Year 4 Mathematics Homework

Area

Tick your answer to each question, like in the example below. You can use any space left below or around a question for your working out, if you need it.

Example Question

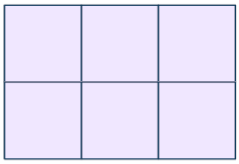
1,435 + 2,870 =

- a ☐ 3,205
- b ☑ 4,305
- c ☐ 3,295
- d ☐ 5,110

1 Area is...

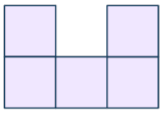
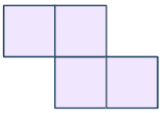
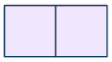
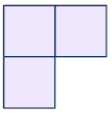
- a ☐ the distance around a 2-D shape.
- b ☐ the amount of shape inside the boundary of a 2-D shape.
- c ☐ the length of one side of a 2-D shape.
- d ☐ the amount of shape inside the boundary of a 3-D shape.

2 What is the area of the rectangle?



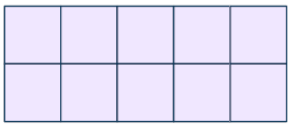
- a ☐ 3 squares
- b ☐ 2 squares
- c ☐ 10 squares
- d ☐ 6 squares

3 Each of the following shapes is made from exactly the same square pieces. Which shape has the smallest area?

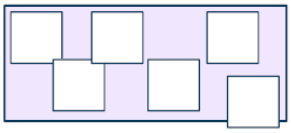
- a ☐ 
- b ☐ 
- c ☐ 
- d ☐ 

4 Which diagram shows an accurate way to find the area of this rectangle?

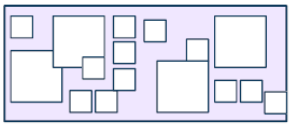
- a ☐ The area is 10 squares.



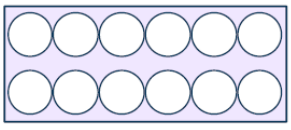
- b ☐ The area is 6 squares.



- c ☐ The area is 16 squares.

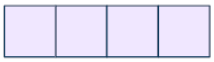


- d ☐ The area is 12 circles.

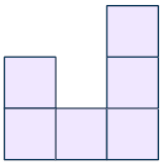


5 Which symbol can be used to compare the areas?

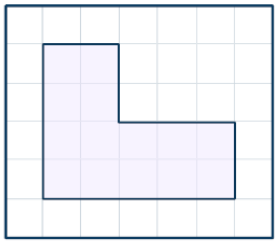
- a ☐ ≈
- b ☐ =
- c ☐ >
- d ☐ <



and



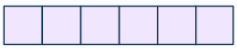
6 Ethan draws a rectilinear shape on squared paper.

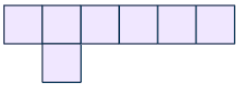


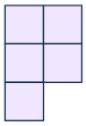
What is the area of the shape that Ethan has drawn?

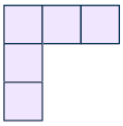
- a ☐ 20 squares
- b ☐ 18 squares
- c ☐ 14 squares
- d ☐ 42 squares

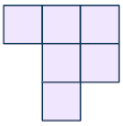
7 Which shape has an area equal to the shape below?



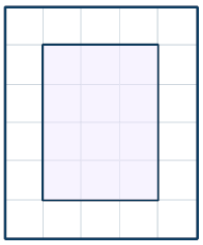
a ☐ 

b ☐ 

c ☐ 

d ☐ 

8 Preeti draws this rectangle on centimetre squared paper.



Ryan draws a rectangle that is made up of two of Preeti's rectangles, so it is twice as wide. What is the area of Ryan's rectangle?

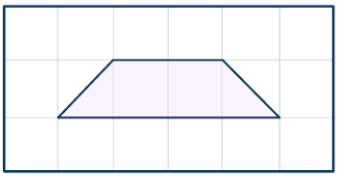
a ☐ 12 squares

b ☐ 24 squares

c ☐ 14 squares

d ☐ 6 squares

9 What is the area of the shape?



a ☐ You cannot calculate the area of this shape.

