Extra Content for Foundation GCSE

82. Cube Numbers and Their Roots

Practice Questions

1. What is 3^3?
2. Find $\sqrt[3]{64}$.
3. Solve 4^3.
4. Find $\sqrt[3]{27}$.
5. Write all cube numbers up to 1000.
6. What is the cube of 5?
7. Find the cube root of 512.
8. Solve $2^3 + 3^3$.
9. What is the cube of 10?
10. Find the missing number: $x^3 = 125$.

Scenario Questions

1. A box has a volume of 216 cm³ and is cube-shaped. What is the side length?
2. A builder is constructing cubic storage boxes, each with a volume of 1000 cm³. What is the side length?
3. A factory produces cubical sugar cubes with a volume of 64 cm³. What is the length of each side?
4. A swimming pool is cube-shaped and holds 8m³ of water. What is the length of one side?
5. A company is designing a cube-based product with a volume of 343 cm³. What is the side length?
6. A cubic building has a total volume of 512 m³. What is the length of each edge?
7. A child builds a 3 × 3 × 3 cube using smaller blocks. How many blocks are in total?
8. A dice has a volume of 125 cm³. What is the side length?
9. A cubic water tank holds 729 litres of water. What is the length of one side?
10. A shop sells cubic candles with a volume of 1m³. What is the side length?

82. Cube Numbers and Their Roots

Practice Questions

1. 27
2. 4
3. 64
4. 3
5. 1, 8, 27, 64, 125, 216, 343, 512, 729, 1000
6. 125
7. 8
8. 35 ($2^3 = 8, 3^3 = 27, 8 + 27 = 35$)
9. 1000
10. 5

Scenario Questions

1. 6 cm
2. 10 cm
3. 4 cm
4. 2 m
5. 7 cm
6. 8 m
7. 27 blocks
8. 5 cm
9. 9 m
10. 1 m