

Answers

Theme 8: Why Is Technology Important? Lesson-12: Measurement

Main Coursebook

Kinaesthetic

Accept all the relevant responses.

Auditory

1. 400m
2. Fatima

Pictorial

40 cm; 36 cm

Interacting better

Accept all the relevant responses.

1. a. 5,623 m = 56,230 dm = 5,62,300 cm = 56,23,000 mm
b. 8.65 km = 865 dam = 8,650 m = 8,65,000 cm
2. a. 45,00,600 dag
b. 4,50,06,000 g
c. 4,500,600,000 cg
d. 45,006,000,000 milligrams
3. a. 7,862.5 litres
b. 786.25 decalitres
c. 78.625 hectolitres
d. 7,862,500 millilitres
4. 2,600 g
5. 15,000 ml

Understanding better (page no 139)

1. Kilometre
2. Multiplication
6. a. 652.52m; 6.5252 hm; 0.65252 km
b. 15.202m; 1.5202 dam; 0.015202 km
7. a. 0.35 km b. 0.476 km
c. 10.775 km d. 847.62 km
8. a. 14.572 kg b. 145.72 hg
c. 1457200 cg d. 14,57,200mg
9. a. 62,000 g b. 350.24 g
c. 35,21,400 g d. 75,420 g
10. a. 3,56,000 l b. 18,240 l
c. 346 l d. 3.46783 l
11. 2.5 km
12. 1.53 m
13. 25.050 kg
14. 200 l
- 15.

- a. 110 m 95 cm b. 240 km 60 m
- c. 291 kg 450 g d. 149l 980 ml
16. a. 57 m 20 cm b. 180 km 33 m
- c. 134 kg 370 g d. 23l 855 ml
17. a. 1l 350 ml b. 12 l 151 ml
- c. 89 km 50 m d. 91 kg 566 g
- e. 29 kg 950 g
18. a. 6482 m 63cm b. 1,006 l 950 ml
- c. 2349 g 783 mg d. 5,175 km 840 m
19. a. 4l 1076 ml b. 42 m 51 cm
- c. 35 g 35 mg d. 209 cm
20. a. 216 km b. 985 g
- c. 2.5 m d. 1,179 l 750 ml
21. a. g b. l c. m
22. a. iii b. iii c. i d. iii
23. a. 10 b. 20 c. 45 d. 50

Solving better

- a. 13.225 l b. 4,005 mg c. 14.7 m
- d. 34,100 g e. 1,70,000 m

Learning better

- A. 1. a 2. a 3. d 4. c 5. a
- B. 1. 4152 cm 2. 12 l 54 ml 3. 36 kg 578 g
4. 145.20 m 5. 1054 g
- C. 1. 403 m 50 cm 2. 114 km 304 m
3. 545 kg 635 g 4. 840 l 898 ml
- D. 1. 290 kg 236 g 2. 274 kg 856 g
3. 88 km 190 m 4. 155 m 65 cm
- E. 1. 300 kg 432 g 2. 1,350 l 150 ml
3. 1,575 km 625 m 4. 685 m 90 cm
- F. 1. 1 kg 002 g 2. 2 l 156 ml
3. 2 km 117 m 4. 1 m 83 cm
- G. 1. 11 kg 500 g 2. 10 glasses
3. 1110 kg 296 g 4. 6 kg 150 g
5. 5406 km 900 m

Thinking better

470 g

Choosing better

- Restart the computer by pressing the power button until it turns off. Then turn it an again.

Students' Worksheets

Worksheet 1

- A. 1. false 2. false 3. true
4. false 5. true
- B. 1. b 2. d 3. d 4. a 5. a

- C. 1. 18 kg 100 g 2. 17 l 700 ml
 3. 27 km 900 m 4. 30 m 95 cm
 5. 44 kg 440 g

Worksheet 2

- A. 1. time 2. 100 3. 10,00,000
 4. multiply 5. divide
 B. 1. 6,000 2. 250 3. 50,500
 4. 200 5. 8.555 6. 3,39,000
 C. 1. c 2. b 3. a 4. c 5. b

WORKSHEET 3

- A. 1. c 2. e 3. d 4. a 5. b
 B. 1. 123.74 m 2. 192m 62cm
 3. 83912 ml 4. 4879 g
 5. 161 kg 680 g
 C. 1. 2520 2. 455.4 3. 45251
 4. 35247.5 5. 12541

Book of Holistic Teaching

- A. in, in, in
 B. The natural satellite is the Moon, which is approximately 384,400 kilometres away from Earth.
 C. Nainital is colder than Bihar because it is at a higher altitude and the thinner air causes lower temperatures

Book of Project Ideas

Making better

Accept all the relevant responses.

