

ADMISSION TEST TO GRADE: 6
SCIENCE
KEY

Q.1 Fill in the blanks.

- (i) Chlorophyll (ii) rusting (iii) bigger (iv) battery/cell

Q.2 Answer the following questions.

- (i) Harmful: They cause diseases in plants, animals and human beings, e.g. TB, diarrhea, etc.
Beneficial: Some bacteria help in digestion of food and absorption of food components.
- (ii) Definition: Type of reproduction in which only one parent produces new organisms of its own kind.
Layering: Some branches of shrubs become buried in soil, it is called layer. A layer produces new roots. When it is cut and separated from the plant, it develops into a new plant.
- (iii) Heat is lost, the movement of particles become slower and they come closer to one another. The forces of attraction between the particles become stronger and liquid changes to solid.
- (iv) Water present beneath the surface or water that exists underground. The rainwater which is absorbed by the soil, passes through many layers of Earth and become a part of underground water.

MATHEMATICS- 6

ANSWER KEY

1. (i) 39 500 (ii) 97 (iii) 5 (iv) 20358

2.

2	42
3	21
	7

3	63
3	21
	7

2	70
5	35
	7

$$42 = 2 \times 3 \times 7$$

$$63 = 3 \times 3 \times 7$$

$$70 = 2 \times 5 \times 7$$

Least common multiple = Product of common & un common factors
 $= 7 \times 3 \times 2 \times 5 \times 3 = 21 \times 10 \times 3 = 630$

3.(i) Amount that son got = $\frac{2}{7}$ of total amount

$$= \frac{2}{7} \times \text{Rs } 3500$$

$$= 2 \times \text{Rs } 500$$

$$= \text{Rs } 1000$$

Remaining amount / Amount to be distributed between two daughters = Rs 3500 – Rs 1000 = Rs 2500

(ii) Share of each daughter = $\frac{\text{Rs } 2500}{2} = \text{Rs } 1250$

4. **Method # 1:**

40% represents 16 books
 1 % represents $\frac{16}{40}$ books
 100% represents $\frac{16}{40} \times 100 = 40$ books

Method # 2:

Let total number of books = x

40% of $x = 16$

$$\frac{40}{100} \times x = 16$$

$$\frac{4}{10} \times x = 16$$

$$x = 16 \times \frac{10}{4} = 40$$

Method # 3:

Let x be the total number of books

Percentage	Books
40	16 (direct proportion)

100	x
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$40 : 100 :: 16 : x$

$100 \times 16 = 40 \times x$ (*product of extremes = product of means*)

$$\frac{1600}{40} = x$$

$$40 = x$$

So, there were 40 books at the beginning.

5. Let 4th day sale be y .

Average sales of 4 days = Rs. 2500

Sales on 1st, 2nd and 3rd day = Rs 3200 , Rs 2800 & Rs 1750

Sum of sales of first three days = R. 3200 + Rs 2800 + Rs. 1750 = Rs 7750

Sum of sales of 4 days = 7750 + y

$$\text{Average} = \frac{\text{Sum of quantities}}{\text{No. of Quantities}}$$

$$2500 = \frac{7750+y}{4}$$

$$2500 \times 4 = 7750 + y$$

$$10000 = 7750 + y$$

$$10000 - 7750 = y$$

So 4th day sale is Rs. 2250.