

## Yr 4 Measures and data Unit 4 (4993)

### Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

#### Day 1 Perimeter of rectangles Sheet 1

Working towards ARE

#### Day 1 Perimeter of rectangles Sheet 2

Working at ARE / Greater Depth

Greater Depth should also complete the Challenge.

#### Day 2 Perimeters Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE find the perimeters of each shape.

Working at ARE / Greater Depth predict the order of perimeters (smallest to biggest) BEFORE calculating the perimeters.

#### Day 3 Area and perimeter Sheet 1

Working towards ARE

#### Day 3 Area and perimeter Sheet 2

Working at ARE

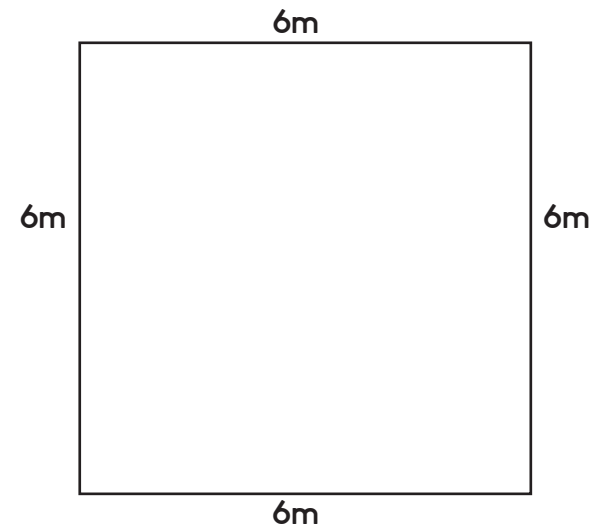
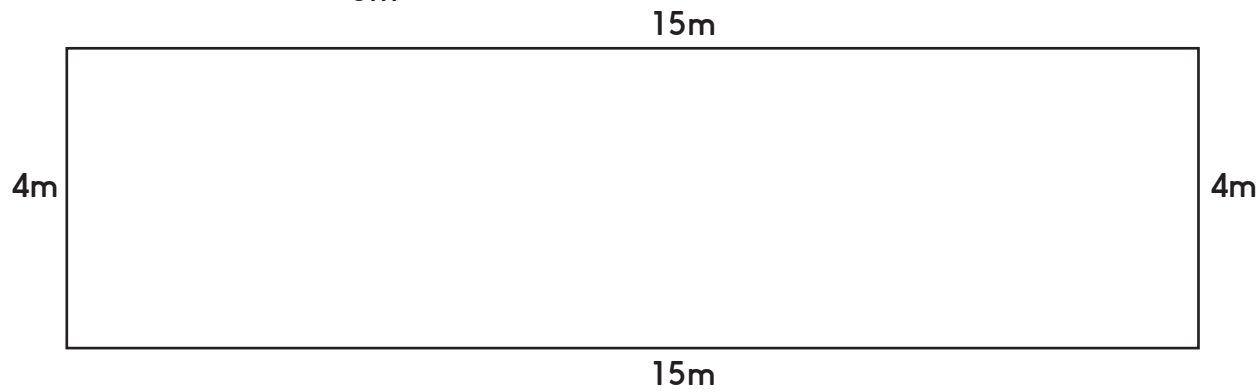
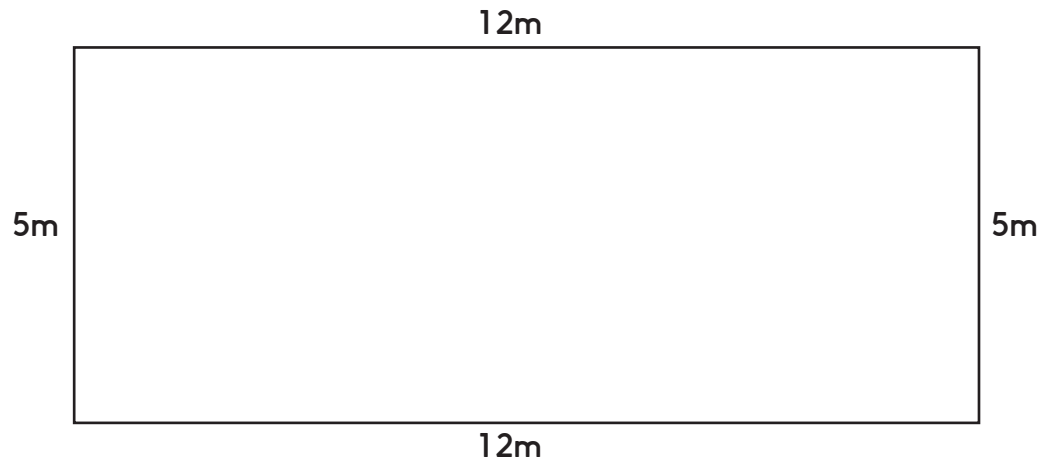
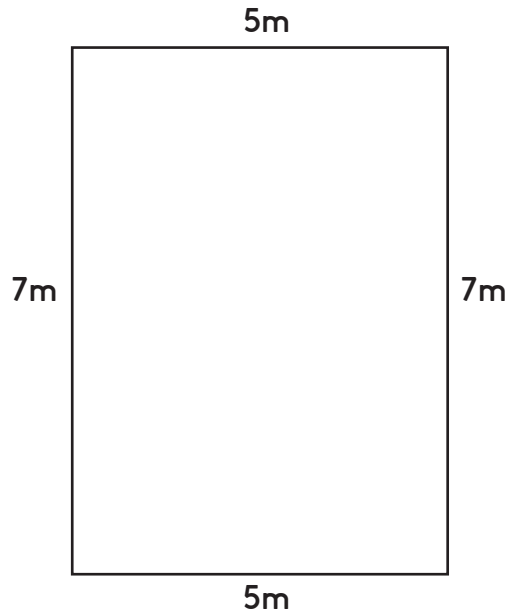
#### Day 3 Area and perimeter Sheet 3

