

भु•ेना International School Shree Swaminarayan Gurukul, Zundal

# Grade – IV Maths

## Specimen copy

## Year 22-23

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#### Note - Always start new topic from new page.

### **Building with Bricks**

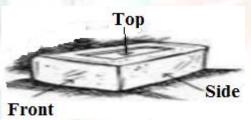
<u>CH-1</u>

#### Key points to remember

- Introduction
- Word problem
- Look at the bricks and answer the following question.
- Activity

#### • Introduction

- In this chapter we are going to learn about bricks.
- Bricks patterns are used in different place.
- In olden time bricks pattern are used in school, houses, library, bridge etc.
- Bricks patterns are draw on the floors, windows and walls.
- Patterns means shapes, designs, groups of numbers that repeat themselves in a predictable manner.
- Different patterns of bricks are Jaali, Jharokha, Arch etc.
- A brick are of different shapes for example triangle, cuboid cube etc.
- A brick having different views (top, front and side).



A brick

#### • Word problems.

**Notes -** Finding out the value of one from many and then the value of many from the one is called unitary method. (cross multiplication)

1. If a Brick cost Rs. 1 then what will be the cost of 500 bricks will be?

#### Solution

One brick cost Therefore, 500 bricks cost = 500 x Rs.1 = Rs. 500

2. If the cost of a brick is Rs. 2 then what will be the cost of 1000 bricks? **Solution** 

One brick cost Therefore, 1000 bricks cost = 1000 x 2

= **Rs. 2000** 

3. If the cost of a brick Rs. 5 then what will be the cost of 2000 bricks? **Solution** 

One brick cost

Therefore, 2000 bricks cost

 $= 2000 \ge 5$ 

= **Rs. 10000** 

4. If the cost of 2000 bricks are Rs. 8000 then what will be the cost of each brick? **Solution** 

= **Rs.** 5

= **Rs.** (?)

Cost of 2000 bricks So cost of one brick = Rs. (?)

- $= 8000 \div 2000$
- $=\frac{8000}{2000}$
- = **Rs.** 4

5. If the cost of 6000 bricks are Rs.30000 then what will be the cost of 1 brick? Solution

Cost of 6000 bricks = Rs. 30000 So cost of one brick = **Rs.** (?)  $= 30000 \div 6000$ 30000 = 6000 = **Rs.** 5

6. If the cost of 4000 bricks are Rs.24000 then what will be the cost of 1 brick? Solution

Cost of 4000 bricks = **Rs. 24000** So cost of one brick = **Rs.** (?)  $= 24000 \div 4000$ 

> 24000 4000

Rs. 6

Look at the bricks and answer the following question. •



- 1. How many faces in all does a bricks have?
- 2. Is any face a square? Yes
- 3. Draw the smallest face of the brick.



6

#### • Activity

Draw one bricks pattern below.

## <u>CH-2</u>

### Long andshort

#### \* Key points to remember

- Introduction
- Convert Kilometres into Metres.
- Convert Metres into Kilometres
- Addition of distance.
- Subtraction of distance.
- Word problem.
- Activity

#### • Introduction

- Measurement of something from its one end to the other is called its length.
- The standard unit of length is meter.
- We use different units to measure different length, millimetre, centimetre metre and kilometre.
- Metre is used to measure average distance.
- Kilometre used to measure long distance.
- -1m = 100 cm
- -1 km = 1000 m
- Which is a better unit to measure these things?

Length of a pin – <u>cm</u>

Height of a house  $-\underline{\mathbf{m}}$ 

Distance the scooter travels – <u>km</u>

- To show kilometer and metre we use dot For example – 4.132

 $4\ km$  and  $132\ m$ 

• Convert kilometres into metres:

a) 4 km

- = 4 x 1000m
- = 4000m.
- b) 9 km 236 m
  - = 9 x 1000 m + 236 m
  - = 9000 m + 236 m

= 9236 m.

- c) 7 km 205m
  - = 7 x 1000 m + 205 m
  - = 7000 m + 205 m
  - = 7205 m.
- d) 12km 60m
  - = 12 x 1000m + 60 m
  - = 12000 m + 6 m
  - = 12060 m.
- e) 19km 215m
- = 19 x 1000 m + 215 m = 19000 m + 215 m
- = 19215 m.
- f) 26km 115m
- = 26 x 1000m + 115 m
- = 26000 m + 115 m
- = 26115m.

