notation.

15. Use distributive property to work out

(a) (2 x 48) + (32 x 2)　　　　　　　　(b) (5 x 24) - (12 x 5)

16. Show 5021 on the abacus.

TH　　H　　T　　O
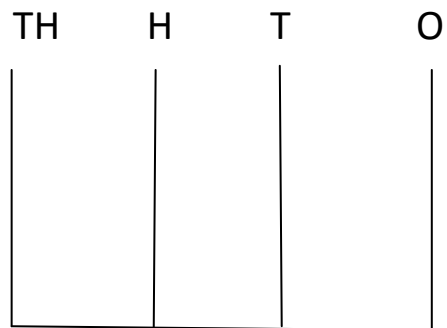
17. Work out: 265 x 24

18. Work out: 2745 ÷ 9

19. Divide: 23724 ÷ 123

20. Work out: 1023 - 823 + 224 - 127 + 3 =

21. (a) Solve: $3^n = 27$

(b) Solve: $3^1 \times 3^4 = 3^{(n + 2)}$

(c) Solve: $5^x = 125$

(d) Solve: $2^n \times 2^n = 64$

22. Work out: $(8.5 \times 12) + (8.5 \times 8)$

23. Expand: 34.207 using powers of ten.

24. Find the cube root of 216.

25. Find the cube of 9.

26. Find the square root $3\frac{1}{16}$.

27. A mother shopped the following items.

   3 kg of sugar at sh.3200 per kg.

   2 ½ kg of rice at sh.4000 per kg.

   1 ½ kg of meat at sh.10,000 per kg.

   200 gm of spices at sh.3000 per kg.

If she went with sh.200,000.

(a) Find her total expenditure.

(b)   If she was given a discount of 10% find the discount.

(c) How much did she pay?

(d)   How much money did she remain with?

28. Find the next numbers in the sequence.

(a) 1, 4, 9, 16, 25, ____, ____

(b) 189, 63, 21, 7, ____, ____

29. Find the three consecutive odd numbers whose sum is 129.

30. Given the mean of the six consecutive integers is 6 and that of the first integer of x.
(a) Find the value of x.

(b)   Write the five integers.

(c) Find their range.

31. The LCM of two numbers is 60 and their GCF is 3. Find the second number if the first number is 15.

32. The LCM and the GCF of two numbers is 120 and 9 respectively.

If one   of the numbers is 36. Find the second number.

33. Use the Venn diagram below to answer questions that follow.
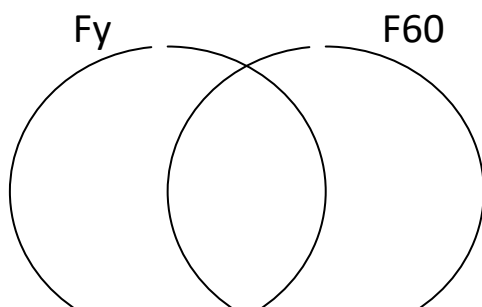
Fy   F60   (a) Find the value of x.

3_1 2_1 2_2

3_3 3_1 x

(b) Find the value of y.

(c) Find the GCF of y and 60.

(d)   Find the LCM of y and 60.

34. Find the values of letters in the magic square.

6	x	2
y	5	9
8	w	z

35. Use the figure below to answer questions.

2(x + 1) cm

(2x) cm
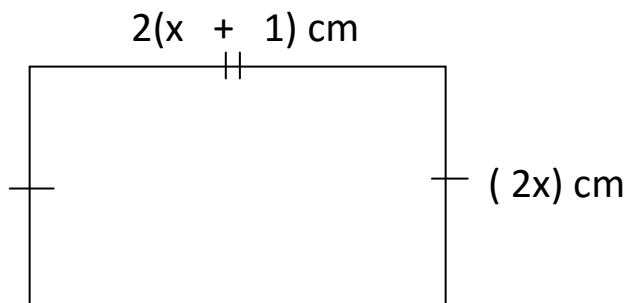
$(5x \overset{||}{-} 7)$ cm

(a) Find the value of x.

(b) Find the perimeter of the figure.

(c) Find the area of the figure.

37. In Bright Future Primary School, there are two bells, one for upper primary that rings after 40 minutes and the other for lower primary that rings every 30 minutes.
(a) After how long will the two bells ring together?

(b) If they ring together at 8: 30 am, at what time will they ring together again?

38. Given that y = 2x + 1. Find the missing co-ordinates to complete the table.

x	0	2	—	⁻3	___	⁻1
y	___	___	3	___	7	___

39. Amos is 4 times as old as Edward. If the range of their age is 24 years.

How old is each?

40. Plot the following points on the grid graph below.

W(⁻3, ⁺2), X(⁺3, ⁺2), Y(⁻3, ⁻2), Z(⁻3, ⁻2)