Greater Depth

# Perimeter of rectangles

## Sheet 1

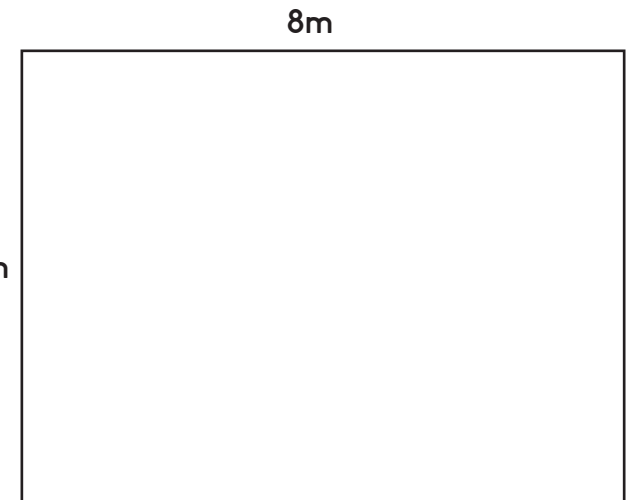
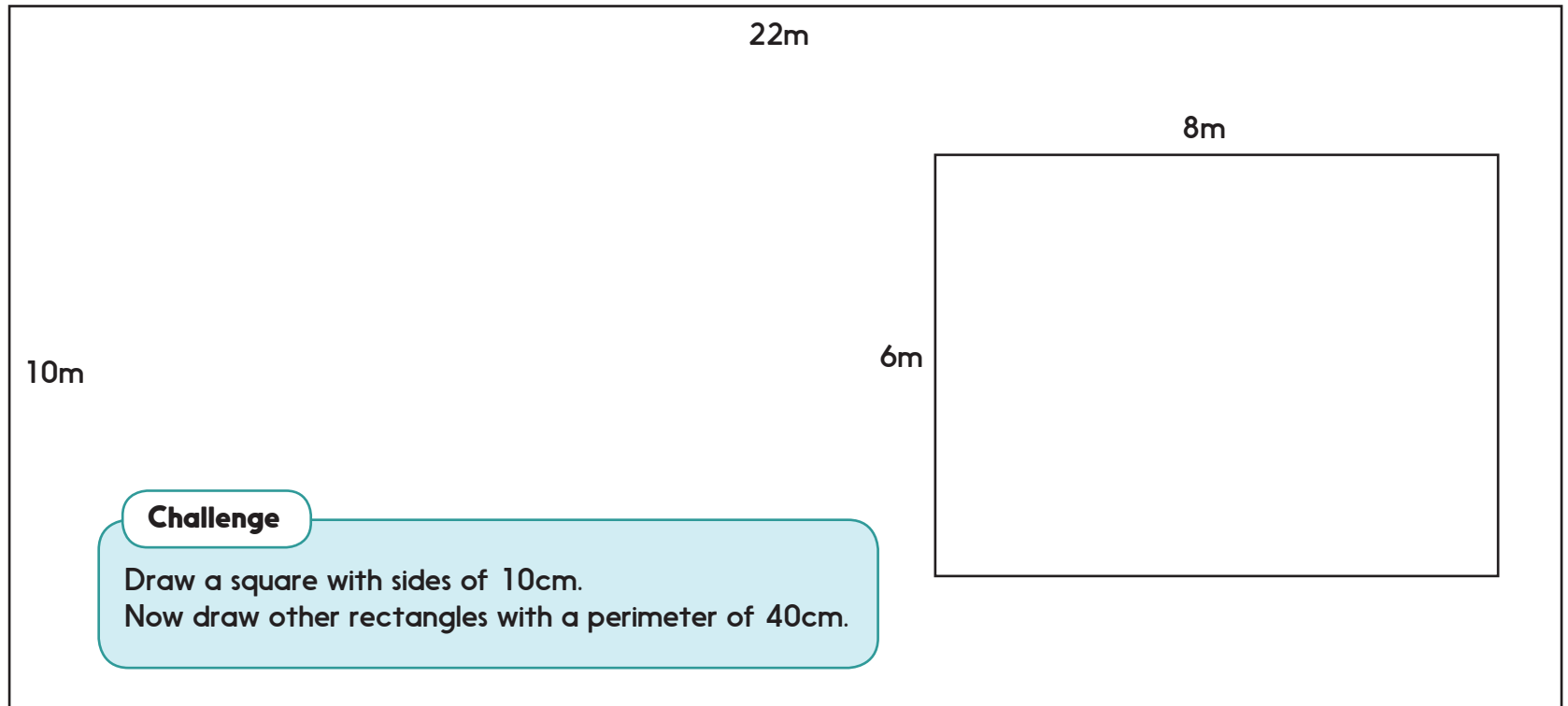
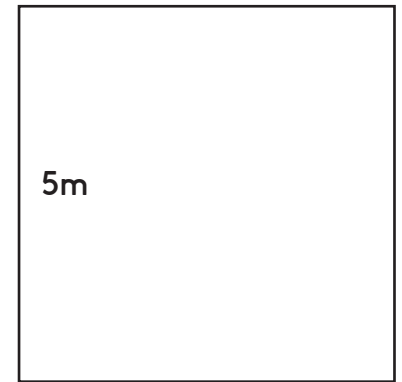
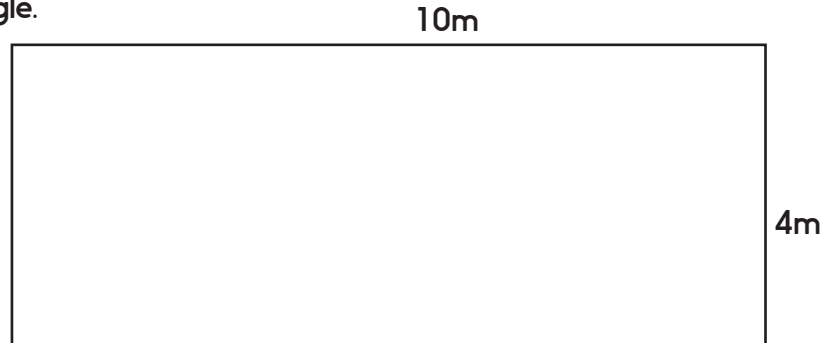
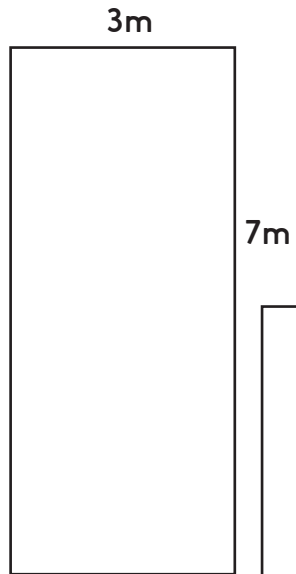
Calculate the perimeter of each rectangle.



# Perimeter of rectangles

## Sheet 2

Calculate the perimeter of each rectangle.