- Convert metres into kilometres:
- a) 2000 m
  - $=\frac{2000}{1000} = 2.000$ 
    - = 2 km
- b) 12300 m
  - $=\frac{12300}{1000}$ = 12.300 km
- c) 6450 m
  - $=\frac{6450}{1000}$ = 6.450 km
- d) 14532 m
  - $=\frac{14532}{1000}$
  - = 14.532 km
- e) 4789 m
  - $=\frac{4789}{1000}$ = 4.789 km

#### • Addition of distance

a) 45km 34m + 34km 5m

	km	m
	45	034
+	34	005
	79	039

b) 21km 1m + 31km 7m

km	m
21	001
+ 3 1	007
52	008

c) 51 km 605 m + 12 km 787 m

1
m
605
787
392

d) 8 km 542m + 4 km 34m (**Hw**)

Solve -

e) 4 km + 2 km 200 m (Hw)

Solve -

#### • Subtraction of distance

a) 15 km30m from 35km 45m

	km	m
	35	045
-	15	030
	20	015

b) 24 km 634m from 48 km 42m

Km	m
7	10 3 12
48	Q 4, 2,
- 2 4	634
2 3	408

c) 14 km 54m from 85 km 540m

Km	m	
	4 13 10	
85	540	
14	054	
71	486	

d) 22 km 783m from 51 km 605m (Hw)Solve -

e) 21km 7m from 32 km 500m (Hw)Solve -

#### • Word problem

 Sid is going to Kozhikode which is 24km away. Manjani is going to Thalassery which is 46km away in the opposite direction. How far is Kozhikode from Thalassery?
Solve –

No. of km Kozhikoda = 24 No. of km Thalassery = 46 No. of km far is Kozhikode from Thalassery = 24 km + 46 km

> 2 4 km + 4 6 km 7 0 km

#### 70km Kozhikode from Thalassery.

2) Ravi daily walks about 400m to the pond, then he walks 150m through the pond. Next he runs across the 350m wide green field, then he cross the 40m wide road to reach his school. How much does Ravi walk everyday to reach school?

Solve -

No. of distance walk to pond = 400m No. of distance walk through the pond = 150m No. of distance ran across green field = 350m No. of distance crossing the road = 40m Total no. of distance daily he walks = 400 m + 150 m + 350 m + 40 m

 $\begin{array}{r} 1 \\ 4 \ 0 \ 0 \ m \\ + \ 1 \ 5 \ 0 \ m \\ + \ 3 \ 5 \ 0 \ m \\ + \ 4 \ 0 \ m \\ \hline \begin{array}{r} 9 \ 4 \ 0 \ m \end{array}$ 

Ravi walk 940 m to reach his school.

#### • Activity

Measure your own height in \_\_\_\_\_cm.

#### <u>Ch – 3 Trip to Bhopal</u> (Activity based chapter)

Note - Nothing to write in this chapter.

#### Chapter - 4 Tick - Tick – Tick

#### Key word to remember

- Introduction
- Show the time
- Convert of time
- Am and Pm
- Write the date
- Write the time by 24 hour clock
- Activity

