Year 4 Maths
Steppingstone activity
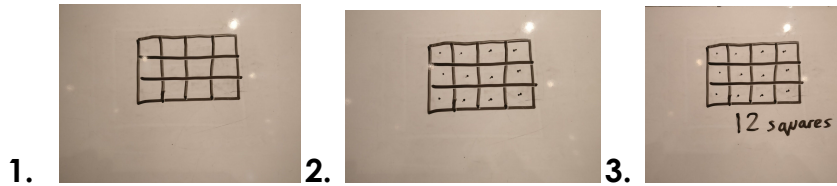
Lesson 11
LO: To find the area of a rectilinear shape
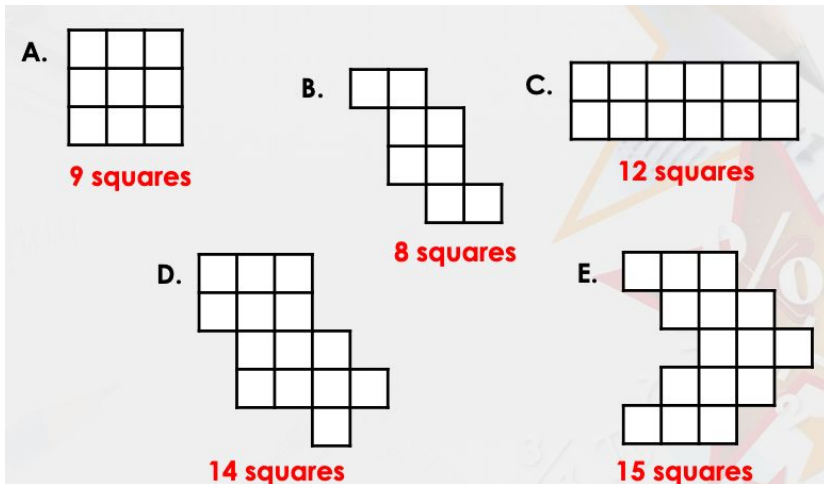
Success Criteria:

1. Look at your shape
2. Count up the squares
3. Write the answer

Remember: Carefully count upall the sides

Model

1. 2. 3.

12 squares

Now you try… What are the areas of the shapes below

A.

9 squares

B.

8 squares

C.

12 squares

D.

14 squares

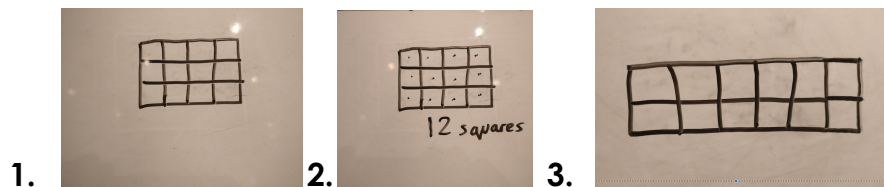E.

15 squares

Year 4 Maths

Task:

Lesson 11
LO: To find the area of a rectilinear shape

Success Criteria:

1. Look at your shape
2. Count up the squares
3. Make another shape with the same area

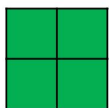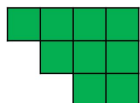**Remember: Do not include the corner squares!**

Model:

1.   2.   3.

Year 4 Maths Main activity
Complete at least 2 columns, more if you can!

Task 1	Task 2

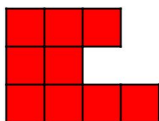## Practice: Add the sides up carefully

1.

Rearrange the tiles to make a rectangle.

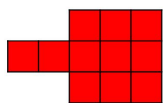Rearrange the tiles to make a different 8-sided shape.
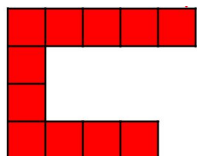
Various answers:

2.

Rearrange the tiles to make a different rectangle.

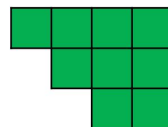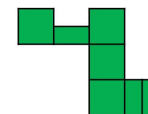Rearrange the tiles to make a different 8-sided shape.

Various answers:
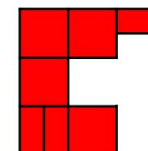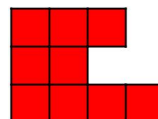
Practice: Add the sides up carefully

1.

Rearrange the tiles to make a different 8-sided shape.

Rearrange the tiles to make a 10-sided shape.

Various answers:

2.