y

						+5						
						+4						
						+3						
						+2						
						+1						
-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6
						-1						
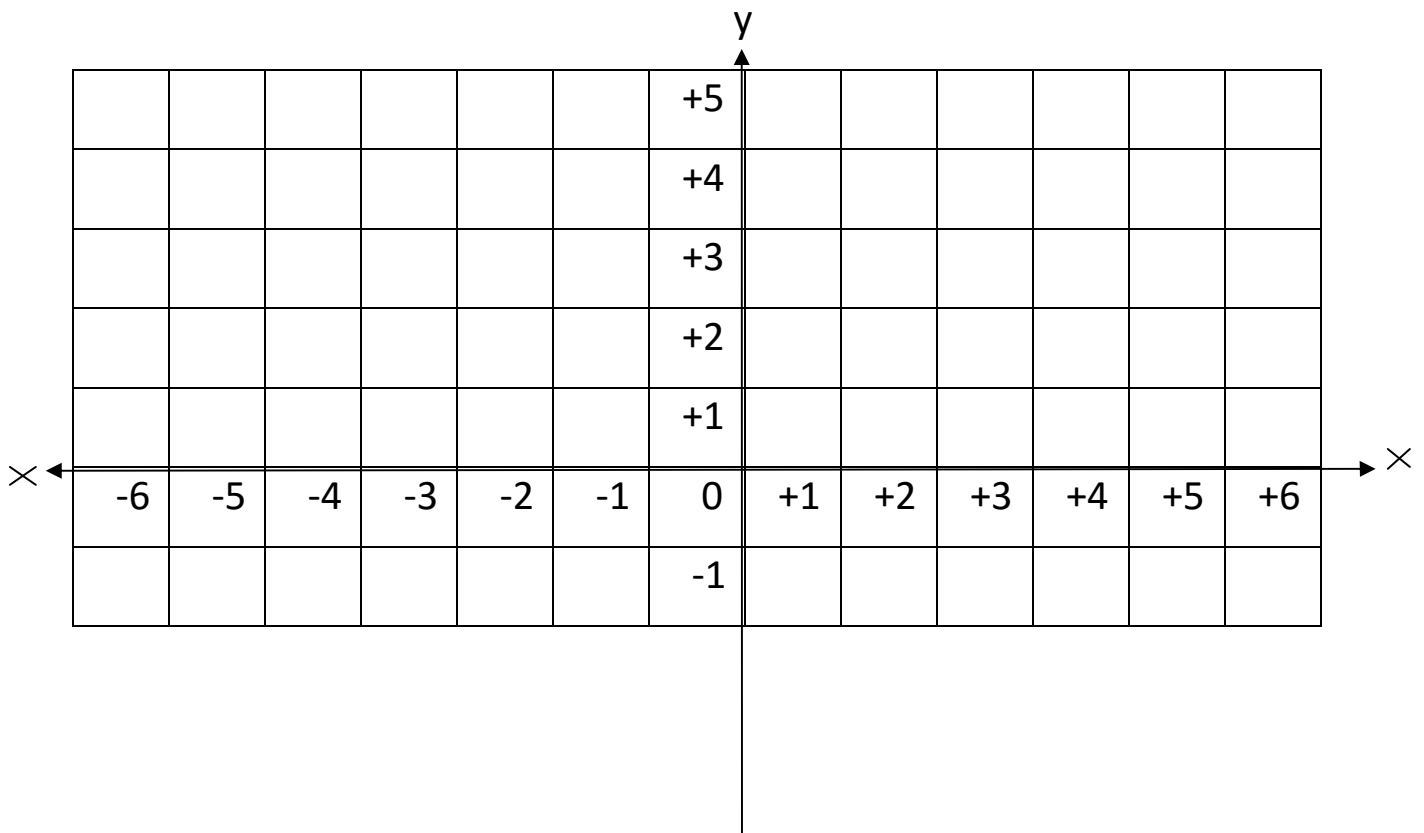
						-2					
						-3					
						-4					
						-5					

y

(b)   Join W to X, X to Y, Y to Z and Z to W.

(c)   Name the figure formed.

(d)   Calculate the area of the figure.

41. When a dice is rolled once. Find the probability of picking.

(a)   an odd number?

(b) a square number?

(c) a triangular number?

41. The LCM of two numbers is 90 and their GCF is 6.

Find the second number if the first number is 30.

42. In a basket ⅓ of the fruits are pineapples, ½ of the remainder are oranges and the rest are mangoes.

(a) Find the fraction of mangoes in the basket.

(b) If there are 16 mangoes in the basket, how many fruits are there altogether?

43. In Mbarara town council ¼ of the youths support Manchester United, ⅔ of the remainder support Arsenal. The rest of the youth support Chelsea, if those who support Chelsea are 33, find the total number of youth in Mbarara town council.

44. Given the £1 costs Ug. Sh.4200 and Ksh. 1 costs Ug. Sh 38 at Kamoga Forex Bureau.

(a) If Moses has £3780, how much will he get in Uganda shillings?

(b) How many Kenya shillings will Choptai get from Ug.sh.2,641,000?

45. The table below shows marks scored by candidates of Sir Apollo Kagwa
   Manyangwa in a test.

Marks	80	60	90	75
No. of pupils	3	2	1	4

(a)   How many pupils did the test?

(b) Find the modal score.

(c)   Calculate their mean mark.

46. The distance from town **A** and **B** is 108 km. If Sarah left town **A** at 7: 15 am
   and
      reached town **B** at 8: 45 am.

(a) How long did Sarah take to cover the journey?

(b) At what speed did Sarah travel.

47. The width of a rectangle is 8 cm less than the length. The perimeter of
the rectangle is 24 cm.
(a) Find the length.

(b) Find the width.

(c) Find the area.

48. Joram is twice as old as his sister Mbabazi. The sum of their ages is 63
years.

(a) How old is Joram?

(b) How old is Mbabazi?

(c) Find the difference between their ages.

49. (a)   Find the value of x.

$3x + 20^o$

$x + 40^o$
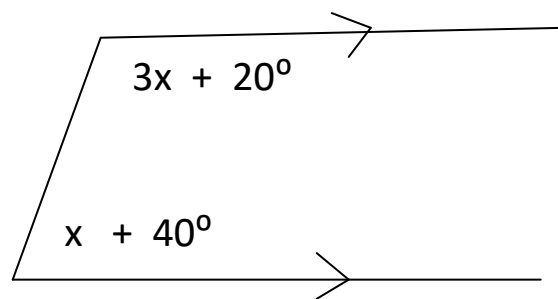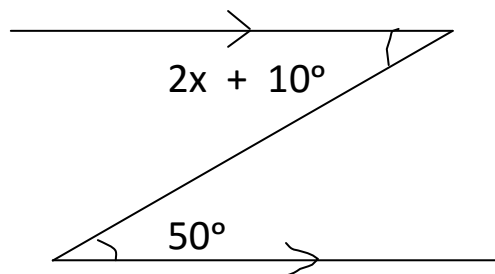
(b) $2x + 10^o$ Find the value of x.

50°

50. The pie-chart below shows Taata Sam's weekly expenditure.

RENT

FOOD

X ⌐
      ⌐
        120⁰
      TRANSPORT
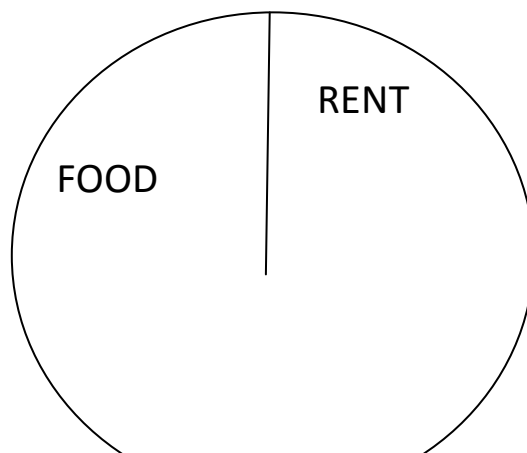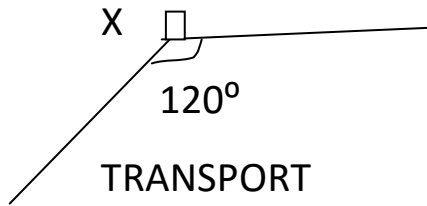
(a) Find the valve of x.

(b) If he spends sh.100,000 on food, how much money does he spend in a

   week.

