WONDERLEARNERZ PRIMARY ACADEMY â€" OFFICIAL ANSWER KEY & MARKING SCHEME

Measurement of Length - Worksheet 1 [ANSWER KEY]

Grade 3 | Mathematics | Ch 7: Measurement of Length | Total Marks: 19 | Time: 30 Minutes

Q1. How many centimetres are there in 4 metres? [1 Mark]

Correct Answer: 400 cm

Explanation: 1 metre = 100 cm. 4 x 100 = 400 cm.

Q2. How many metres are in 3 kilometres? [1 Mark]

Correct Answer: 3,000 m

Explanation: 1 kilometre = 1,000 metres. 3 x 1,000 = 3,000 m.

Q3. Convert 2 m 65 cm into total centimetres: [1 Mark]

Correct Answer: 265 cm

Explanation: 2 m = 200 cm. 200 + 65 = 265 cm.

Q4. Which metric unit is most suitable for measuring the distance between two cities? [1 Mark]

Correct Answer: Kilometres (km)

Explanation: Long geographic travel distances are measured in kilometres.

Q5. At the School Sports Track, an athlete runs 4 laps of a 100-metre course. What total distance does the athlete run? [1 Mark]

Correct Answer: 400 metres

Explanation: 4 x 100 m = 400 metres.

Q6. A tailor has a 4-metre piece of fabric. She cuts 120 cm for a shirt and 150 cm for trousers. How many centimetres of fabric remain? [1 Mark]

Correct Answer: 130 cm

Explanation: Total = 4 m = 400 cm. Used = 120 + 150 = 270 cm. Remaining = 400 - 270 = 130 cm.

Q7. Liam is 135 cm tall and his older sister is 1 m 58 cm tall. How many centimetres taller is his sister? [1 Mark]

Correct Answer: 23 cm

Explanation: Sister = 1 m 58 cm = 158 cm. Difference = 158 - 135 = 23 cm.

Q8. Find the missing value: 5 km = [?] m [1 Mark]

Correct Answer: 5,000 m

Explanation: 1 km = 1,000 m, so 5 km = 5,000 m.

Q9. Find the missing length: 3 m 40 cm + [?] cm = 4 m [1 Mark]

Correct Answer: 60 cm

Explanation: 4 m = 400 cm. 400 cm - 340 cm = 60 cm.

Q10. A student measures a pencil with a broken ruler starting at the 3 cm mark and ending at 11 cm. He records the length as '11 cm'. What is the true length? [1 Mark]

Correct Answer: 8 cm (11 - 3 = 8 cm)

Explanation: When not starting from zero, subtract the start mark from the end mark: 11 - 3 = 8 cm.

Q11. Priya calculates: '2 m + 35 cm = 37 m'. What conceptual mistake did Priya make? [1 Mark]

Correct Answer: She added metres and centimetres directly without converting units; the correct answer is 2 m 35 cm (235 cm)

Explanation: Different metric units cannot be added directly without converting to a common unit.

Q12. Why would measuring a classroom with a 15 cm school ruler be less accurate and practical than using a 5-metre tape measure? **[2 Marks]**

Correct Answer: Moving a 15 cm ruler repeatedly introduces cumulative alignment errors and takes much longer, whereas a tape measure spans the room in one continuous measurement

Explanation: Repeated repositioning of small instruments accumulates human positioning errors.

Q13. If an ant walks 1,000 millimetres in a straight line, how many metres has the ant traveled? **[2 Marks]**

Correct Answer: 10 metres

Explanation: 1 cm = 10 mm; 1 m = 100 cm = 1,000 mm. So 1,000 mm = 1 metre.

Q14. A school bus travels 3 km 400 m in the morning and 2 km 850 m in the afternoon. What is the total distance traveled by the bus in kilometres and metres? **[2 Marks]**

Correct Answer: 6 km 250 m

Explanation: 3 km + 2 km = 5 km. 400 m + 850 m = 1,250 m = 1 km 250 m. Total = 6 km 250 m.

Q15. A wooden plank is 6 metres long. A carpenter cuts it into 5 equal pieces. What is the length of each piece in centimetres? **[2 Marks]**

Correct Answer: 120 cm

Explanation: 6 m = 600 cm. 600 cm / 5 = 120 cm per piece.