

Ysgol Uwchradd Caergybi

Mathematics Department

Homework Pack

Year 8 Module 5

Intermediate

Topic	Page	Date	Mark %	Comments / To Improve
Area 1	1	.....	.....	..........
Area 2	2 – 3	.....	.....	..........
Probability	4	.....	.....	..........
Dec -%-	5	.....	.....	.....
Money				.....
Numeracy -1	6	.....	.....	..........
Numeracy-2	7	.....	.....	..........
Numeracy-3	8	.....	.....	..........

Name

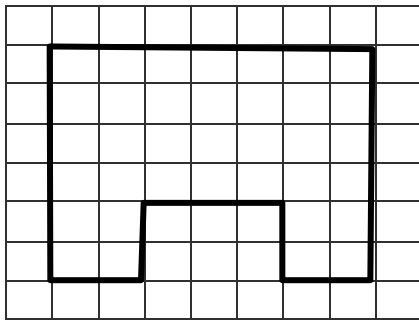
Class Teacher

Name

Area-1

$\frac{\dots}{20} \times 100 = \dots\%$

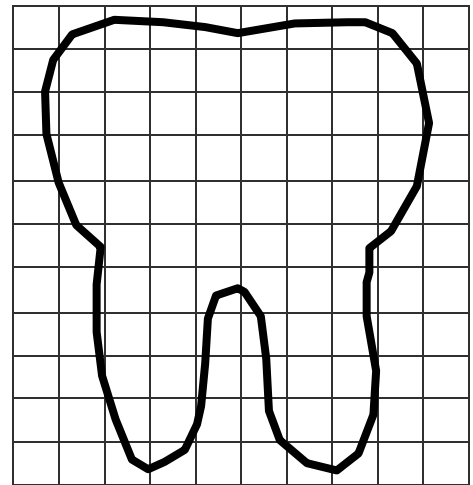
1. Find the **perimeter** and **area**



a. Perimeter..... [1]

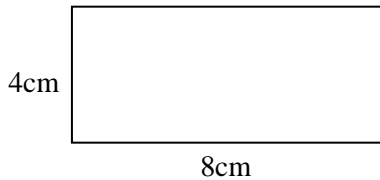
b. Area [1]

2. Estimate the **area** of this tooth



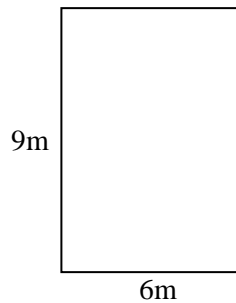
Area[2]

2. Calculate the **perimeter** and **area** of these shapes.
Remember use the correct **units** (2 marks for correct units)



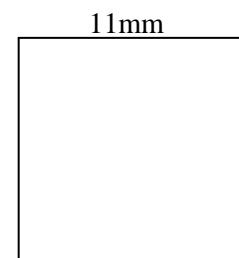
Perimeter =[2]

Area = [2]



Perimeter =[2]

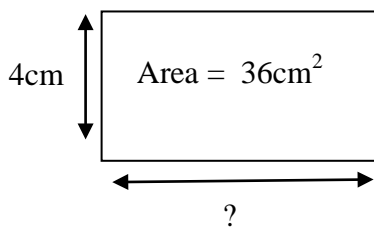
Area =[2]



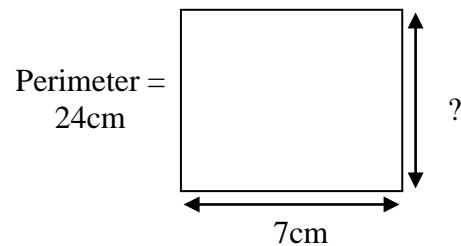
Perimeter = [2]

Area =[2]

3. Find the missing lengths of these two shapes



length ? [1]



length ? [1]

To improve I need to

Name

Area-2

$\frac{\dots}{30} \times 100 = \dots\%$

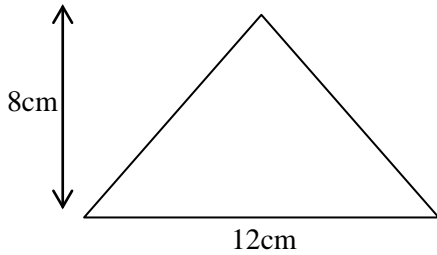
Calculate the area of these shapes.

