

L.O: The review area and perimeter through an online adventure- 22.05.2020/
XXII.V.MMXX



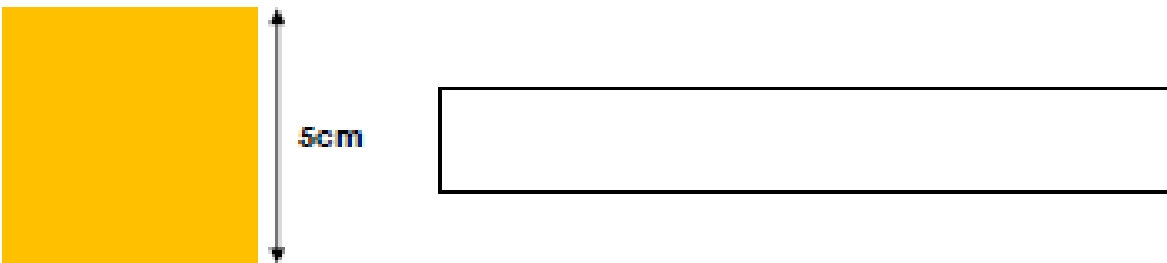
Your friend has invited you to play on a live stream computer game where you can split the screen and compare activity.

The aim of the game is to gain points through creative use of shapes.

PRESS START

LEVEL ONE

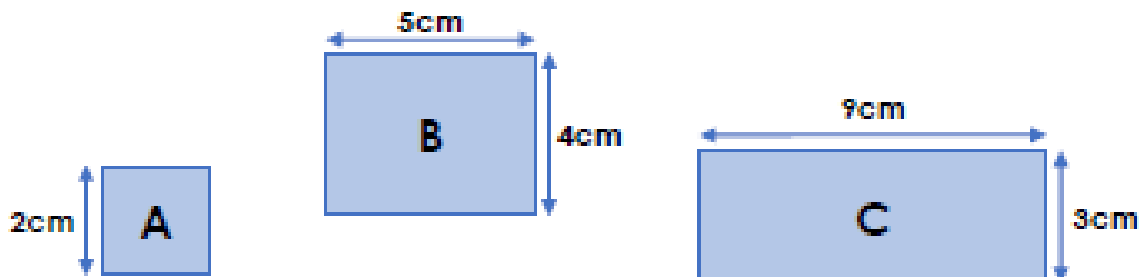
1. Your friend has created this square and gains 1 point per cm in the perimeter. What's the score to beat?



2. You are given a rectangle with one short side set at 3cm. How long will you need to make the long side to beat your friend's score?

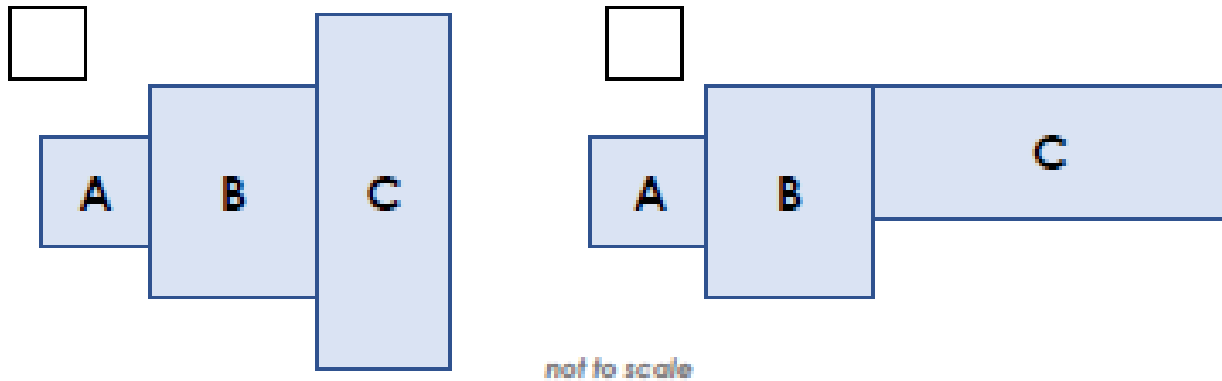
LEVEL TWO

Next up is compound shapes. This is trickier as you are both given the same shapes.

