

Varied Fluency

Step 6: Cube Numbers

National Curriculum Objectives:

Mathematics Year 5: (5C5d) [Recognise and use square numbers and cube numbers, and the notation for squared \(2\) and cubed \(3\)](#)

Differentiation:

Developing Questions to support the recognition and use of cube numbers. Includes the first 5 cube numbers.

Expected Questions to support the recognition and use of cube numbers. Includes the first 12 cube numbers.

Greater Depth Questions to support the recognition and use of cube numbers. Includes the first 12 cube numbers and applying knowledge of square numbers.

More [Year 5 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Cube Numbers

1a. Match the numbers to their cube numbers.

2^3	1
1^3	64
4^3	8



VF

Cube Numbers

1b. Match the numbers to their cube numbers.

5^3	0
0^3	27
3^3	125



VF

2a. Use $<$, $>$ or $=$ to complete the statements below.

$$5^3 \quad \square \quad 125$$

$$9 \quad \square \quad 3^3$$



VF

2b. Use $<$, $>$ or $=$ to complete the statements below.

$$4^3 \quad \square \quad 40$$

$$6 \quad \square \quad 2^3$$



VF

3a. Circle the cube numbers.

3 9 8

12 15 6

64 18 21



VF

3b. Circle the cube numbers.

23 13 27

30 11 60

1 5 7



VF

4a. Solve the calculations.

$$3^3 + 1^3 = \square$$

$$5^3 - 2^3 = \square$$



VF

4b. Solve the calculations.

$$2^3 + 3^3 = \square$$

$$4^3 - 1^3 = \square$$



VF

Cube Numbers

5a. Match the numbers to their cube numbers.

6^3	216
9^3	125
5^3	729



VF

Cube Numbers

5b. Match the numbers to their cube numbers.

8^3	343
12^3	512
7^3	1,728



VF

6a. Use $<$, $>$ or $=$ to complete the statements below.

$$7^3 \quad \square \quad 434$$

$$521 \quad \square \quad 8^3$$



VF

6b. Use $<$, $>$ or $=$ to complete the statements below.

$$10^3 \quad \square \quad 1,000$$

$$215 \quad \square \quad 5^3$$



VF

7a. Circle the cube numbers.

999 261 1,000

343 344 719

152 303 927



VF

7b. Circle the cube numbers.

126 633 133

729 23 512

63 216 279



VF

8a. Solve the calculations.

$$8^3 + 2^3 = \square$$

$$11^3 - 4^3 = \square$$



VF

8b. Solve the calculations.

$$10^3 + 4^3 = \square$$

$$9^3 - 5^3 = \square$$



VF

Cube Numbers

9a. Match the calculations to the correct answers.

$$9^3 - 5^2 \qquad 1,081$$

$$10^3 + 9^2 \qquad 1,712$$

$$12^3 - 4^2 \qquad 704$$



VF

Cube Numbers

9b. Match the calculations to the correct answers.

$$7^3 + 12^2 \qquad 612$$

$$11^3 - 6^2 \qquad 487$$

$$8^3 + 10^2 \qquad 1,295$$



VF

10a. Use $<$, $>$ or $=$ to complete the statements below.

$$11^3 + 7^2 \quad \square \quad 1,830$$

$$608 \quad \square \quad 9^3 - 11^2$$



VF

10b. Use $<$, $>$ or $=$ to complete the statements below.

$$10^3 + 8^2 \quad \square \quad 1,016$$

$$1,385 \quad \square \quad 12^3 - 7^2$$



VF

11a. Complete the calculations below.

$$8^3 + \underline{\quad}^2 = 593$$

$$\underline{\quad}^3 - 12^2 = 199$$



VF

11b. Complete the calculations below.

$$9^3 - \underline{\quad}^2 = 648$$

$$\underline{\quad}^3 + 12^2 = 360$$



VF

12a. Solve the calculations.

$$12^3 + 3^3 - 6^2 = \square$$

$$9^3 - 8^2 + 5^3 = \square$$



VF

12b. Solve the calculations.

$$11^3 + 4^3 - 5^2 = \square$$

$$12^3 - 11^2 + 4^3 = \square$$



VF

Varied Fluency Cube Numbers

Developing

1a. 2^3 and 8; 1^3 and 1; 4^3 and 64

2a. =; <

3a. 8 and 64

4a. 28; 117

Expected

5a. 6^3 and 216; 9^3 and 729; 5^3 and 125

6a. <; >

7a. 343 and 1,000

8a. 520; 1,267

Greater Depth

9a. $9^3 - 5^2$ and 704; $10^3 + 9^2$ and 1,081;
 $12^3 - 4^2$ and 1,712

10a. <; =

11a. 9; 7

12a. 1,719; 790

Varied Fluency Cube Numbers

Developing

1b. 5^3 and 125; 0^3 and 0; 3^3 and 27

2b. >; <

3b. 1 and 27

4b. 35; 63

Expected

5b. 8^3 and 512; 12^3 and 1,728; 7^3 and 343

6b. =; >

7b. 729, 512 and 216

8b. 1,064; 604

Greater Depth

9b. $7^3 + 12^2$ and 487; $11^3 - 6^2$ and 1,295;
 $8^3 + 10^2$ and 612

10b. >; <

11b. 9; 6

12b. 1,370; 1,671