Use the correct formula and units

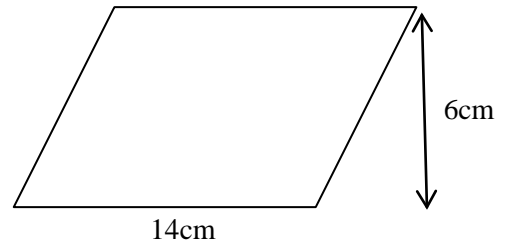
Area Triangle = $\frac{1}{2} \times \text{length} \times \text{height}$

Parallelogram = length x height

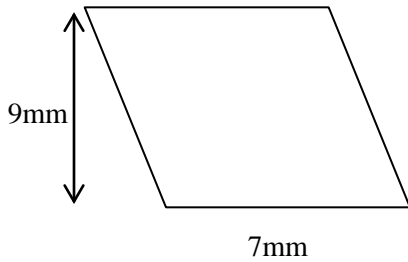
Trapezium = $\frac{1}{2} \times (a + b) \times \text{height}$



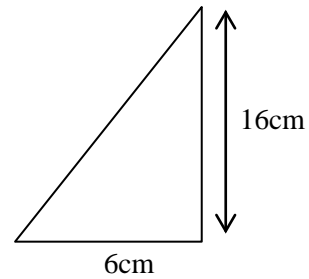
Area [2]



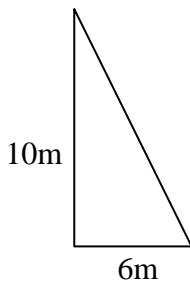
Area [2]



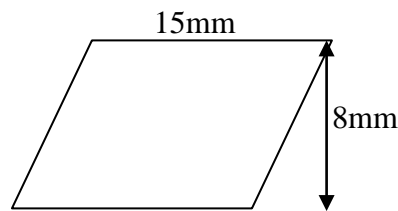
Area [2]



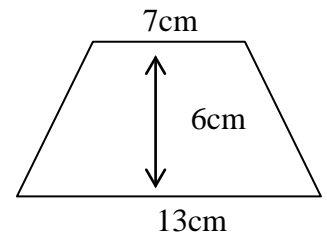
Area [2]



Area



Area



Area

.....

.....

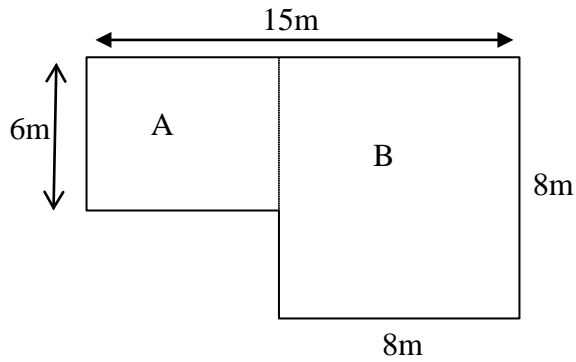
.....

..... [2]

..... [2]

.....[2]

4. Calculate the Perimeter and Area of this shape



Perimeter =[4]

Area =[4]

Working out

.....

.....

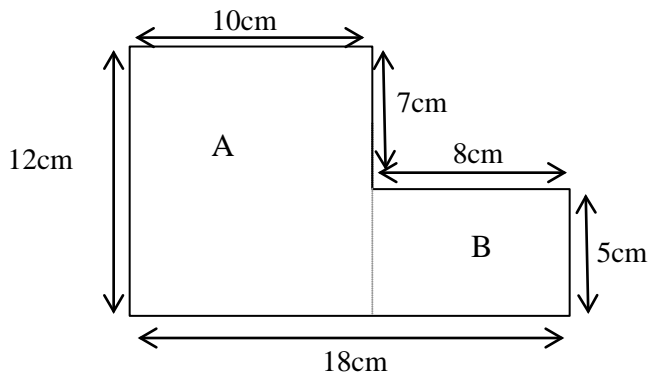
.....

.....

.....

.....

5. Calculate the Perimeter and Area of this shape



Perimeter =[4]

Area =[4]

Working out

.....

.....

.....

.....

.....

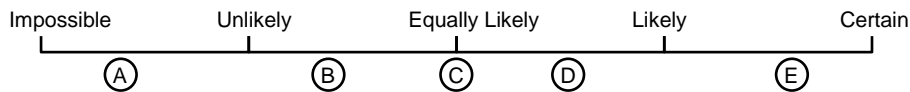
.....

To improve I need to

Name

Probability

$\frac{\dots}{20} \times 100 = \dots\%$



1. From the list below, which events correspond to the above letters. [5]
- a. Getting a 'head' when tossing a coin
 - b. Obtaining 2 or more when throwing a dice
 - c. Choosing a red card (at random) if you have 10 cards - 4 red and 6 yellow
 - d. Choosing a red pencil(at random) if you have 5 pencils - 3 red and 2 yellow.....
 - e. Choosing a boy(at random) if 90% of the class are girls

2. Complete the following



- a. Obtaining a '2' when throwing a dice
(write as a fraction) Probability is
 - b. Obtaining a 7 when turning the spinner
Probability is
- [4]

3. Complete the following table .

Probability of happening	Probability of NOT happening
$\frac{4}{5}$	
$\frac{7}{10}$	
	$\frac{12}{18}$
0.25	
	0.68

[5]

4. Sammy has two dice

The two dice are thrown and Sammy's score is calculated by **adding** the two values are.