b ☐ 4 squares

c ☐ 3 squares

d ☐ 2 squares

10 What is the area of yellow (y) squares in this pattern?

Y	Y	Y	G
B	Y	P	P
B	Y	P	P
B	Y	Y	P

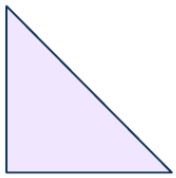
a ☐ 6 squares

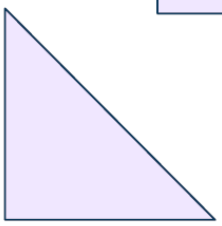
b ☐ 7 squares

c ☐ 16 squares

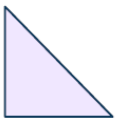
d ☐ 5 squares

11 The triangles are all drawn to the same scale.
Which triangle has a greater area than the triangle below?



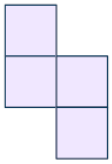
a ☐ 

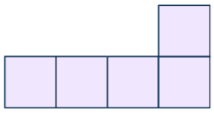
b ☐ 

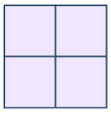
c ☐ 

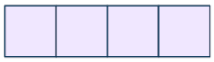
d ☐ 

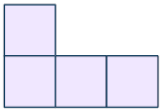
12 Which shape does not have the same area as the shape below?



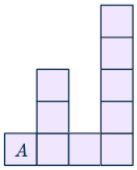
a ☐ 

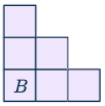
b ☐ 

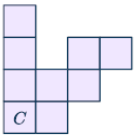
c ☐ 

d ☐ 

13 Order the shapes by their area starting with the shape with the smallest area.







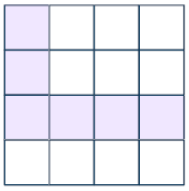
a ☐ Shape B, Shape C, Shape A

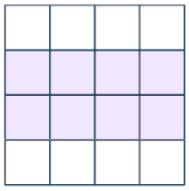
b ☐ Shape B, Shape A, Shape C

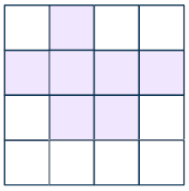
c ☐ Shape A, Shape C, Shape B

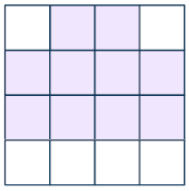
d ☐ Shape A, Shape B, Shape C

14 Which diagram shows a shape with an area of 8 squares?

a ☐ 

b ☐ 

c ☐ 

d ☐ 

15 Which of the described shapes has the greatest area?

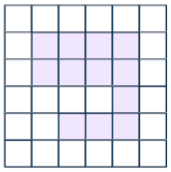
a ☐ A square with an area of 4 squares.

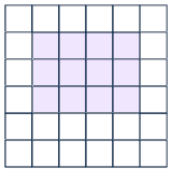
b ☐ A rectangle with an area of 6 squares.

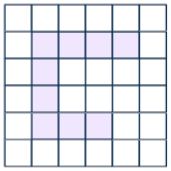
c ☐ A rectangle with an area of 8 squares.

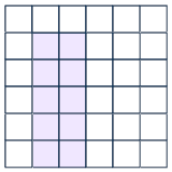
d ☐ A rectangle with an area of 3 squares.

16 Which diagram shows a shape with an area of 10 squares?

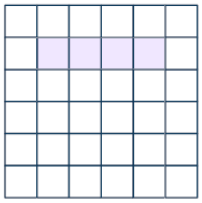
a ☐ 

b ☐ 

c ☐ 

d ☐ 

17 How many squares will need to be added to this shape to make a square with an area of 16 squares?



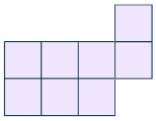
a ☐ 16 squares

b ☐ 12 squares

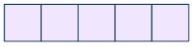
c ☐ 10 squares

d ☐ The shape already has an area greater than 16 squares.

18 Which symbol can be used to compare the areas?



and



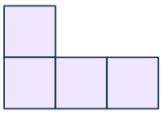
a ☐ >

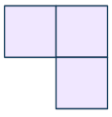
b ☐ <

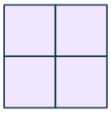
c ☐ =

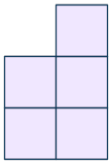
d ☐ ≈

19 Each of the following shapes is made from exactly the same square pieces. Which shape has the greatest area?

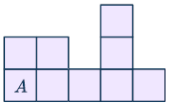
a ☐ 

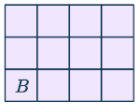
b ☐ 

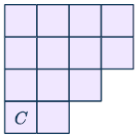
c ☐ 

d ☐ 

20 Order the shapes by their area starting with the shape with the greatest area.







a ☐ Shape C, Shape A, Shape B

b ☐ Shape C, Shape B, Shape A

c ☐ Shape A, Shape C, Shape B

d ☐ Shape A, Shape B, Shape C