## Match-Up

## Volume of Cubes and Cuboids

| 1 | Find the volume of the cube. | 5 | The volume is $420 \mathrm{~cm}^{3}$. Find $x$. | 9 | A cuboid with dimensions 12 cm by 24 cm by 40 cm is filled by 180 identical cubes. What is the length of the side of a cube? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Find the volume. <br> 12.5 cm | 6 | The volume is $289 \mathrm{~cm}^{3}$. Find $x$. | 10 | The volume of a cube is twice the volume of a cuboid with dimensions 3 cm by 4 cm by 9 cm . Find the side length of the cube. |
| 3 | Find the volume. | 7 | Find the side length of a cube with volume $3375 \mathrm{~cm}^{3}$. | 11 | A cuboid has side lengths in the ratio $2: 4: 5$. If the shortest side length is 5 cm , find the volume of the cuboid. |
| 4 | Find the volume. | 8 | Find the volume of a cuboid whose side lengths in cm are the first, third and fifth prime numbers. | 12 | A cuboid has sides of length $x, x$ and $3 x$. Its volume is $1536 \mathrm{~cm}^{3}$. Find the value of $x$. |


| $\mathbf{A}$ | 15 cm | $\mathbf{D}$ | 8 cm | $\mathbf{G}$ | 10.5 cm | $\mathbf{J}$ | 4 cm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{B}$ | $110 \mathrm{~cm}^{3}$ | $\mathbf{E}$ | 8.5 cm | $\mathbf{H}$ | $625 \mathrm{~cm}^{3}$ | $\mathbf{K}$ | $125 \mathrm{~cm}^{3}$ |
| $\mathbf{C}$ | 6 cm | $\mathbf{F}$ | $375 \mathrm{~cm}^{3}$ | $\mathbf{I}$ | $96 \mathrm{~cm}^{3}$ | $\mathbf{L}$ | $1125 \mathrm{~cm}^{3}$ |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
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