(c) Find the amount he spends on transport every week.

51. Three angles 40°, x + 20° and 70° are angles on a straight line. Find the

valve of x.

SOCIAL STUDIES P. 7 SET II

GHANA:

Get an Atlas or a text book SST P. 7 and observe the following:-

1. Name the region of Africa where Ghana is found.

   ....

   Which major line of longitude runs through Ghana?

   ....

   How many degrees has the above named longitudes?

   ....

   What is the relationship between the named line of longitude and the equator?

   ....

   Name the water body which borders Ghana in the south.

   ....

   What evidence is there to show that Ghana is a non-land locked country?

   ....

   Besides Ghana name any two other African countries crossed by longitude 0°.

   (i)   ....   (ii)   ....

2. Name the neighbouring countries of Ghana:-

   (a)   in the north   ....

   (b)   in the East   ....

   (c)   In the west   ....

3. Name the town in Ghana directly crossed by longitude 0°.

   ....

   Compae Ghana and Uganda in terms of size.

   ....

The old name of Ghana is Gold coast. Why was it named so?

……

Similarities between Ghana and Uganda.

a) Both are independent countries of Africa.

b) Both use English as an official language.

c) Both were colonized by Great Britain.

d) Both belong to the Common Wealth.

4. Differences between Ghana and Uganda.

i.   Ghana got her independence earlier than Uganda (1955 / 1962)

ii.   Ghana has a coastline while Uganda is land locked.

iii.   Ghana is crossed by the Prime Meridian while Uganda is crossed by the equator.

iv.   Ghana is bigger than Uganda.

v.   Ghana is more populated than Uganda.

vi.   Ghana is found in West Africa while Uganda in East Africa.

NOTE CAREFULLY.

1. Why is English officially used in both Uganda and Ghana?

   ……

   Why was Ghana named so after independence.

   ……

   Name the major lake in Ghana.

   ……

   Of what formation is the named lake?

   ……

   Inga dam is the largest dam in DRC. What is Ghana's largest dam?

   ……

   Give **three** reasons which made Ghana to be a famous kingdom in West Africa.

(i) ....

(ii) ....

2. ....

3. Name the nationalist who led Ghana to independence.

....

COCOA GROWING IN GHANA.

1. It was introduce in Ghana from South America (Brazil) in the Amazon forest where it grew widely.

2. It was first grown in Sao Tome in Africa as introduced by the chocolate company.

3. Give two similarities between cocoa and coffee.

(i) ....

(ii) (ii)..

4. What is the purpose of intercropping cocoa?

....

Besides cocoa, name any three examples of beverage crops.

(i) .... (ii) .... (iii) ....

5. Name two districts in Uganda known for growing cocoa.

(i) .... (ii) ....

6. List down any four ways how Ghana has gained from cocoa growing.

(i) ....

(ii) ....

(iii) ....

(iv) ....

7. Identify any three factors which favour cocoa growing in Ghana.

(i) ....

(ii) ....

(iii) ....

8. Besides Ghana list down any three other African countries known for cocoa growing.

(i) ....

(ii) ....

(iii) ....

9. Write down any three products obtained from cocoa after processing it.

(i) ....

(ii) ....

(iii) ....

10. How is the harvesting of cocoa different from coffee?

....

....

What is the purpose of fermenting cocoa?

....

Name the town in Ghana known for the activities of cocoa growing, weighing and buying. ....

11. Identify at least four problems which face cocoa growers in Ghana.

(i) ....

(ii) ....

(iii) ....

(iv) ....

12. Draw a sketch map of Ghana and show the following towns.

- Sekondi, Takoradi, Axim, Accra, Tema, Tamale, Kumasi

THE REPUBLIC OF SUDAN.

1. Use an Atlas to draw the sketch map of Sudan and clearly show its neighbouring countries, the Red Sea and Khartoum, Alexandria and Port Sudan.

2. How did the creation of South Sudan affect the give of the present Sudan?

   ....

   Why did South Sudan break away from Sudan?

   ....

   Besides Sudan, name any four other countries which are found in the Nile valley.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

3. The main cash crop grown in the Nile valley is cotton. How does Sudan as a desert country manage to grow cotton?

....

Cotton in Sudan is mostly grown at the Gezira scheme and the manage extension.

A - Gezira scheme

B - Managil

C - Kenana scheme

D - Lake Tana

E - Khartoum

F - Omduman

G - White Nile

H -   Senner dam

I - A railway line

J - Blue Nile
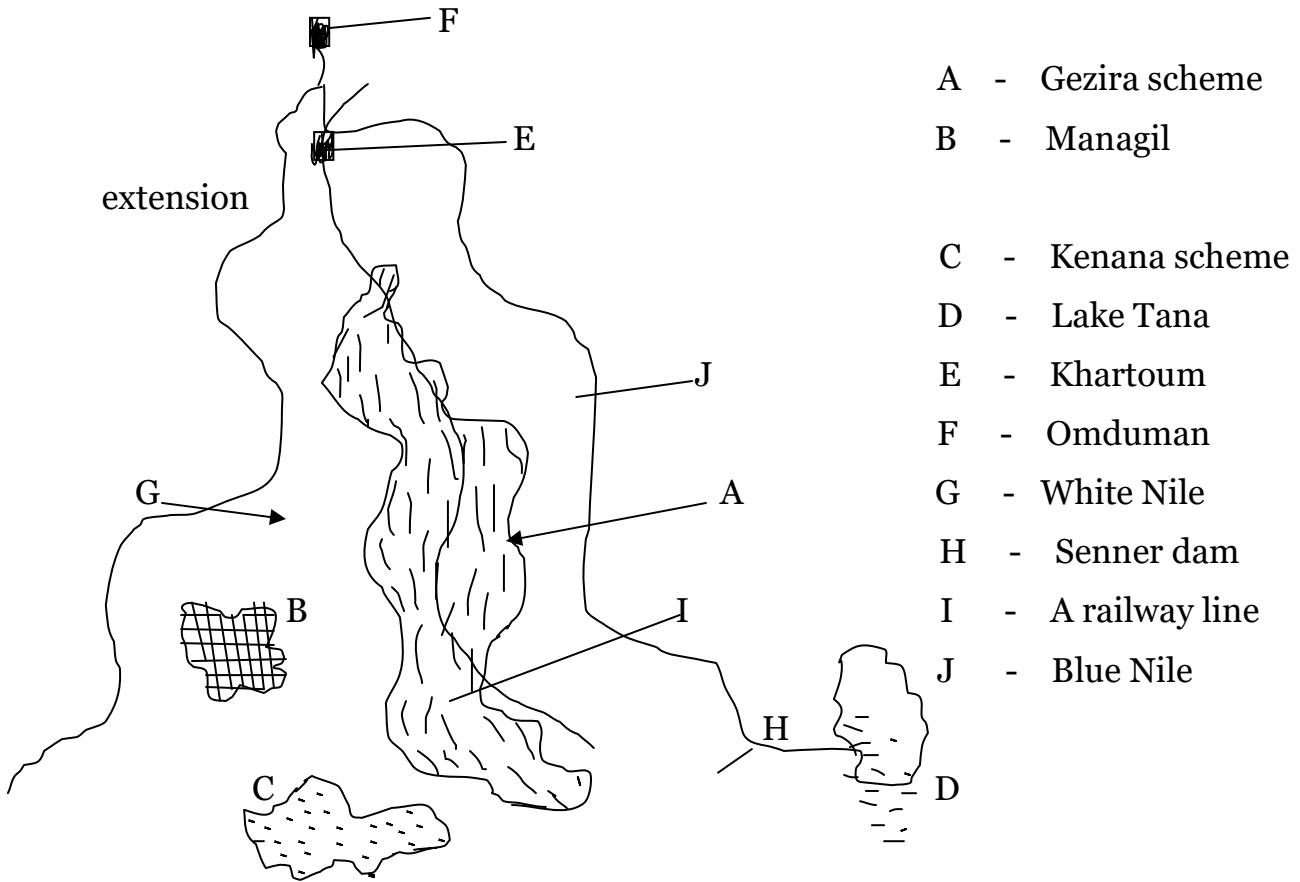
4. (a) Why are crops in Sudan mostly grown by the help of irrigation?

