

CLASS 6 SCIENCE WORKSHEET – SET C**Chapter 5: Measurement of Length and Motion (NCERT Curiosity)**

Name: _____ Class: 6 ____ Date: _____ Marks: _____ / 95

1. Multiple Choice Questions [10 × 1 = 10]

Choose the correct option.

1. Which is the correct way of writing the length?
(a) 5 cm (b) 5 cms (c) 5 CM (d) 5 Cm
2. 1 mm is equal to
(a) 0.1 cm (b) 0.01 cm (c) 10 cm (d) 1 cm
3. The unit 'angula' refers to the width of
(a) a foot (b) an arm (c) a finger (d) a handspan
4. Deepa's mother calls the handspan
(a) angula (b) balisht (c) dhanusa (d) yojana
5. The number of handspans of the same table differs because
(a) tables change size (b) handspans of people differ in size (c) tables are curved (d) scales are broken
6. On the kilometre stone 'Delhi 70 km', the reference point is
(a) Padma (b) the bus (c) Delhi (d) the stone
7. The motion of a merry-go-round is
(a) linear (b) circular (c) oscillatory (d) straight
8. The motion of a car moving on a straight road is
(a) linear (b) circular (c) oscillatory (d) none of these
9. Periodic motion is one in which the object
(a) never moves (b) repeats its path after a fixed interval of time (c) moves only once (d) moves in a straight line only
10. Tasneem should NOT use which material to make a metre scale?
(a) plywood (b) steel (c) stretchable rubber (d) hard plastic

2. Fill in the Blanks [10 × 1 = 10]

1. SI stands for International System of _____.
2. 2 m = _____ cm.
3. 3 km = _____ m.
4. A tailor uses a flexible _____ tape.
5. Units of length begin with a _____ case letter (except at the start of a sentence).
6. If the zero mark is unclear, the reading of the starting mark is _____ from the reading at the other end.
7. The kilometre stone 'Delhi 60 km' shows the position is 60 km from _____.
8. An object in motion changes its _____ with respect to a reference point with time.
9. A heavy box pushed along a straight line shows _____ motion.
10. An eraser whirled on a thread shows _____ motion.

3. True or False [10 × 1 = 10]

1. A measurement of length has two parts: a number and a unit. (_____)

2. Handspans of all people are of the same size. (_____)
3. 1 m = 100 cm. (_____)
4. Objects with ruled markings, possibly scales, were found at Harappan sites. (_____)
5. A reference point is needed to decide whether an object is in motion or at rest. (_____)
6. We should leave no space between the number and the unit. (_____)
7. The motion of a merry-go-round is oscillatory. (_____)
8. A metal strip pressed and released shows oscillatory motion. (_____)
9. A flexible tape cannot be used for measuring a curved line. (_____)
10. A scale reads 1.0 cm to 10.4 cm. The length is 9.4 cm. (_____)

4. Match the Following [10 × 1 = 10]

Column A	Column B
1. 1.5 km (_____)	a. 5 cm
2. 2 m (_____)	b. circular motion
3. 50 mm (_____)	c. 1500 m
4. 30 cm (_____)	d. counting strides
5. 'Delhi 70 km' (_____)	e. kilometre stone
6. Lines of a kabaddi court (_____)	f. oscillatory motion
7. Whirling an eraser on a thread (_____)	g. 200 cm
8. Vibrating metal strip (_____)	h. linear motion
9. Orange falling from a tree (_____)	i. 0.3 m
10. Farmer dividing a field into beds (_____)	j. drawn with chuna powder

5. Answer in 2 Lines [10 × 2 = 20]

1. Write two rules for writing units of length.

2. Express 3.5 m in centimetres.

3. What does a kilometre stone indicate?

4. How did Padma know she was getting closer to Delhi?

5. Why can seated bus passengers be both at rest and in motion?

6. Which scale would you use to measure the height of a room?

7. Which units are used to measure very small lengths?

8. Why should Tasneem not use stretchable rubber for a metre scale?

9. How can a bicycle be used to measure distance?

10. Give two examples of oscillatory motion.

6. Write Short Notes (4 or 5 points with examples / diagram) [5 × 5 = 25]

1. Write short notes on non-standard units like the handspan.

2. Write short notes on the rules for writing units of length.

3. Write short notes on choosing an appropriate scale.

4. Write short notes on describing position using kilometre stones.

5. Write short notes on circular and oscillatory motion activities.

7. Give the Answer in a Word [10 × 1 = 10]

Read each definition and write the term.

