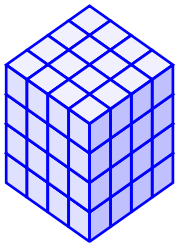
Grade 6 Math Name_____

# Formulas for Volume and Surface Area of a Cube

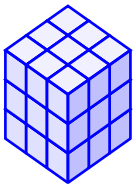
Date_____ Period____

**For each problem, find the volume and surface area of the provided cube. Each small cube represents one cubic unit.**

1)

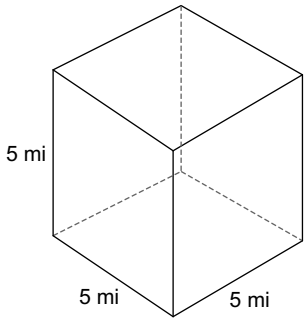


2)

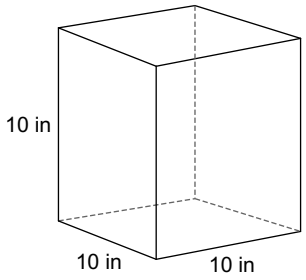


**For each problem, find the volume and surface area of the provided cube.**

3)




4)




**Solve each problem.**

5) A cube has side lengths of 7 yd. Find the volume and surface area of the cube.

6) A cube has side lengths of 12 in. Find the volume and surface area of the cube.

Grade 6 Math Name_____

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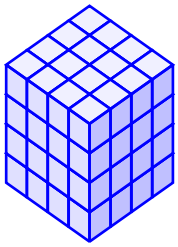
Date_____ Period____

**For each problem, find the volume and surface area of the provided cube. Each small cube represents one cubic unit.**

1)



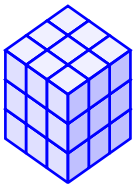
Volume = $s^3 = 4 \times 4 \times 4 = 64$

Surface Area = $6 \times s^2 = 6 \times 4 \times 4 = 96$

Volume: 64 units³

Surface Area: 96 units²

2)



Volume = $s^3 = 3 \times 3 \times 3 = 27$

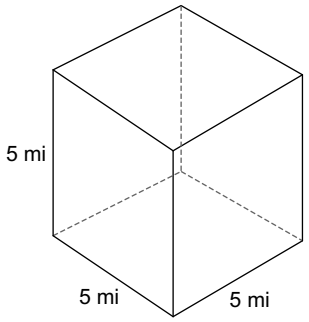
Surface Area = $6 \times s^2 = 6 \times 3 \times 3 = 54$

Volume: 27 units³

Surface Area: 54 units²

**For each problem, find the volume and surface area of the provided cube.**

3)



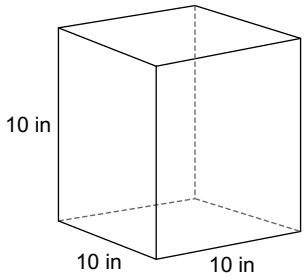

Volume = $s^3 = 5 \times 5 \times 5 = 125$

Surface Area = $6 \times s^2 = 6 \times 5 \times 5 = 150$

Volume: 125 mi³

Surface Area: 150 mi²

4)




Volume = $s^3 = 10 \times 10 \times 10 = 1000$

Surface Area = $6 \times s^2 = 6 \times 10 \times 10 = 600$

Volume: 1,000 in³

Surface Area: 600 in²

**Solve each problem.**

5) A cube has side lengths of 7 yd. Find the volume and surface area of the cube.

Volume = $s^3 = 7 \times 7 \times 7 = 343$

Surface Area = $6 \times s^2 = 6 \times 7 \times 7 = 294$

Volume: 343 yd³

Surface Area: 294 yd²

6) A cube has side lengths of 12 in. Find the volume and surface area of the cube.

Volume = $s^3 = 12 \times 12 \times 12 = 1728$

Surface Area = $6 \times s^2 = 6 \times 12 \times 12 = 864$

Volume: 1,728 in³

Surface Area: 864 in²