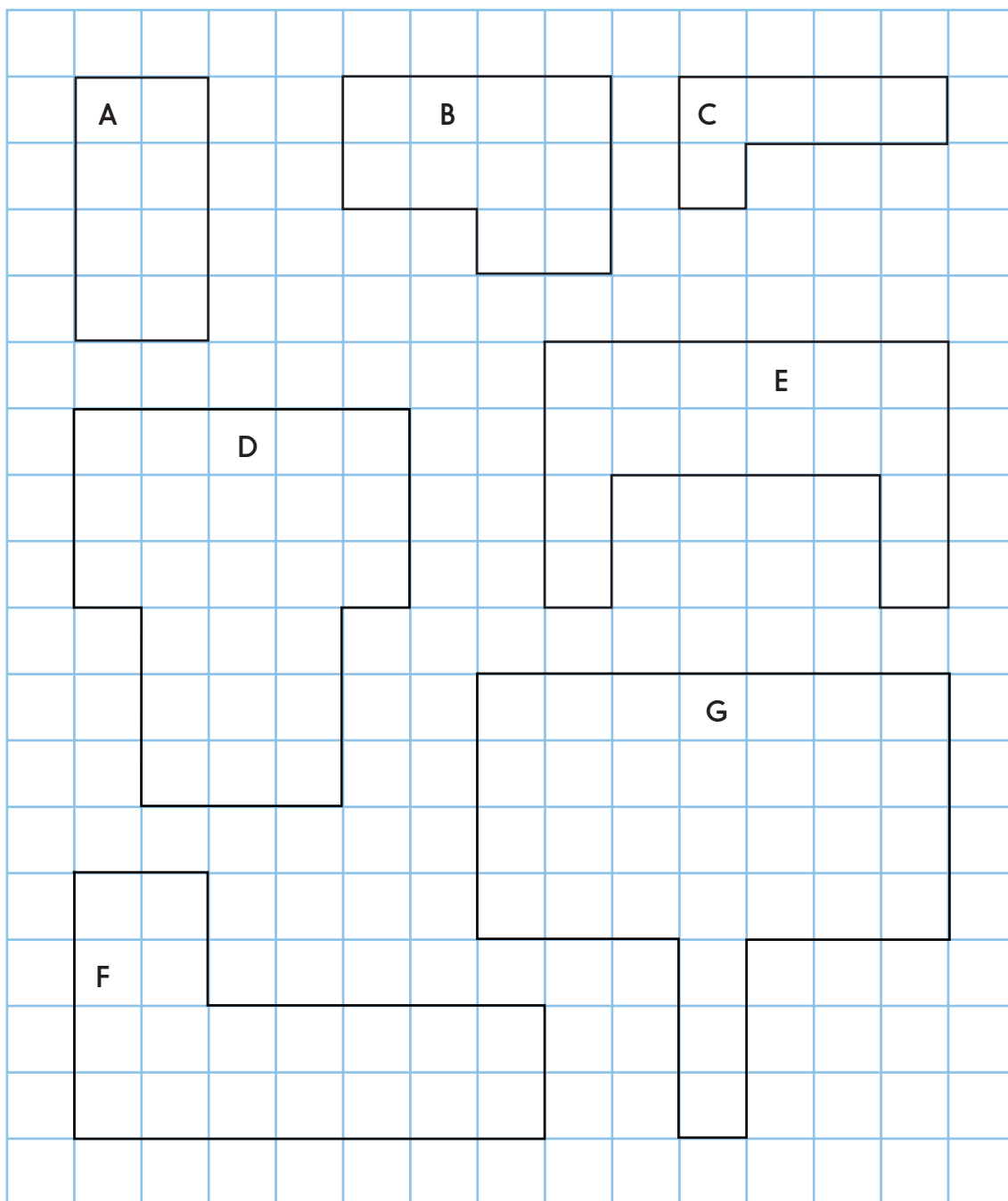
### Challenge

Draw a square with sides of 10cm.  
Now draw other rectangles with a perimeter of 40cm.

# Perimeters

## Sheet 1

Which of these shapes has the greatest perimeter?  
Find the perimeter of these shapes.  
Write the perimeter in each shape.