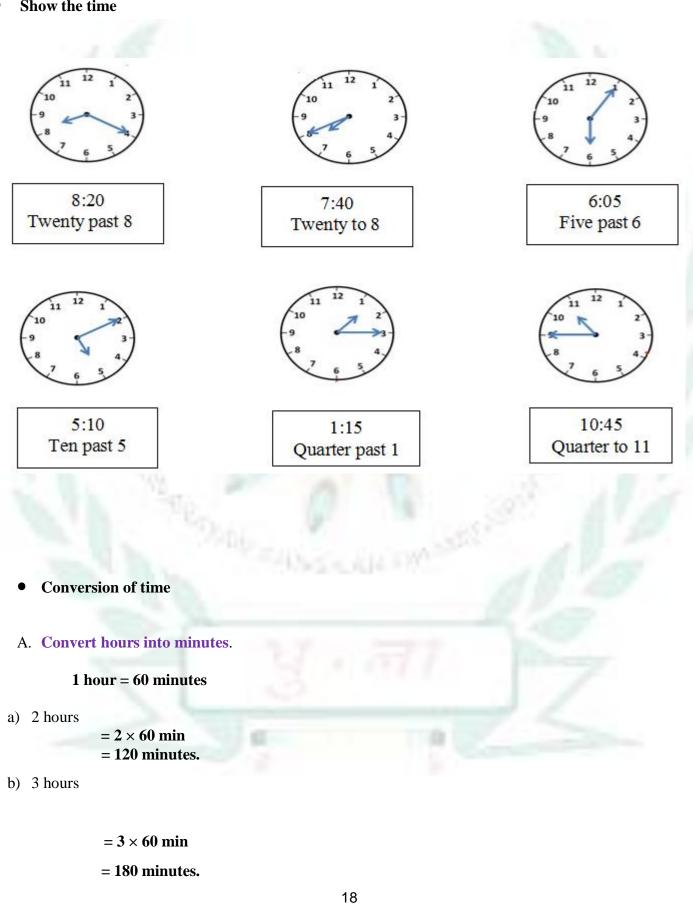


#### • Introduction

- Time can be define as days, months, years, minutes, seconds and hours.
- Even time can be define as morning, afternoon, evening, night and mid night.
- To measure time we use clock or watch.
- We use the letters 'Am' to show the time from 12 o'clock midnight to 12 o'clock noon.
- We use the letters 'Pm' to show the time from 12 o' clock noon to 12 o'clock midnight.
- You have learnt about clock in Class III. Lets revise it through this picture.



Show the time •



- c) 4 hours
- $= 4 \times 60 \min$
- **= 240 minutes.**
- d) 6 hours 35 minutes

 $= 6 \times 60 \min + 35 \min$ 

= 360 min + 35 min

= 395 minutes

e) 5 hours 25 minutes

= 5 × 60 min + 25 min = 300 min + 25 min

= 325 minutes.

B. Convert days into hours.

1 day = 24 hours.

- a) 2 days
  - $= 2 \times 24$  hours = 48 hours.
- b) 3 days

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= 3 \times 24 hours
```

- = 72 hours.
- c) 4 days

 $= 4 \times 24$  hours

- = 96 hours.
- d) 6 days 14 hours

 $= 6 \times 24$  hours + 14 hours

- = 144 hours + 14 hours
- = 158 hours.

- e) 5 days 10 hours
  - $= 5 \times 24$  hours + 10 hours
  - = 120 hours + 10 hours
  - = 130 hours
  - C. Convert weeks into days.

1 week = 7 days

a) 2 weeks

 $= 2 \times 7$  days

- = 14 days.
- b) 3 weeks

 $= 3 \times 7$  days

- = 21 days.
- c) 4 weeks
  - $= 4 \times 7 \text{ days}$ = 28 days.
- d) 11 weeks
  - = 11 × 7 days = 77 days
- e) 12 weeks
  - $= 12 \times 7$  days
  - **= 84 day**s

- Write the time with 'Am' and 'Pm'.
  - 1) Half past four in the evening = 4:30 pm.
  - 2) Quarter to four in the evening = 3:45 pm.
  - 3) Quarter past five in the evening = 5:15 pm.
  - 4) Ten minutes to six in the evening = 5:50 pm.
  - 5) Five minutes to nine in the morning = 8:55 am.
  - 6) Six hours after 3:35 am = 9:35 am.
  - 7) Two hours after 12 noon = 2:00 pm.
  - 8) One hour before 12 mid night =  $\underline{11:00 \text{ pm}}$ .

#### • Write the date

- a) 17 April 2021= <u>17-04-21.</u>
- b) 3 September 2021= <u>3-09-21.</u>
- c) 25 December 2021 = 25 12 21.
- d) 23-03-21 = 23 March 2021.
- e) 8-01-21 = <u>8 January 2021</u>.
- f) 27-02-21= <u>27 February 2021</u>.
- g) 15-06-13= <u>15 June 2013</u>.
- Write the time by 24 hour clock.
- 1) 1 o' clock in the afternoon **<u>13:00 hours</u>**
- 2) 2 o' clock in the afternoon <u>14:00 hours</u>
- 3) 3 o' clock in the afternoon **<u>15:00 hours</u>**
- 4) 3:30 in the afternoon **<u>15:30 hours</u>**
- 5) 6 o' clock in the evening **18:00 hours**
- 6) 9 o' clock in the evening <u>21:00 hours</u>
- 7) 12 o' clock at midnight <u>00:00 hours</u>

#### • Activity

Make a model of clock and label quarter past, half past and quarter to.