Answers

Theme 8: Why Is Technology Important? Lesson-13: Perimeter, Area and Volume

Main Coursebook

Kinaesthetic

Accept all the relevant responses.

Auditory

400

Pictorial

Perimeter – 14, 14, 16

Area – 11, 12, 17

Interacting better

Accept all the relevant responses.

Understanding better (page no – 151)

- 10a
- 8a
 - 22 cm b. 60 cm c. 17.6 cm
 - 75 cm
- 10 cm b. 7 cm c. 45 cm
- 3.35 cm
- 4.4 cm

Understanding better (page no – 153)

- Yes
- No
- 15 sq. cm b. 135 sq. cm
 - 1,050 sq. cm d. 188.65 sq. m
- 625 sq. cm b. 112.36 sq. cm
 - 150.0625 sq. m d. 1,056.25 sq. m
- 15,000 sq m; Rs. 52,500
 - Rs. 58,0890
 - Rectangle
 - 5m
- 2 sq. cm b. 4.5 sq. cm
 - 9 sq. cm
- 187.5 sq. cm b. 32.5 sq. cm
 - 103.75 sq. cm
- 34.375 sq. cm
- 14 sq. unit b. 12 sq. unit
 - 9 sq. unit d. 13 sq. unit
 - 13 sq. unit f. 17 sq. unit
- 141 sq. cm b. 440 sq. cm
 - 24 sq. m d. 112 sq. cm
 - 100 sq. cm f. 82 sq. cm

Understanding better (page no – 157)

- Volume is the space an object occupies, while capacity is the amount a container can hold.
- 1 km³

Understanding better (Page no – 158)

- Vertices are the points where lines, edges or surfaces meet, such as the corners of shapes.
 - Faces are the flat sides of a shape, like the walls of a box.
 - An edge is the line segment that forms the boundary between two faces.
- 576 cu. cm b. 2500 cu. cm
 - 1,601.25 cu. cm d. 3,095.75 cu. cm
 - 3,375 cu. cm
 - 8,000 cu. cm
 - 28,094.464 cu. cm
 - 238.328 cu. M
 - 60,000 cu. cm b. 640 cu. cm
 - 12,50,000 cu cm d. 64

Solving better

- 120 cu. cm b. 960 cu. cm
- 3,750 cu. m d. 210 cu. m
- 30,000 cu. Cm

Learning better

1. d 2. b 3. c 4. a 5. d
- Perimeter = 28 cm; Area = 48 sq. cm
 - Perimeter = 14 m; Area = 10 sq. m
 - Perimeter = 242 m; Area = 120 sq. m
 - Perimeter = 520 cm; Area = 16,800 sq cm
 - Perimeter = 42,00 m; Area = 21,600sq m
- 1,500 cu. cm 2. 1,080 cu. cm
 - 7,500 cu. m 4. 500 cu. m
 - 1,00,000 cu. cm
- 3,375 cu. cm
 - 6,434. 856 cu. cm
 - 15,625 cu. m
 - 27,000 cu. cm
 - 1,26,884.390625 cu. m
- Perimeter = 3 km; Area = 0.5 sq. km
 - 6,000 bricks
 - 650
 - Rs. 25; 14,00 sq. m
 - Area = 4,800 sq. cm; Perimeter = 320 cm

Thinking better

- 13.5 sq. m; Rs. 3,375

Choosing better

- Inform your mother and not enter any personal information.



Students' Worksheets

Worksheet 1

- A. 1. Side $\times$ Side
2. Length $\times$ Breadth
3. Length $\times$ Breadth $\times$ Height
4. 4 $\times$ Side
5. 2 (Length + Breadth)
- B. 1. false 2. false 3. true
4. true 5. true
- C. Accept all the relevant responses.

Worksheet 2

- A. 1. $\frac{1}{2} \times \text{Base} \times \text{Height}$
2. two
3. Side $\times$ Side $\times$ Side
4. Length $\times$ Breadth $\times$ Height
5. 4

- B. 1. Length $\times$ Breadth
2. Length $\times$ Breadth $\times$ Height
3. Side $\times$ Side $\times$ Side
4. 2 (Length + Breadth)
5. Length $\times$ Breadth
- C. 1. 24 cm 2. 16 cm 3. 101 cm

Book of Holistic Teaching

- A. 1. addition 2. multiplication
- B. India's first satellite, launched in 1975, is named Aryabhata.
- C. The heat zone for this location is likely the Tropical Zone due to its rainfall and warm temperatures.

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Accept all the relevant responses.