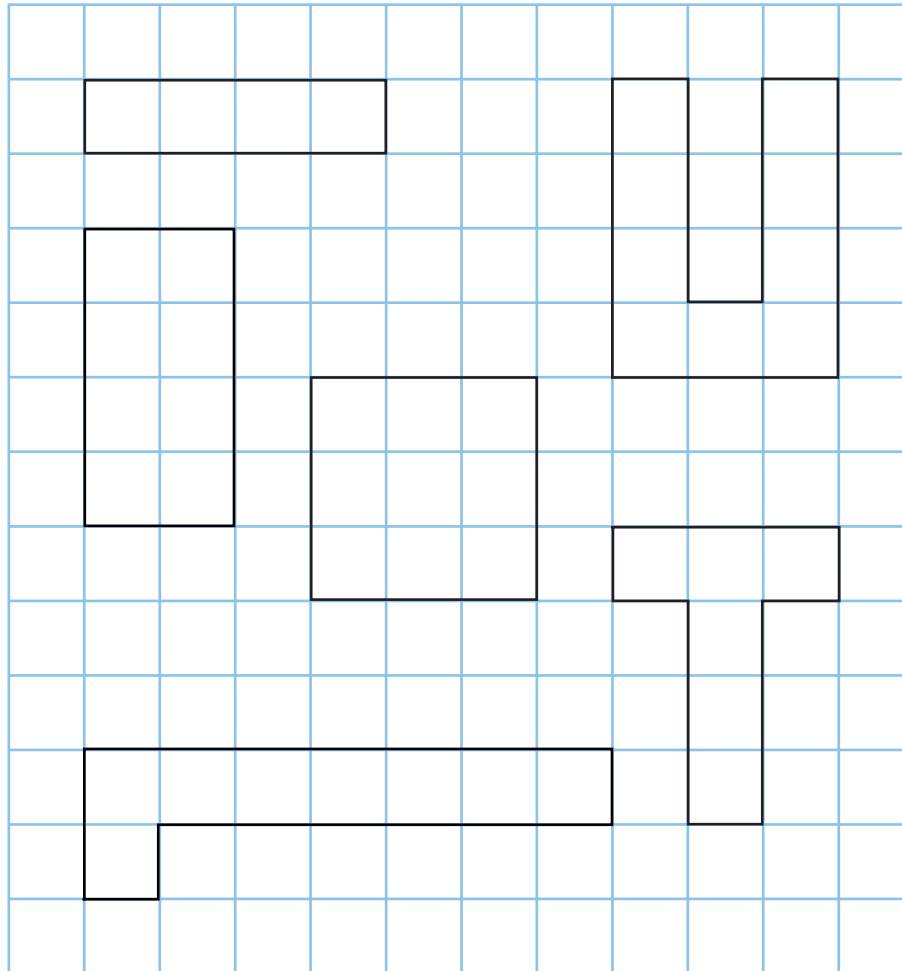
### Challenge

Georgia says, 'Finding these perimeters was easy! I did  $2 \times$  the sum of the longest side and width of each shape. Like for shape C, I did  $2 \times (4 + 2)$ .' Does this strategy work? Does it work for all of the shapes?

# Area and perimeter

## Sheet 1

Label each shape with a letter A to F to describe its area and perimeter.



