**Estimating roots GREEN**

Explain how we know $\sqrt{30}$ lies between 5 and 6.

Explain how we know $\sqrt[3]{110}$ lies between 4 and 5.

Which two consecutive whole numbers is √60 between?

Which two consecutive whole numbers is $\sqrt[3]{30}$ between?

Approximately how long is a side of a square that has an area of 90 cm²?

Approximately how long is an edge of a cube with a volume of 200 m³?

**Estimating roots AMBER**

Explain how we know $\sqrt{30}$ lies between 5 and 6.

What are the square numbers above and below 30?

Explain how we know $\sqrt[3]{110}$ lies between 4 and 5.

What are the cube numbers above and below 110?

Which two consecutive whole numbers is $\sqrt{60}$ between?

What are the square numbers above and below 60?

Which two consecutive whole numbers is $\sqrt[3]{30}$ between?

What are the cube numbers above and below 30?

Approximately how long is a side of a square that has an

Use square numbers…

area of 90 cm²?

Use cube numbers…

Approximately how long is an edge of a cube with a volume

of 200 m³?

**Estimating roots RED**

Use your 1 – 100 grid to help you!

Explain how we know $\sqrt{30}$ lies between 5 and 6.

What are the square numbers above and below 30?

4² =

5² =

6² =

7² =

Explain how we know $\sqrt[3]{110}$ lies between 4 and 5.

What are the cube numbers above and below 110?

2³ =

3³ =

4³ =

5³ =

Which two consecutive whole numbers is $\sqrt{60}$ between?

What are the square numbers above and below 60?

Which two consecutive whole numbers is $\sqrt[3]{30}$ between?

What are the cube numbers above and below 30?

Approximately how long is a side of a square that has an

Use square numbers…

area of 90cm²?

$\sqrt{90}$ = ?

Use cube numbers…

Approximately how long is an edge of a cube with a volume

of 200m³?

$\sqrt[3]{200}$ = ?