1. 1000 metres. _____

2. 100 centimetres. _____

3. 10 millimetres. _____

4. An object changing its position with respect to a reference point with time is in _____.

5. The motion of an object whirled on a thread. _____
6. The motion of children on a swing. _____
7. The arithmetic operation done on the two readings when the scale end is broken. _____
8. The unit a farmer counts to divide a field into beds. _____
9. The limestone powder used to draw lines on a kabaddi court. _____
10. The symbol of millimetre. _____

ANSWER KEY – SET C**1. Multiple Choice Questions []**

1-a 2-a 3-c 4-b 5-b 6-c 7-b 8-a 9-b 10-c

2. Fill in the Blanks []

1. Units
2. 200
3. 3000
4. measuring
5. lower
6. subtracted
7. Delhi
8. position
9. linear
10. circular

3. True or False []

1-True 2-False 3-True 4-True 5-True 6-False 7-False 8-True 9-False 10-True

4. Match the Following []

1-c 2-g 3-a 4-i 5-e 6-j 7-b 8-f 9-h 10-d

5. Answer in 2 Lines []

1. Write units and symbols in lowercase and never add 's' to them. Leave a space between the number and the unit, e.g. 5 cm.
2. $1\text{ m} = 100\text{ cm}$, so $3.5\text{ m} = 3.5 \times 100 = 350\text{ cm}$.
3. It shows the distance of that place from a reference point. For example, 'Delhi 70 km' means 70 km away from Delhi.
4. The kilometre stones changed from 'Delhi 70 km' to 'Delhi 60 km'. The distance from Delhi was decreasing.
5. They are at rest with respect to the bus. They are in motion with respect to buildings outside.
6. A metre scale or a measuring tape. A 15-cm scale is too short.
7. Centimetre and millimetre. For example, the thickness of a page is measured in millimetres or smaller.
8. Rubber stretches, so the markings change. The scale would give wrong readings.
9. Count the number of turns of the wheel. Multiply it by the length of the wheel's outer boundary.
10. A swing and a vibrating metal strip.

6. Short Notes (model answers) []**1. non-standard units like the handspan.**

- Body parts like handspan, foot, fist and finger were used to measure length.
- A measurement has two parts: a number and a unit (e.g. 13 handspans).
- Farmers measure fields by counting strides; a grandmother measures cloth by arm length.
- These units differ from person to person (Table 5.1).
- So standard units like the metre were adopted.

2. the rules for writing units of length.

- Units such as kilometre, metre, centimetre and millimetre begin with a lowercase letter.
- Symbols km, m, cm and mm are also written in lowercase.
- Symbols are never followed by 's' in the plural, e.g. 5 cm, not 5 cms.
- No full stop is written after the symbol except at the end of a sentence.
- Leave a space between the number and the unit, e.g. 9.4 cm.

3. choosing an appropriate scale.

- Use a 15-cm scale for small objects like a pencil.
- Use a metre scale or measuring tape for the height of a room.
- Use a flexible tape (like a tailor's tape) for the girth of a tree or chest.
- Use a thread or flexible tape for curved lines (Fig. 5.8).
- Scales with raised markings help visually challenged students.

4. describing position using kilometre stones.

- Position is described with respect to a reference point.
- Padma saw kilometre stones reading 'Delhi 70 km' and then 'Delhi 60 km' (Fig. 5.12).
- Delhi is the reference point here.
- Her position changed with respect to Delhi with time, so she was in motion.
- The decreasing distance showed she was getting closer to her destination.

5. circular and oscillatory motion activities.

- Activity 5.4: whirl an eraser tied to a thread; it moves along a circular path (Fig. 5.15).
- Activity 5.5: hang the eraser and release it to one side; it moves to and fro (Fig. 5.16).
- Activity 5.6: press and release a metal strip fixed to a table; it moves up and down (Fig. 5.17).
- Circular motion: merry-go-round. Oscillatory motion: swing.
- Both are periodic as they repeat after a fixed time.

7. Give the Answer in a Word []

1. kilometre
2. metre
3. centimetre
4. motion
5. circular motion
6. oscillatory motion
7. subtraction
8. stride
9. chuna
10. mm