A Area:  $9\text{cm}^2$   
Perimeter:  $20\text{cm}$

B Area:  $8\text{cm}^2$   
Perimeter:  $18\text{cm}$

C Area:  $4\text{cm}^2$   
Perimeter:  $10\text{cm}$

D Area:  $9\text{cm}^2$   
Perimeter:  $12\text{cm}$

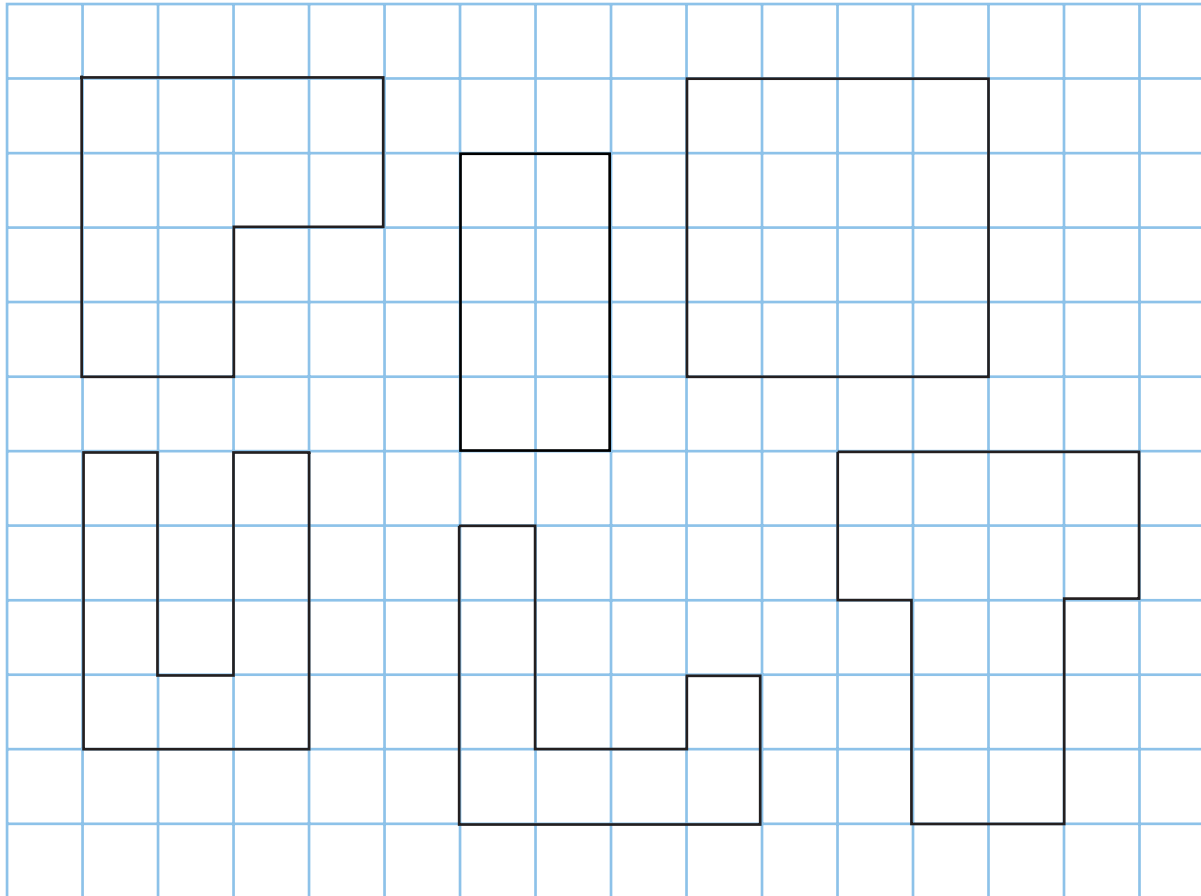
E Area:  $6\text{cm}^2$   
Perimeter:  $14\text{cm}$