....(

b) What is irrigation farming?

....

Give any **two** advantages of irrigation farming.

(i)   ....

(ii)   ....

(a) Outline at least **two** disadvantages of irrigation farming.

(i) ....

(ii) ....

(b) Why isn't irrigation farming commonly done:-

(i) Near lake Victoria ....

(ii) Karamoja region ....

(c) Besides cotton, name any two other crops grown on the Gezira scheme.

(i) .... (ii) ....

(d) Name the crop grown on the Kenama scheme.

....

(e) Identify at least three factors which have favoured cotton growing on the

Gezira

scheme.

(i) ....

(ii) ....

(iii) ....

(f) How has Sudan gained from cotton growing?

....

Outline any **two** problems which face cotton growing on the Gezira

scheme.

(i) ....

(ii) ....

(g) Use an Atlas to name at least three cotton growing districts in Uganda.

(i) .... (ii) .... (iii) ....

(h) Why has cotton growing declined in Uganda?

(i) ....

(ii) ....

(i) Define the following:-

    (i)   Ginning   ....

    (ii) A ginnery   ....

(j) How did the following contribute to cotton growing in Uganda:-

   -   Hesketh Bell   ....

   -   Kenneth Borup   ....

(k) Why did the colonialists introduce cotton growing in Uganda?

    (i)   ....

    (ii)   ....

(l) Why has the production of cotton growing declined in Uganda?

....

Write down any **two** products obtained from cotton.

    (i)   ....

    (ii)   ....

(m)   Cotton growing in Sudan is managed by the Gezira Management Board. How has this board supported the tenants?

It has provided the tenants herbicides, fertilizers, good seeds, technical advice markets; garden tools, pesticides and land.

(n) The roles of the tenants. They prepare the land, plant weed, spray, harvest and sell cotton to the board.

(o) How have the following supported cotton growing on the Gezira Scheme:-

    (i)   The Blue and White Nile.

    (ii) Senner dam

    (iii) Lake Tana

THE FEDERAL REPUBLIC OF NIGERIA.

1. Use an Atlas and related textbooks to show the location of Nigeria , its neigbouring countries:

  a. In the north.

b. In the West.

c. In the East

d. In the north East

e. In the South.

2. Compare Nigeria and Uganda in terms of:-

   a. Size

   b. Location

   c. Colonialism

   d. Population

3. Show in three ways how Nigeria and Uganda are different.

   (i)   ....

   (ii)   ....

   (iii)   ....

4. Give two reasons why the southern part of Nigeria receives a lot of rainfall.

   (i)   ....

   (ii)   ....

5. In the northern region, there is a dry land occupied by the Fulani. What is their main work?

   ....

   ....

   Why do most pastoralists occupy dry areas?

  L

   ist down any two problem faced by pastoralists and their solutions.

   Problems. (i)   ....

           (ii)   ....

   Solutions. (i)   ....

           (ii)   ....

6. The following perennial crops are grown in Nigeria – coffee, oil palm, rubber and cocoa. Name any two factors which favours oil palm growing in Nigeria.

(i) ....

(ii) ....

7. Name the district in Uganda known for oil palm growing.

....

Mention at least two products obtained from oil palm.

(i) ....

(ii) ....

8. How has BIDCO supported oil palm growing in Kalangala.

i. ....

ii. ....

POPULATION

1. Nigeria is the most populated country in Africa. Give **two** advantages of this large population.

(i)

....

(ii)

....

2. Give two challenges Nigeria has because of this large population.

(i) ....

(ii) ....

3. R. Niger is the biggest river in Nigeria. Why was it named as the oil river?

....

Use the Atlas to show R. Benue, the Niger delta and Kainji dam.

4. Use a comprehensive text book SST Bk 7, draw the map of Nigeria on page 153 and show clearly the oil fields and towns.

5. Why was Nigeria's town transferred from Lagos to Abuja?

....

Why has Libya gained from oil drilling than Nigeria?

....

....

How has Nigeria gained from oil drilling?

(i)   ....

(ii)   ....

6. Why has the Niger delta attracted a large population of people?

....

Note carefully:-

Dear candidates the situation is not the best but use it to compete with thousands of other P.L.E candidates.   Please parents thank you for the effort injected in, God is watching and will reward you.

NEVER GIVE UP

P. 6 SCIENCE REVISION WORK

CLASSIFICATION OF ANIMALS.

