

CHAPTER-2 | Power Play

QUIZ
PART-13

1. This part mainly compares:

- A. Addition and subtraction
- B. Linear and exponential growth
- C. Fractions and decimals
- D. Area and volume (B)

Explanation: The chapter focuses on linear growth vs. exponential growth.

2. The ladder example shows which type of growth?

- A. Linear growth
- B. Exponential growth
- C. Negative growth
- D. No growth (A)

Explanation: Each step adds the same length, so it is linear growth.

3. Distance from Earth to Moon is given as:

- A. 38,440 km
- B. 3,84,400 km
- C. 38,44,000 km
- D. 3,840 km (B)

Explanation: The chapter gives the Earth–Moon distance as 3,84,400 km.

4. Length of one ladder step is:

- A. 10 cm
- B. 20 cm
- C. 30 cm
- D. 40 cm (B)

Explanation: One step is shown as 20 cm.

5. To find number of steps, we divide total distance by:

- A. 20 cm
- B. 20 km
- C. 200 m
- D. 2 km (A)

Explanation: Each step covers 20 cm.

6. 3,84,400 km is equal to:

- A. 3,844,000 m
- B. 38,440,000 m
- C. 384,400,000 m
- D. 3,844,000,000 m (C)

Explanation: 1km =1000m, so 3,84,400km =384,400,000m.

7. Number of 20 cm steps to the Moon is about:

- A. 1.92 million
- B. 1.92 billion
- C. 19.2 thousand
- D. 192 crore crore (B)

Explanation: 3,84,400km =38,440,000,000cm; divide by 20 gives 1,922,000,000 steps.

8. Folding paper repeatedly is an example of:

- A. Linear growth
- B. Exponential growth
- C. Equal sharing
- D. Subtraction (B)

Explanation: Each fold doubles the thickness.

9. The chapter shows exponential growth reaching the Moon in about:

- A. 26 folds
- B. 36 folds
- C. 46 folds
- D. 56 folds (C)

Explanation: The image shows exponential growth needs about 46 folds.

10. If a mountain is 8,800 m high and each ladder step is 20 cm, steps needed are:

- A. 440
- B. 4400
- C. 44000
- D. 440000 (C)

Explanation: 8,800m =880,000cm;
 $880,000 \div 20 = 44,000$.