F Area:  $8\text{cm}^2$   
Perimeter:  $12\text{cm}$

# Area and perimeter

## Sheet 2

Label each shape with a letter A to F to describe its area and perimeter.

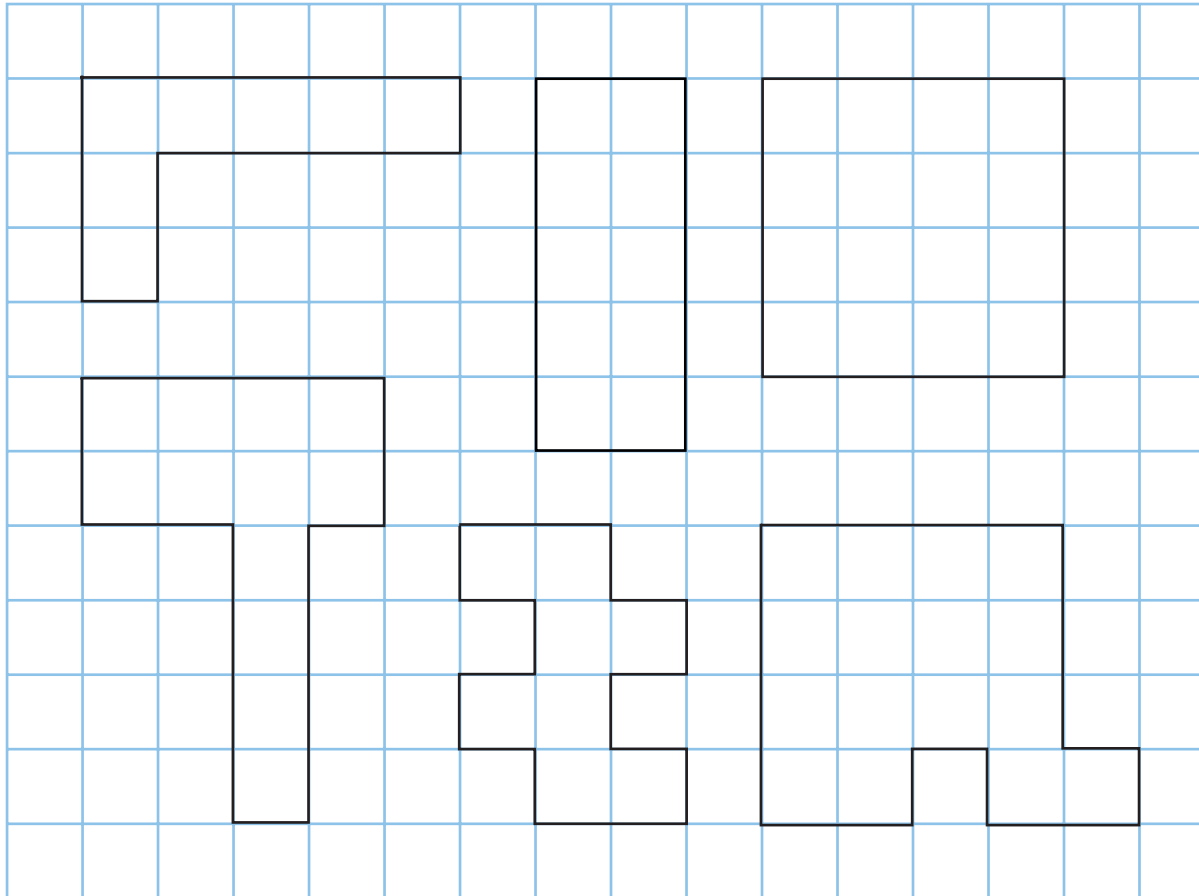


- A Area:  $8\text{cm}^2$   
Perimeter:  $18\text{cm}$
- B Area:  $12\text{cm}^2$   
Perimeter:  $16\text{cm}$
- C Area:  $8\text{cm}^2$   
Perimeter:  $12\text{cm}$
- D Area:  $14\text{cm}^2$   
Perimeter:  $18\text{cm}$
- E Area:  $16\text{cm}^2$   
Perimeter:  $16\text{cm}$
- F Area:  $9\text{cm}^2$   
Perimeter:  $20\text{cm}$

# Area and perimeter

## Sheet 3

Label each shape with a letter A to F to describe its area and perimeter.



A Area:  $10\text{cm}^2$   
Perimeter:  $14\text{cm}$

B Area:  $8\text{cm}^2$   
Perimeter:  $18\text{cm}$

C Area:  $16\text{cm}^2$   
Perimeter:  $20\text{cm}$

D Area:  $16\text{cm}^2$   
Perimeter:  $16\text{cm}$

E Area:  $12\text{cm}^2$   
Perimeter:  $20\text{cm}$

F Area:  $7\text{cm}^2$   
Perimeter:  $16\text{cm}$

# Measures and data

## Answers

### Day 1 Perimeter of rectangles Sheet 1

$$7\text{m} + 5\text{m} + 7\text{m} + 5\text{m} = 24\text{m}$$

