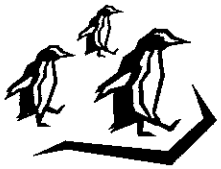
WORKSHEET 1 MEASUREMENT – CHAPTER 14



WHAT IS BLACK AND WHITE AND GOES ROUND AND ROUND?

1 Which unit of length would be best to use to measure
(a) length of a soup spoon (b) height of Sydney Tower (c) Ballina to Tweed Heads.

2 Convert these measurements to the units indicated.
(a) 2cm = … mm (b) 4.9m = … cm (c) 42km = … m

3 Convert these measurements to the units indicated.
(a) 70mm = cm (b) 3350m = km (c) 6400mm = m

4 A circular athletics track is 400 metres, how many laps must the competitors run to complete the 5km race?

5 Which unit of mass would be best to use to find the mass of:
(a) an egg (b) bag of pool salt (c) semi trailer

6 Convert these measurements to the units indicated
(a) 6000 mg = … g (b) 2750 g = …. kg (c) 3650 kg = … t

7 The gross mass of the recycling bin containing rubbish is 26.7 kg. If the mass of the rubbish is 21.8 kg, what is the mass of the bin?

8 Change to 24 hour time.
(a) 3.30 a.m. (b) 8.45 p.m.

9 Change to analogue time
(a) 2330 (b) 0500

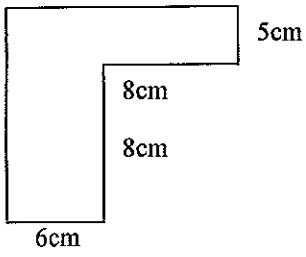
10 If Auckland (NZ) is (+12) hours of Greenwich Mean Time; Sydney (+10), Adelaide (+9.5), Perth (+8). What is the time in the other cities if it is 11 a.m. in Adelaide?

11 (a) Calculate the speed if the distance is 120 km and the time is 1.5 hours.
(b) Calculate the distance if the speed is 70 km/h and the time is 3.5 hours.
(c) Calculate the time taken if the speed is 80 km/h and the distance is 200 km.

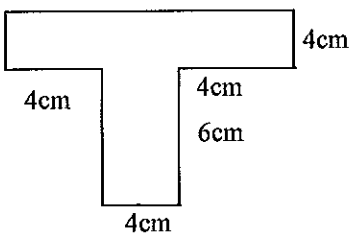
12 Con operated a tour around Sydney. In the morning the bus travelled 20 km for 2 hours. It then took 30 minutes break for lunch. In the afternoon it travelled 22 km in 90 minutes. Find its average speed.

13 Find the perimeter of the following.

(a)



(b)



14 A jogger runs along a track, which is 1 metre inside the fence of a square field with sides 120 metres. How far did he run?

15 Given that each rectangular card has dimensions 3cm by 4 cm, find the perimeter if we place 4 of these cards
(a) end on end (b) side by side (c) to form one large rectangle

16 Find the area of these shapes in Question 13.

17 Convert these to the units indicated.
(a) 5 cm^2 = ... mm^2 (b) 4000 mm^2 = ... cm^2 (c) 30 000 mm^2 = ... m^2

18 How many 10cm by 10cm tiles are required to cover the bathroom floor whose dimensions are 3m by 3.5m?

19 Find the total surface area of the rectangular prism, given the dimensions : 6cm by 8cm by 12cm. (Hint: draw a net).

20 A coffee mug holds 275 mL. How many cups can be made from 1.65L?

21 Which is the best unit of capacity for finding the amount of water in a:
(a) teaspoon (b) bucket (c) dam

22 The dimensions of a rectangle is length 10m by breadth 8 m. If we increase the length by 10% and decrease the breadth by 10%, then
A both the area and perimeter remain unchanged
B the area is unchanged and the perimeter increased
C the area is unchanged and the perimeter decreased
D the perimeter is unchanged and the area increased
E the perimeter is increased and the area decreased.

Answers:

A	A	A	C	D	E	G	G	H	I
cm m km	4.9 kg	6 cups	118 72	Au 1.30pm Syd 11.30am Perth 9.30am	6g 2.75kg 3.65t	38 32 28	mL L kL or ML	7cm 3.35km 6.4m	80 245 2.5

I	L	N	N	N	O	O	P	R	T
432	472m	1050	20mm 490cm 42000m	E	12.5	11.30pm 5am	g kg t	12	54 44

U	V
0330 2045	500mm^2 40cm^2 0.03m^2

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1 5 6 18 15 8 19 22 16 7 8 21 3 13 11 2 20

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12 6 17 9 14 17 11 18 15 10 9 4 12