1. Name the **two** main groups of animals.

   (i) …………………………………… (ii) ……………………………………

2. State any **four** reasons why animals are classified as living organisms.

   (i) ………………………………………………………………………………

   (ii) ………………………………………………………………………………

   (iii) ………………………………………………………………………………

   (iv) ………………………………………………………………………………

3. Besides animals, name **four** other kingdoms of living organisms.

   (i) ………………………………………………………………………………

   (ii) ………………………………………………………………………………

   (iii) ………………………………………………………………………………

   (iv) ………………………………………………………………………………

4. Study the table drawn below and complete it by filling in the missing organisms.

Animal kingdom

```
                    ┌──────────────────────┐
              ┌─────┤                      │
              │     └──────────────────────┘
              │         Invertebrate
              │
    ┌─────────┼──────────┬──────────┬──────────┐
    │         │          │          │          │
Amphibians  ┌────┐    Reptiles ┌────┐      ┌────┐
            └────┘             └────┘      └────┘
```

```
    ┌──────┬──────────┬──────────┬──────────┬──────────┐
    │      │          │          │          │          │
  ┌────┐ Coelenterates ┌────┐  echinoderms ┌────┐
  └────┘              └────┘             └────┘
 sponges
```
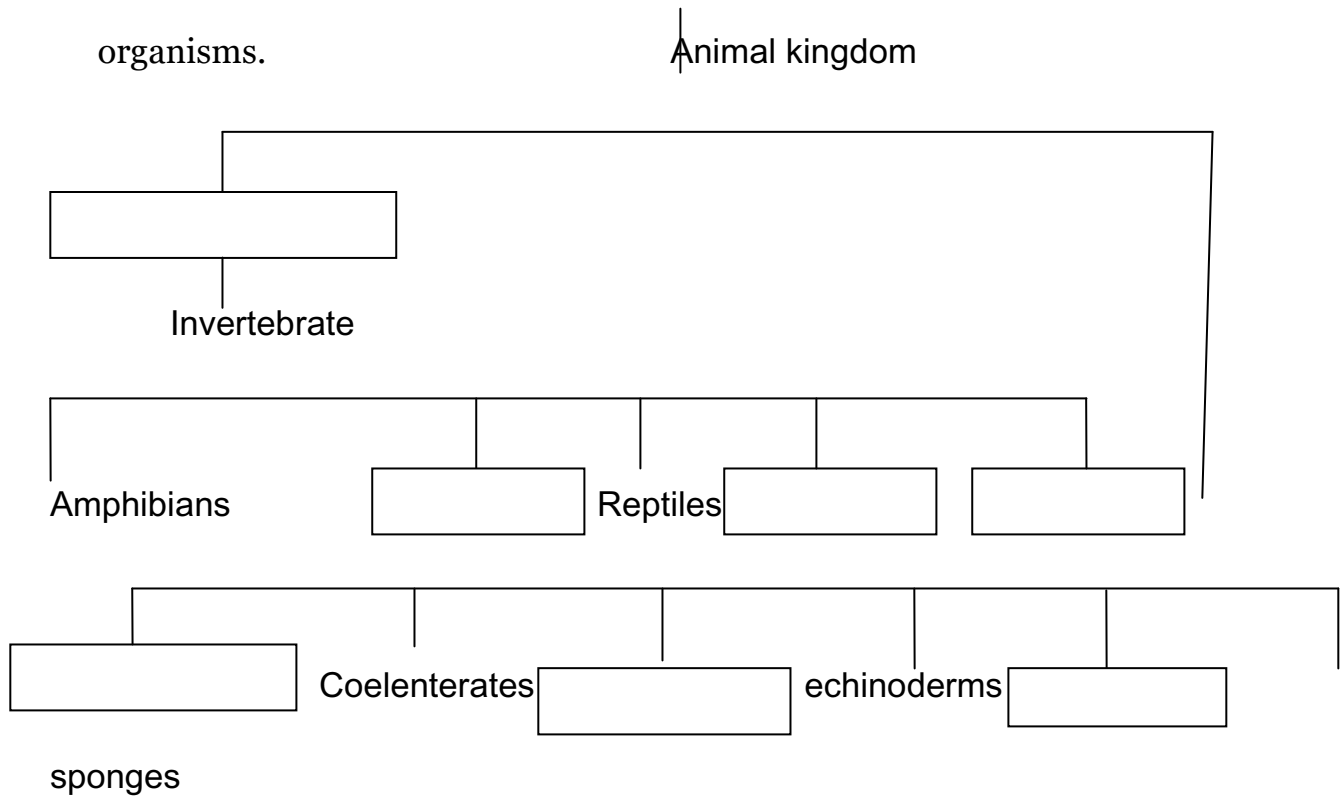
5. State any **four** characteristics of fish.

   (i) ....

   (ii) ....

   (iii) ....

   (iv) ....

The diagram below is of a structure of a fish. Study it and answer questions about it.
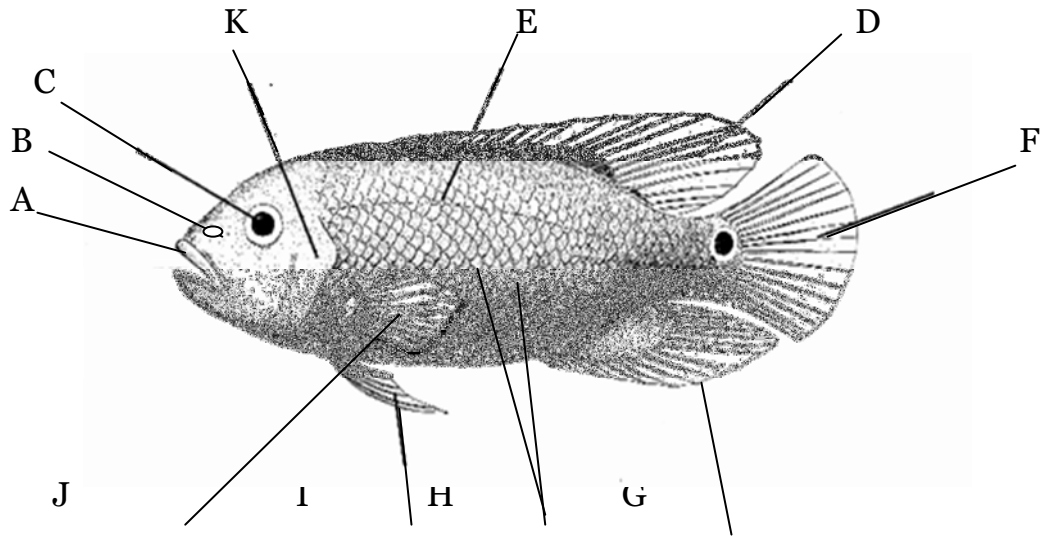
6. Name the parts marked:

A _____   G _____

B _____   H _____

C _____   I _____

D _____   J _____

F _____   K _____

(b) State the function of the parts marked:

A ....

B ....

C ....

D ....

E ....

F ....

G ....

H ....

I ....

J ....

K ....

7. How do fish reproduce?

   ....

8. State any **four** ways fish are adapted to living in water.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

9. State any **five** ways fish are useful to people.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

   (v)   ....

10. Write any three ways fish protect themselves from enemies?

    (i)   ....