$$12\text{m} + 5\text{m} + 12\text{m} + 5\text{m} = 34\text{m}$$

$$15\text{m} + 4\text{m} + 15\text{m} + 4\text{m} = 38\text{m}$$

$$6\text{m} + 6\text{m} + 6\text{m} + 6\text{m} = 24\text{m}$$

### Day 1 Perimeter of rectangles Sheet 2

$$7\text{m} + 3\text{m} + 7\text{m} + 3\text{m} = 20\text{m}$$

$$10\text{m} + 4\text{m} + 10\text{m} + 4\text{m} = 28\text{m}$$

$$5\text{m} + 5\text{m} + 5\text{m} + 5\text{m} = 20\text{m}$$

$$22\text{m} + 10\text{m} + 22\text{m} + 10\text{m} = 64\text{m}$$

$$8\text{m} + 6\text{m} + 8\text{m} + 6\text{m} = 28\text{m}$$

### Day 2 Perimeters Sheet 1

$$A = 12\text{cm}$$

$$B = 14\text{cm}$$

$$C = 12\text{cm}$$

$$D = 22\text{cm}$$

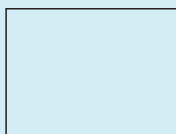
$$E = 24\text{cm}$$

$$F = 22\text{cm}$$

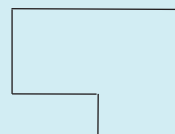
$$G = 28\text{cm}$$

#### Challenge

This works for all shapes, except E. The strategy works when a corner has been 'pushed in', e.g.

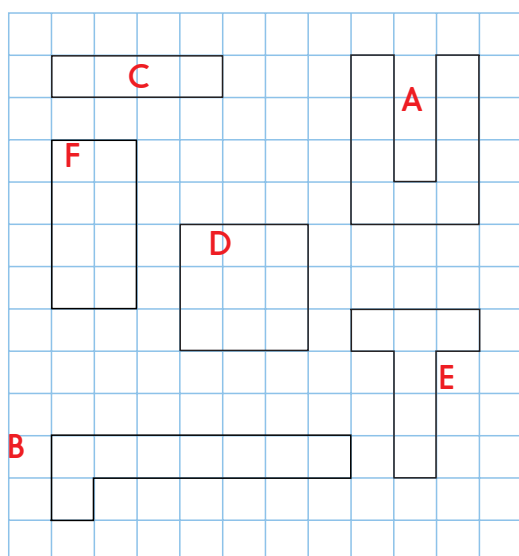


has the same perimeter as



Shape G has the largest perimeter.