- a. Complete the table
- b. What is the probability of obtaining a score of seven ?
- c. What is the probability of obtaining a score greater than 7 ?

Dice 1

6						
5						
4						
3						
2						
1	2	3	4	5	6	7
	1	2	3	4	5	6

Dice 2

[2]

[2]

[2]

To improve I need to

Name

Percentages and Money

$\frac{\dots}{25} \times 100 = \dots\%$

1. Find

a. $\frac{1}{5}$ of 20 [1]

d. $\frac{2}{5}$ of 20 [2]

b. $\frac{1}{10}$ of 90 [1]

e. $\frac{4}{10}$ of 90 [2]

c. $\frac{1}{3}$ of 21 [1]

f. $\frac{2}{3}$ of 21 [2]

2. Find

a. 10% of £240 [1]

c. 5% of £240 [2]

b. 10% of £64 [1]

d. 20% of £64 [2]

3. Use a calculator to convert the following marks into percentages [3]

a. 36 out of 60 $\cdot \frac{36}{60} \times 100 = \dots$

b. 21 out of 28

c. 78 out of 150

4. William buys a Xbox one from Argos for Kate in the sales,

a. How, much did William save? [2]



.....
.....

Argos Xbox £349
SALE 12% off all
Electrical goods

Harry buys a Xbox one off E-bay for Pippa

b. How much did Harry pay for post and packing? [2]

.....
.....

E-bay Xbox Special £290*
* post and packing add
10% to cost

5. Elizabeth receives £12 a week pocket money, she spends $\frac{1}{3}$ on sweets and $\frac{1}{4}$ on i-tunes,

How much money does she save at the end of the week? [3]

.....
.....

To improve I need to

Name

Numeracy - 1

$$\frac{\dots}{25} \times 100 = \dots\%$$

ADDITION

NON CALCULATOR

1.

$$\begin{array}{r} 485 \\ + 258 \\ \hline \\ \hline \end{array}$$

2.

$$\begin{array}{r} 638 \\ + 579 \\ \hline \\ \hline \end{array}$$

3.

$$\begin{array}{r} 878 \\ + 696 \\ \hline \\ \hline \end{array}$$

4.

$$\begin{array}{r} 2905 \\ + 5826 \\ \hline \\ \hline \end{array}$$

5.

$$\begin{array}{r} 7698 \\ + 8364 \\ \hline \\ \hline \end{array}$$

6.

$$\begin{array}{r} 3137 \\ 5774 \\ + 8053 \\ \hline \\ \hline \end{array}$$

SUBTRACTION

NON CALCULATOR

7.

$$\begin{array}{r} 643 \\ - 62 \\ \hline \\ \hline \end{array}$$

8.

$$\begin{array}{r} 344 \\ - 86 \\ \hline \\ \hline \end{array}$$

9.

$$\begin{array}{r} 700 \\ - 57 \\ \hline \\ \hline \end{array}$$

10.

$$\begin{array}{r} 703 \\ - 456 \\ \hline \\ \hline \end{array}$$

11.

$$\begin{array}{r} 507 \\ - 378 \\ \hline \\ \hline \end{array}$$

12.

$$\begin{array}{r} 7030 \\ - 4268 \\ \hline \\ \hline \end{array}$$

2 marks each plus 1 mark for effort

To improve I need to

Name

Numeracy - 2

.....%

NON CALCULATOR Complete the multiplication grid

X	3	5	4	5	8	7	9	11	6	12
4										
5										
8										
3										
6										
7										
12										
11										
9										
5										

Name

Numeracy - 3

$\frac{\dots}{20} \times 100 = \dots\%$

1. Write down the first 10 prime numbers

Answer [2]

2. Write down the first 10 multiples of 13

Answer [2]

3. Write down all the factors of

a. 40 Answer [2]

b. 28 Answer [2]

4. Write down the value of

a. 7^2 Answer

d. 8^2 Answer[2]

b. $\sqrt{36}$ Answer

e. $\sqrt{400}$ Answer[2]

c. 2^3 Answer

f. 1^3 Answer[2]

5. Write down a

a. Square number between 20 and 30 Answer [1]

b. Prime number between 20 and 25 Answer [1]

c. Cube number between 20 and 30 Answer [1]

6. What number must be added to 76 to make 115? [1]

7. What is the difference between 76 and 49 [1]

8. The value of 100×0.01 [1]

To improve I need to