    (ii)   ....

    (iii)   ....

11. Why do fish reproduce in large numbers?

    ....

12. The diagram below shows the breathing system in fish. Use it to answer

    questions about it.......

Mouth

P

Q   R
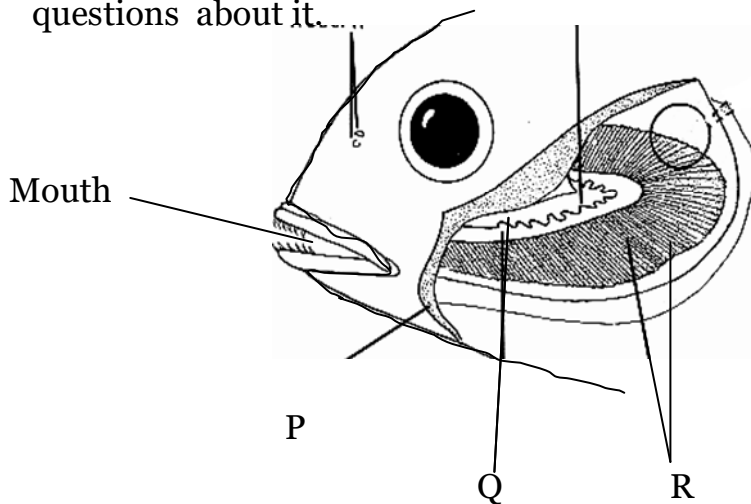
a) Name the parts marked P, Q and R.

   (i)   P ....   (iii) R ....

   (ii)   Q ....

b)   Why is the mouth useful for breathing in fish?

....

c) State the **function** of the parts marked:

   P   ....

   Q   ....

   R   ....

d) How are the structures marked R adapted to their function?

....

e) Why will fish die if it is removed from water?

....

13. Why would you advise a mother whose child has kwashiorkor to add fish to the child's diet?

....

14. Why are fish cold blooded?

....

15. What are amphibians?

....

16. State any **four** characteristics of amphibians.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

17. Give **four** examples of amphibians.

   (i)   ....   (iii) ....

   (ii)   ....   (iv) ....

18. How do amphibians reproduce?

....

19. Give any one example of amphibians classified under each of the following groups.

(a) Apoda   ....

(b) Urodella   ....

(c) Anura   ....

20. (a) Give any **two** similarities between frogs and toads.

(i)   ....

(ii)   ....

(b) State any **three** differences between frogs and toads.

(i)   ....

....

(ii)   ....

....

(iii)   ....

21. How is the long sticky tongue useful to frogs and toads?

....

22. The drawings below are of eggs laid by different amphibians.
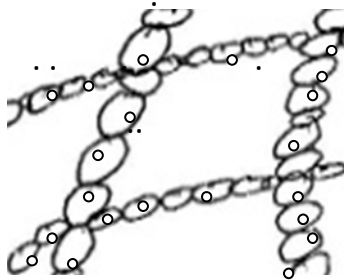
V   W
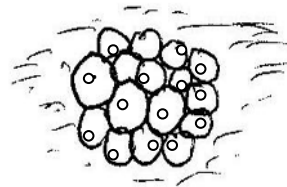
Name the amphibian that lays eggs marked:

(ii)   V   ....

(iii)   W   ....

23. How is a tadpole similar to fish in terms of breathings?

....

24. (a) State any two similarities between amphibians and fish.

(i) ....

(ii) ....

(b) Give any **three** differences between amphibians and fish.

(i) ....

....

(ii) ....

....

(iii) ....

....

25. How do amphibians help in controlling the spread of malaria?

....

26. State any **five** characteristics of reptiles.

(i) ....

(ii) ....

(iii) ....

(iv) ....

(v) ....

27. Give the four main groups of reptiles.

(i) .... (iii) ....

(ii) .... (iv) ....

28. Give any **two** examples of each of the following:

(a) Poisonous snakes (i) .... (ii) ....

(b) Non poisonous snakes (i) ....

(ii) ....

(c) Constrictors (i) ....

(ii) ....

29. The diagram below is of a head of a snake. Use it to answer questions about it.

(a) Which type of snake is shown in the diagram below?

....

(b) Name the parts marked:

A .... B ....

(c) How is part marked B useful to a snake?

....

(d) In which way are the parts marked A of importance to the snake?

....

30. Why are snakes regarded as carnivorous animals?

....

31. Give any four types of lizards.

(i) .... (ii) ....

(ii) .... (iii) ....

32. Why do some lizards break their tails?

....

33. Of what importance is the shell to a tortoise?

....

34. Why are turtles and terrapins have their feet modified into flippers?

....

35. State two ways in which tails are useful to crocodiles and alligators.

(i) ....

(ii) ....

36. How are rows of big teeth in the jaw of crocodiles and alligators of importance?

   ....

37. State any four ways reptiles can be useful to people.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

38. State any two ways camouflaging is useful to chameleons.

   (i)   ....

   (ii)   ....

39. How is the tongue of a chameleon adapted to its function?

   ....

40. State any five characteristics of birds.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

41. (a) List three classes of birds grouped according to how they feed.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (b) List five classes of birds grouped basing on how they move.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

   (v)   ....

42. The drawings below are a head and foot of a group of birds.
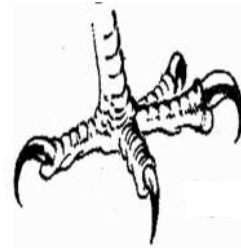
(a) Name the class of birds with such head and toot.

....

(b) Of what importance is such a beak to the bird?

....

(c) How is such a foot adapted to its function?

....

(d) Give any four examples of birds that belong to the class you mentioned in **(a)** above.

(i) .... (iii) ....

(ii) .... (iv) ....

(e) Why are birds with such beak and foot regarded as carnivorous?

....

43. (a) What are perching birds?

....

(b) Name the four groups of perching birds.

(i) ....

(ii) ....

(iii) ....

(iv) ....

(c) Give any four examples of perching birds.

(ii) .... (iii) ....

(iii) .... (iv) ....

44. The diagram shows a head of a perching bird. Study it and answer questions

about it

(i)   To what group of perching birds does a bird with such a head belong?

....

(ii)   How is such a beak adapted to its function?

....

(iii)   Give any two examples of birds with such a beak.

(a)   ....   (b)   ....

45. The diagram below is of feet of different types of birds. Use them to answer questions about them.

C   D

a. Which class of birds have such foot marked:

C   ....   D   ....

b. How is foot marked C adapted to its function?

....

c. Name any four examples of birds with foot marked C.

(i)   ....   (iii)   ....