### Day 3 Area and perimeter Sheet 1



A Area:  $9\text{cm}^2$   
Perimeter:  $20\text{cm}$

B Area:  $8\text{cm}^2$   
Perimeter:  $18\text{cm}$

C Area:  $4\text{cm}^2$   
Perimeter:  $10\text{cm}$

D Area:  $9\text{cm}^2$   
Perimeter:  $12\text{cm}$

E Area:  $6\text{cm}^2$   
Perimeter:  $14\text{cm}$

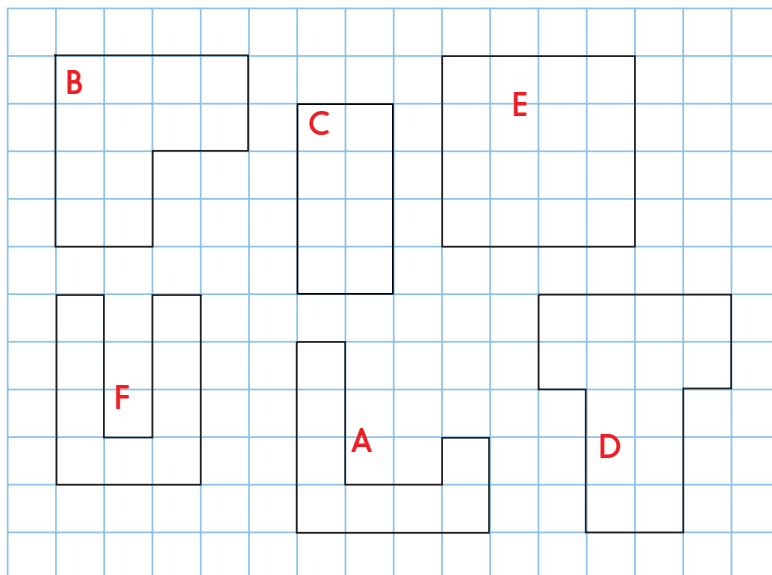
F Area:  $8\text{cm}^2$   
Perimeter:  $12\text{cm}$



# Measures and data

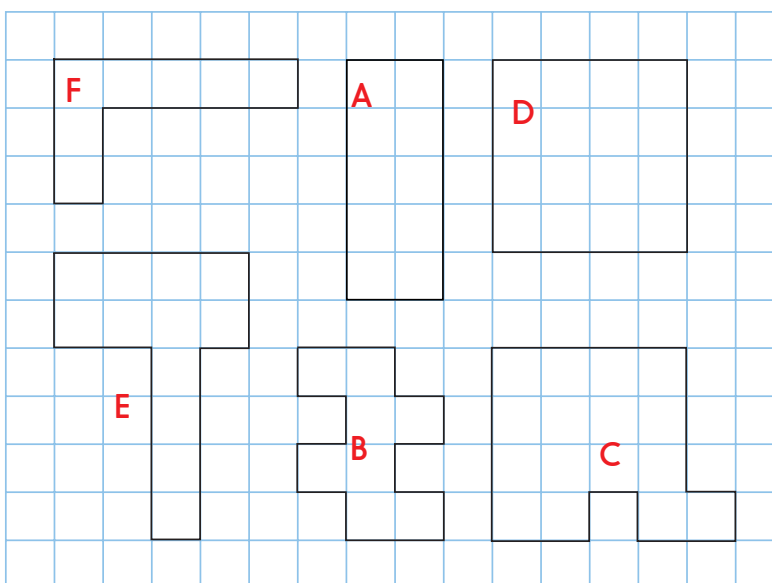
## Answers

### Day 3 Area and perimeter Sheet 2



- A Area:  $8\text{cm}^2$   
Perimeter:  $18\text{cm}$
- B Area:  $12\text{cm}^2$   
Perimeter:  $16\text{cm}$
- C Area:  $8\text{cm}^2$   
Perimeter:  $12\text{cm}$
- D Area:  $14\text{cm}^2$   
Perimeter:  $18\text{cm}$
- E Area:  $16\text{cm}^2$   
Perimeter:  $16\text{cm}$
- F Area:  $9\text{cm}^2$   
Perimeter:  $20\text{cm}$

### Day 3 Area and perimeter Sheet 3



- A Area:  $10\text{cm}^2$   
Perimeter:  $14\text{cm}$
- B Area:  $8\text{cm}^2$   
Perimeter:  $18\text{cm}$
- C Area:  $16\text{cm}^2$   
Perimeter:  $20\text{cm}$
- D Area:  $16\text{cm}^2$   
Perimeter:  $16\text{cm}$
- E Area:  $12\text{cm}^2$   
Perimeter:  $20\text{cm}$
- F Area:  $7\text{cm}^2$   
Perimeter:  $16\text{cm}$