

Area

Resources:

[Shady Shapes Handout](#) | [Area of a Rectangle Booklet](#) | Mini-whiteboards | [pHet - Area Builder 1.1.20](#)

Do Now: Shady Shapes

How many 1x1 squares are in each figure?

Extension:

Count ALL of the squares in each of the figures (eg. 1x1 squares AND 2x2 squares, 3x3 squares, etc.)

Mini whiteboards

Did anyone find a fast way to add up the number of squares?

Hint: We can use our timestables...




Learning Intention

Students will be able to Find the formula for the area of a rectangle. (VCMMG258).

{: .label}

5 mins

Success Criteria

-  Level 1 - I can correctly solve 5 picture-based problems using the formula for the area of a rectangle. (Activity 1)
-  Level 2 - I can correctly solve 5 word-based problems using the formula for the area of a rectangle. (Activity 2)
-  Level 3 - I can correctly solve 5 compound area problems using the formula for the area of a rectangle.

Why do we need to know about area?

Some skills that require area

- Estimating amount of paint to cover a wall
- Carpet laying
- Roofing
- Turfing
- Mulching a garden

Any other examples can you think of?

Vocabulary

- *Dimension*: a measurement of a particular kind, such as width, or height.
- *Right-angle*: an angle of 90° , as in a corner of a square.
- *Perpendicular*: At an angle of 90° to.
- *Perimeter*: the boundary of a closed geometrical figure. (1D)
- *Area*: the size of a surface. (2D)

What is a rectangle

Area of a Rectangle

$$\text{Area}_{\text{rectangle}} = \text{width} \times \text{height}$$

STEP 1 – Write down formula

STEP 2 – Substitute values and calculate area.

STEP 3 – Show your units.

End.

Compiling lesson using Marp in the Command Prompt:

```
CD C:\Users\...\Documents\GitHub\stemresources.github.io
```

```
# Convert slide deck into HTML
```

```
# npx @marp-team/marp-cli [filename].md
```

```
# npx @marp-team/marp-cli [filename].md -o output.html
```

```
# Convert slide deck into PDF
```

```
npx @marp-team/marp-cli [filename].md --pdf
```

```
npx @marp-team/marp-cli [filename].md -o output.pdf
```

```
# Convert slide deck into PowerPoint document (PPTX)
```

```
npx @marp-team/marp-cli [filename].md --pptx
```

```
npx @marp-team/marp-cli [filename].md -o output.pptx
```

```
# Watch mode
```

```
npx @marp-team/marp-cli -w 07_Maths-Measurement-01.md
```

```
# Server mode (Pass directory to serve)
```

```
npx @marp-team/marp-cli -s ./slides
```