(ii)   ....   (iv)   ....

d. How is foot marked D adapted to its function?

....

e. Name any two examples of birds with foot marked D.

(i)   ....   (ii)   ....

46.   Name any three examples of birds which belong to each of the following classes:

a) Scratching birds : (i)   ....

                       (ii)   ....

b) Flightless birds: (i) ....

                       (ii) ....

c) Scavenger birds (i) ....

                       (ii) ....

d) Wading birds (i) ....

                       (ii) ....

47. (a) Why can't flightless birds fly?

....

(b) Which adaptation enables wading birds to walk easily in water?

....

(c) How are scavenger birds useful in the environment?

....

48.   (a) State any five ways in which birds are adapted for flying.

(i)   ....

(ii)   ....

(iii)   ....

(iv)   ....

(b) Give any four ways in which birds are useful in the environment.

(i)   ....

(ii)   ....

(iii)   ....

(iv)   ....

(c) State any three disadvantages of birds.

(i)   ....

(ii)   ....

(iv)   ....

49.   (a) What are mammals?

....

....

(b) State any **three** characteristics of mammals.

(i) ....

(ii) ....

(iii) ....

(c) Name the nine classes of mammals.

(i) .... (vi) ....

(ii) .... (vii) ....

(iii) .... (viii) ....

(iv) .... (ix) ....

(v) ....

50. Give any two examples of animals belonging to each of the following classes of mammals.

(a) Primates: (i) .... (f) chiroptera (i) ....

        (ii) .... (ii) ....

(b) Ungulates: (i) .... (g) monotremes (i) ....

        (ii) .... (ii) ....

(c) Carnivores: (i) .... (h) Cetaceans (i) ....

        (ii) .... (ii) ....

(d) Rodents (i) ....

        (ii) ....

(e) Insectivores: (i) .... (ii) ....

51. The drawings below are of toes of different hoofed mammals. Study them and answer questions about them.

B   **C**   **D**

(a)   Name any **one** example of a hoofed mammal with toes marked:

   B   ....

   C   ....

   D   ....

(b)   Why are hoofed mammals regarded as herbivores?

   ....

52. State any **four** characteristics that determine the mode of feeding of carnivorous mammals.

   (i)   ....

   (ii)   ....

   (iii)   ....

   (iv)   ....

53. What makes monotremes different from the rest of other mammals?

   ....

   ....

54. The table below shows different organisms. Study it and answer questions that follow.

A	B	C	D
Hyena	Monkey	Seal	Echdina
Leopard	Gollira	Whale	Duck-billed platypus
Lion	Chimpanzee	Walrus	

   a. To what group of vertebrates do all animals shown in the table belong?

   ....

   b. How do animals in group **B** differ from animals in group **D** as regards reproduction?

   ....

....

c. How are animals in group **A** similar to those in group **C** as regards feeding habits?

....

d. Why would you classify a baboon under group **B**?

....

e. Why are all the animals in the table shown above regarded as endothermic?

....

f. State any one similarity between birds and animals in group **D**.

....

55. The drawings below are of different organisms.

V

W

X

Y
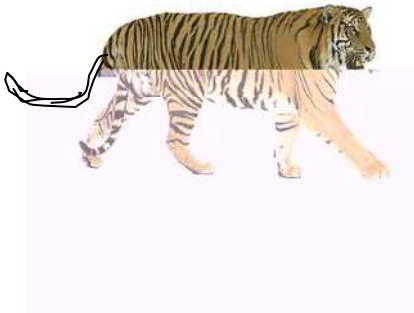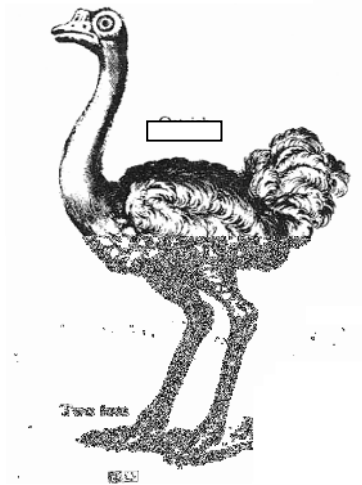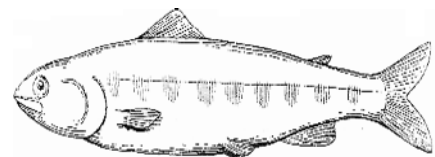
a. How does animal marked **X** differ from animal marked **Y** as regards breathing mechanism?

....

b. State any one similarity between animals **W** and **X**. in terms of reproduction?

....

c. How does animal marked **V** differ from animal **W** in terms of reproduction?

....

d. State any **two** similarities between animals **X** and **Y**.

(i) ....

(ii) ....

e. State any two similarities between animals V and W.

(i) ....

(ii) ....

f. How does each of the following animals protect itself from enemies?

V ....

W ....

X ....

Y ....

g. To which class of vertebrates does each of the following organisms belong?

V .... **X** ....

W .... **Y** ....

h. Why would you classify the kiwi together with animal marked **W**?

....

....

56. (a) What are invertebrates?

....

....

(b) Name six groups of invertebrates.

(i) .... (iv) ....

(ii) .... (v) ....

(iii) .... (vi) ....

(c) To which group of invertebrates does each of the following organisms belong?

(i)   Jelly fish   ....

(ii)   Star fish   ....

(iii) Octopus   ....

(iv)   Tapeworm   ....

(v)   Scorpion   ....

57. (a) What term describes a group of invertebrates with soft bodies that are not segmented?

....

(b) Apart from snails name any other examples of invertebrates you have named in (a) above?

(i)   ....   (iii)   ....

(ii)   ....

(c) How do the invertebrates you named in (a) above reproduce?

....

(d)   How do snails protect themselves against enemies?

....

(e)   State the danger of water snails to people.

....

58.   (a) Worms are thin, long and soft bodied invertebrates. Give any two places where they live.

(i)   ....

(ii)   ....

b. How do worms breathe?

....

c. How do worms reproduce?

....

d. Give any one example of worms under the following groups:

(i)   Segemented worms (Annelids)

           ....

(ii)   Flat worms (Platyhelminthes)

           ....

(iii)   Round worms (Nematodes)

           ....

59. The drawing below is of a worm. Study it and answer questions about it.
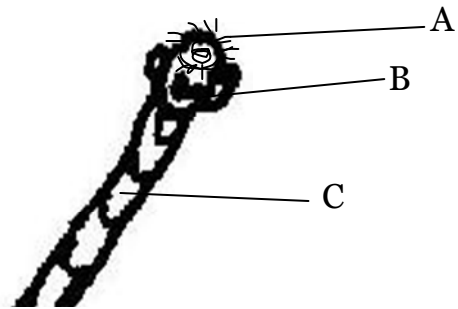
a) Name the worm shown in the diagram above.