Rearrange the tiles to make a different 8-sided shape.
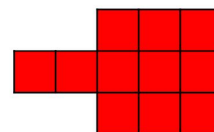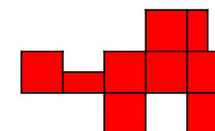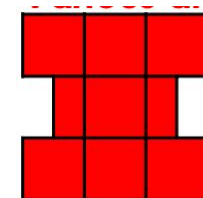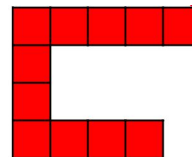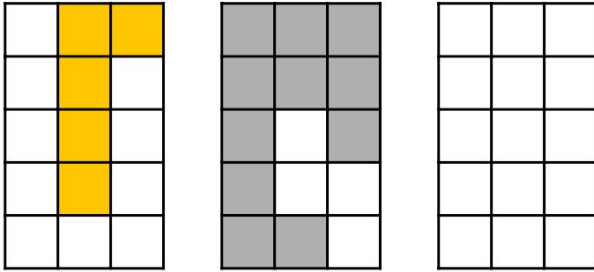
Rearrange the tiles to make a 12-sided shape.

Various answers:

3.

8a. Brad wants to create three different rectilinear shapes using 26 square tiles. He has completed two. Create a shape with the remaining tiles.

Any shape with an area of 10 squares.

3.

12a. Bruce wants to create three different rectilinear shapes using 15 square tiles and 16 half square tiles. He has completed two. Create a shape with the remaining tiles.
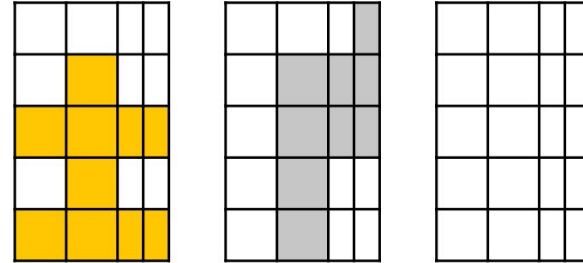
Any shape with any area of 8 squares and 7 half squares.

Task 3

Reasoning

Explain your answers.

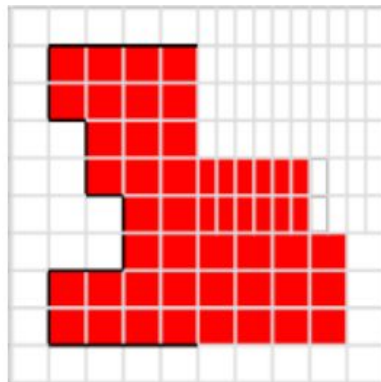**4a.** Jacob is using square tiles to make a shape. He says,

I can make a square using 16 tiles.

Is he correct? Prove it.

7b. Nathan is using square and half square tiles to make a shape. He says,

I can make a rectangle using 10 square tiles and 2 half square tiles.

Is he correct? Prove it.

4a. Jacob is correct. He could create a 4 x 4 square with an area of 16.

9a. Various answers, for example:

Task 4

Problem solving

2. Maintenance Mick is retiling his bathroom. So far, he has completed part of the wall below. He has 19 square tiles and 17 half square tiles left to complete the wall.

Use the tiles to complete the wall.
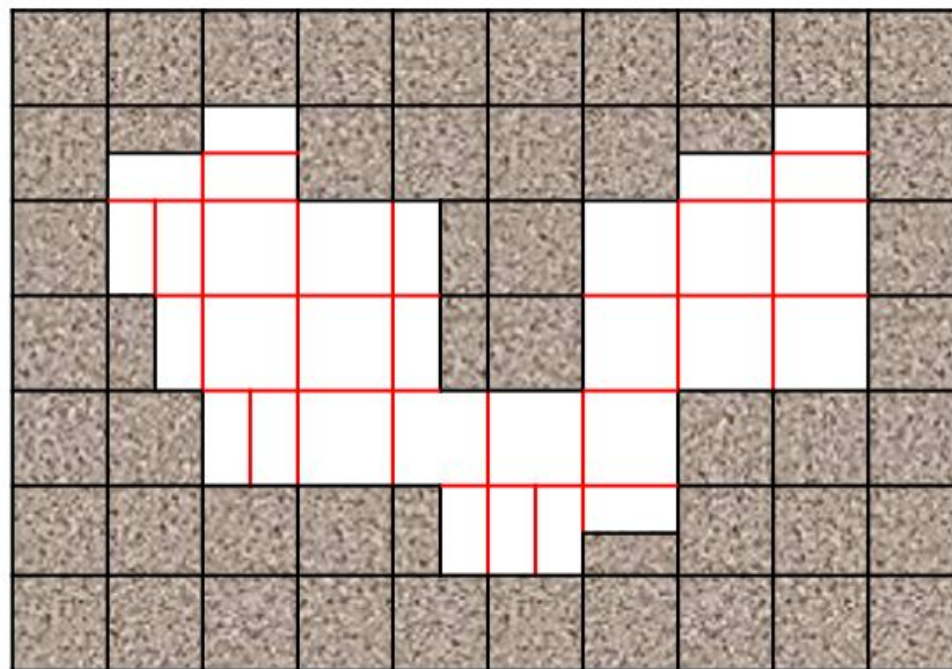
What is the smallest amount of tiles that can be used to fill the area?
19 square tiles and 7 half square tiles