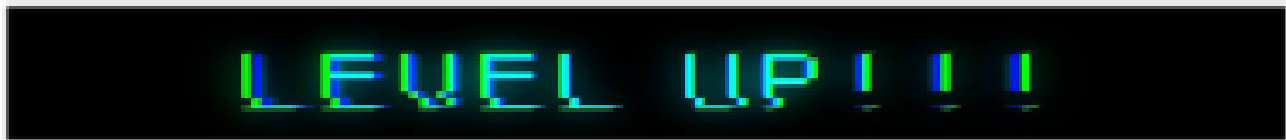


not to scale

3. Which configuration will give you the largest perimeter and win you the most points?
Tick a box to show your choice.



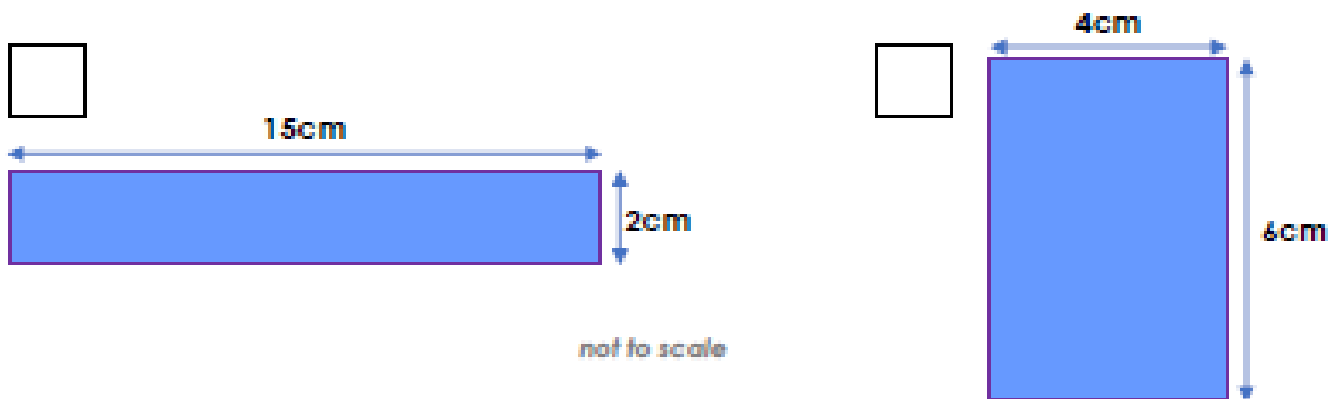
To level up, use the measurements to calculate the perimeter of your chosen shape.



LEVEL THREE

You've reached the penultimate level! The rules change, and area is your next challenge.

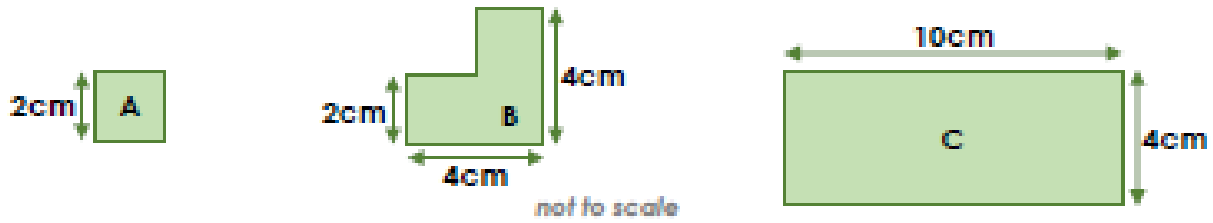
4. Below is the split screen with you on the left. Tick who has won.



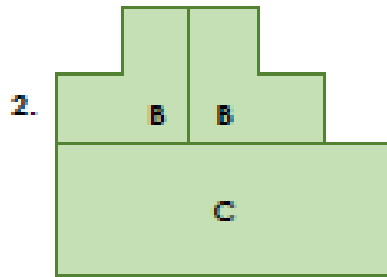
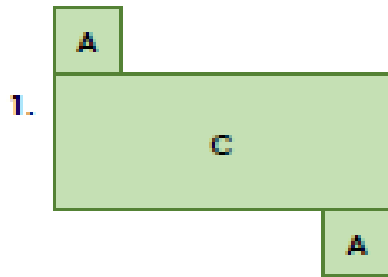
What was the winning score?

LEVEL FOUR

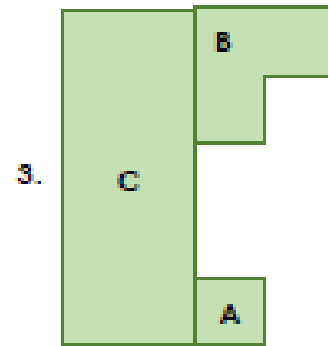
It's down to the final task: area of compound shapes!
You have been given the following shapes:



5. You can use a maximum of three shapes.
Which configuration below will give you the highest score?



not to scale



Area of 1 =

Area of 2 =

Area of 3 =

Highest score =

**GAME
OVER**

You did it! Master of perimeter and area... who will YOU challenge next?