    ....

b) Under which class of worms is the worm shown above?

    ....
    ...

c) Name the parts marked:

    A   ....

    B   ....

    C   ....

d) State the function of the part marked B.

    ....

e) How does such a worm get into the body of a person?

    ....

f) Give any **two** signs or symptoms of the infection of worms you mentioned in (a) above to the human body.

(i) ....

(ii) ....

g) State any **two** preventive and treatment measures against such worms.

(i) ....

(ii) ....

h) What type of skeleton do worms have?

....

60. (a) What term describes invertebrates with jointed legs and segmented bodies?

....

(b) What type of skeleton do invertebrates you names in (a) above have?

....

61. (a) Give any two examples of each of the following:

(a) Arachnids (i) .... (ii) ....

(b) Crusaceans (i) .... (ii) ....

(c) Insects (i) .... (ii) ....

(d) Myriapods (i) .... (ii) ....

62. (a) Myriapods are arthropods with many jointed legs. How are the very many legs useful to them?

....

....

(b) Besides centipedes and millipeds give **two** other classes of myriapods.

(i) ....

(ii) ....

(c) How do centipedes differ from millipedes as regards their feeding habits?

....

(e) How does each of the following protect itself against enemies?

(i) Centipede ....

(ii) Millipede ....

63. (a) How many legs do arachnids have?

....

(b) Apart from spiders give any two other examples of arachnids.

(i) ....

(ii) ....

(c) How do spiders :

(i) reproduce?

....

(ii) protect themselves against enemies?

....

(d) State any two uses of a web to a spider.

(i) ....

(ii) ....

64. (a) State any **four** characteristics of insects.

(i) ....

(ii) ....

(iii) ....

(iv) ....

b. Give any two examples of insects with:

(i) Mandibles ...., ...

(ii) Proboscis ...., ...

c. How do insects reproduce?

....

65.The diagrams below are of different life cycles of insects. Study them and answer

questions that follow.

M   N
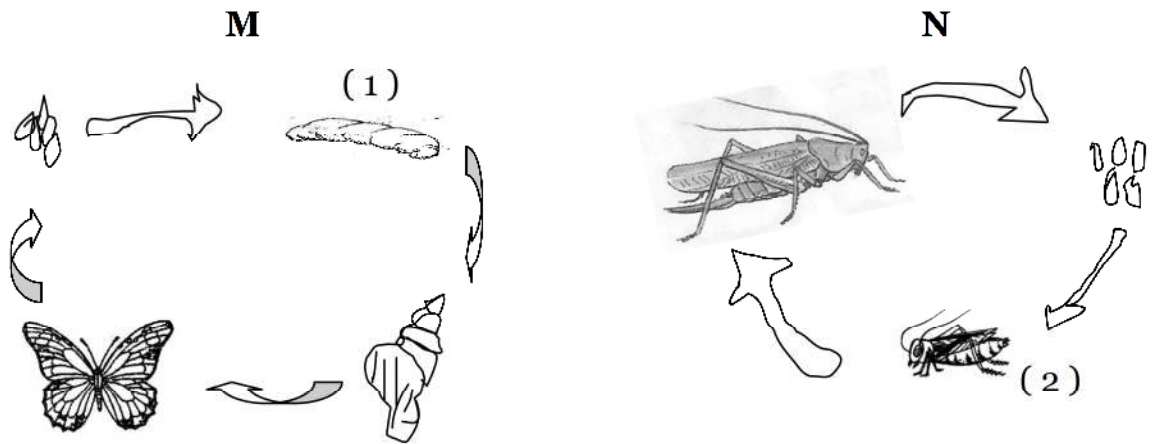
(a)   Name the type of life cycle marked:

    (i) **M**   ....

    (ii) **N**   ....

(b)   Give any **three** examples of insects which undergo the life cycle marked:

    M : (i) .... (ii) .... (iii) ....

    N: (i) .... (ii) .... (iii) ....

(c)   Name the stages marked 1 and 2 in the diagrams:

    (1)   ....

    (2)   ....

66.   (a) State any **four** ways insects are useful in the environment.

  (i)   ....

  (ii)   ....

  (iii)   ....

  (iv)   ....

(b) Give any **three** dangers of insects in the environment.

  (i)   ....

  (ii)   ....

  (iii)   ....

67. The diagrams below show different arthropods. Study and use them to answer

questions that follow.
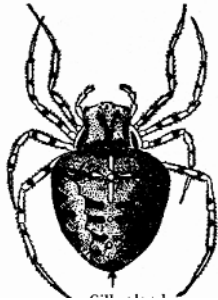
C	D	E

a. Name the class of arthropods to which animals C, D and E belong.

C ....

D ....

E ....

b. Give any **two** reasons why you would not classify animal **C** under the same group as animal **E**.

(i) ....

(ii) ....

c. How are animals **C**, **D** and **E** similar in the way they reproduce?

....

d. Give any **two** similarities between animal **C** and **D**.

(i) ....

(ii) ....

e. How is animal **D** different from animal **E** in the way they feed?

....

....

68. State any **five** ways you would care for and protect animals.

(i) ....

(ii) ....

(iii) ....

(iv) ....

(v) ....

69. Explain how each of the following animals protects itself against enemies.

(a) Leopard ....

(b) Buffalo ....

(c) Porcupine ....

(d) Zebra ....

(e) Kangaroo ....

(f) Elephant ....

(g) Chameleon ....

(h) Lion ....

(i) Snake ....

(j) Python ....

(k) Tortoise ....

(l) Frog ....

(m) Bee ....

(n) Ostrich ....

(o) Fish ....

(p) Caterpillar ....

70. The lists below are of different organisms. Study them and answer questions
that follow.

A	**B**	**C**
Crab	mussel	cobra
Grasshopper	octopus	crocodile
Millipede	oyster	gecko
Scorpion	slug	turtle

a) What makes animals in list **C** different from those in lists **A** and **B**?

....

....

b) How are all animals in lists **A**, **B** and **C** similar in the way they reproduce?

....

c) State any **two** characteristics that make animals in list C different from those in list A.

(i) ....

(ii) ....

d) How is a cobra similar to a scorpion in the way they defend themselves?

....

....

e) What body feature is similar in both the oyster and turtle?

....

71. (a) State **any four** ways animals that are useful to people.

(i) ....

(ii) ....

(iii) ....

(iv) ....

b. Give **any five** features or characteristics used in classifying animals.

(i) ....

(ii) ....

(iii) ....

(iv) ....

(v) ....