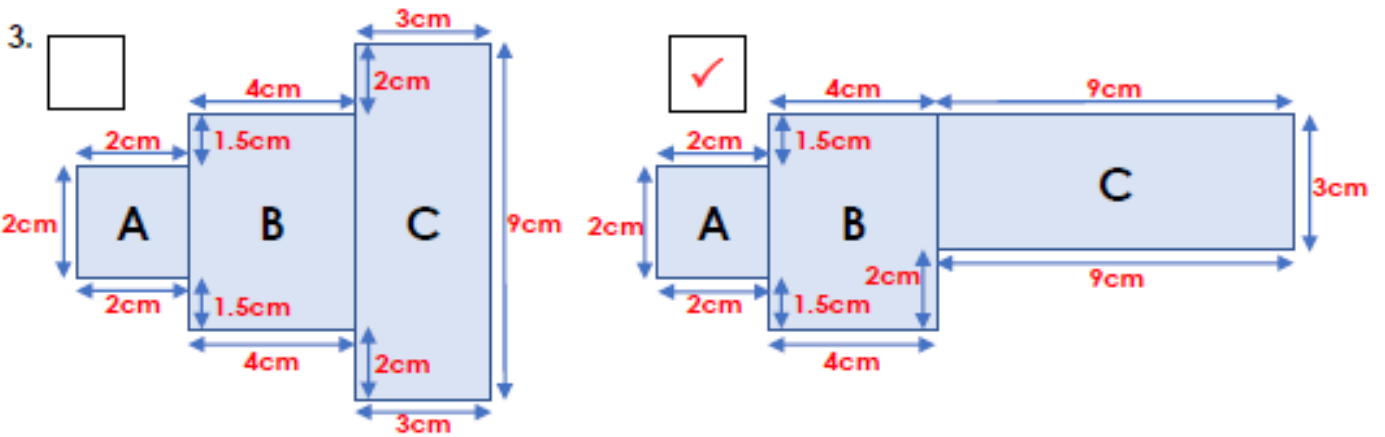
clues:

1. Perimeter is adding all the sides together. Add each side of the square for your perimeter.
2. Try drawing the shape to help you. If one short side is 3cm, then the other short side will also be 3cm. What will the long sides be?
3. Mild: Solve the perimeter of each box individually—Or use yesterday's video on compound shapes to help you. Step 1 will be subtracting the length of A from B.
4. Area= Length x Width
5. Once you figure out the area of the 3 individual shapes, all you need to do is add. Area of the first shape will be $A + A + C = ?$

Congratulations! If you were unable to solve any of the questions, look at the answer and try the question again—write out all the steps to see how to reach that answer.

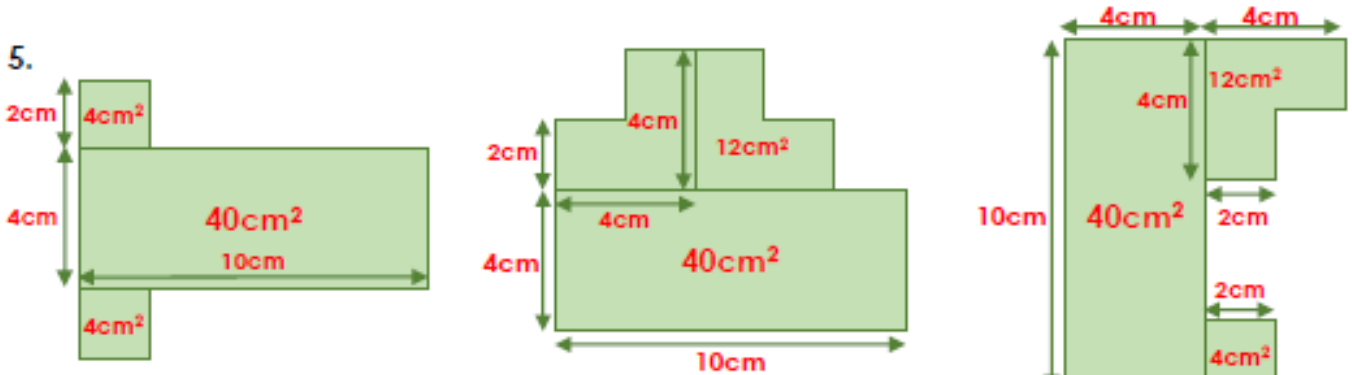
Answers:

1. Need to beat 20 points ($5\text{cm} + 5\text{cm} + 5\text{cm} + 5\text{cm} = 20\text{cm}$)
2. A rectangle with 2 sides of 3cm will need the other two lengths to be 7.5cm to get points of 21 ($3\text{cm} + 3\text{cm} + 7.5\text{cm} + 7.5\text{cm} = 21\text{cm}$)



The first shape's perimeter = 36cm . The second shape's perimeter = 40cm .

4. The first shape has won because it is larger with an area of 30cm^2 (15×2). The second shape's area is 24cm^2 (4×6).



Area of 1 =

Area of 2 =

Area of 3 =

Shape 2 will give you the highest score with an area of 64cm^2 .