

Ysgol Uwchradd Caergybi Mathematics Department Homework Pack

Year 8 Module 8 Foundation

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Name

Class Teacher

Name

Algebra

$$\frac{\dots}{15} \times 100 = \dots\%$$

Algebra Recap

1. Simplify the following

i) $3b + 7b$

ii) $4a + 5a + 6b + 2b$

2. Substitute and find the values of. **a = 4 b = 3 c = 2**

i) $a + b + c$

ii) $3a + 2b$

3. Solve

i) $x + 3 = 15$

ii) $3x = 27$

4. Use the formula, **Total cost = Number of days worked x £30 + £65**

a. To find the **Total cost** when **Number of days worked = 6**.

.....

b. To find the **Total cost** when **Number of days worked = 20**

.....

5. Write down the three next terms in these sequences

a. 13, 17, 21, 25,,,

b. 43, 36, 29, 22,,,

c. 3, 6, 12, 24,,,

2. Describe, **in words**, the rule for continuing the following sequences.

a. 3, 10, 17,, Rule: [1]

b. 25, 15, 5,, Rule: [1]

c. 64, 32, 16,, Rule: [1]

3. Write down the *n*th term of the sequence 3, 7, 11, 15, 19, [2]

.....

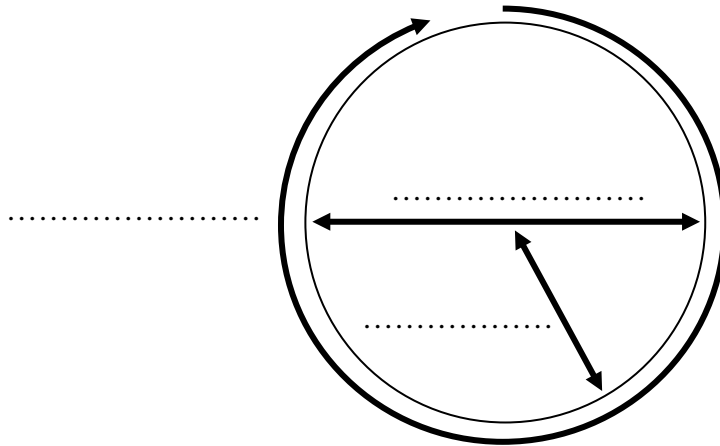
To improve I need to

Name

Circles

$$\frac{\dots}{15} \times 100 = \dots\%$$

1. Label the following Circle use the following word; circumference, diameter, radius



[3]

2. Complete the following sentences for the formula of the **circumference** of a circle

a. Using words

..... = π x

[2]

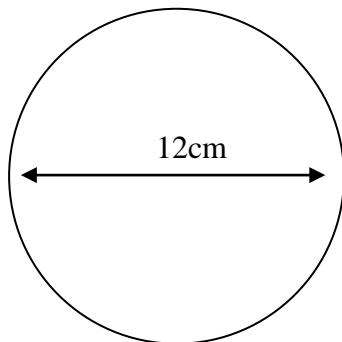
b. Using letters = π x

[2]

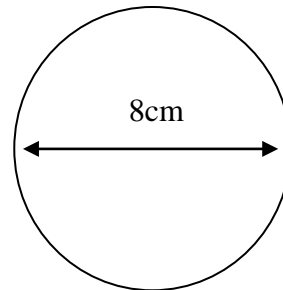
3. Calculate the Circumference of the following circles (use π or 3.14)

[8]

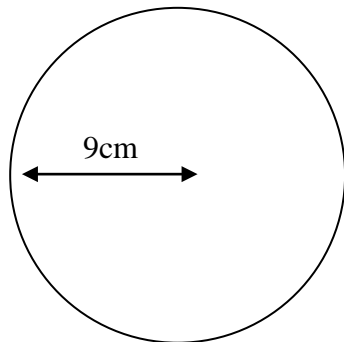
a.



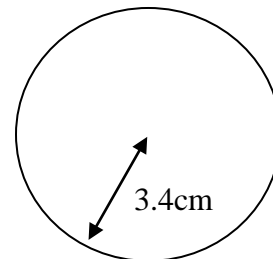
Circumference =



Circumference =



Circumference =



Circumference =

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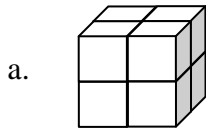
Name

Volume

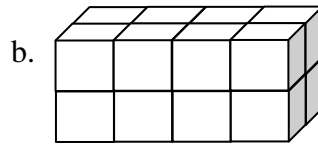
$$\frac{\dots}{15} \times 100 = \dots\%$$

1. By counting cubes calculate the volume of the following shapes

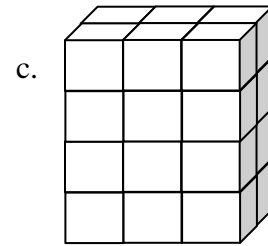
[6]



.....



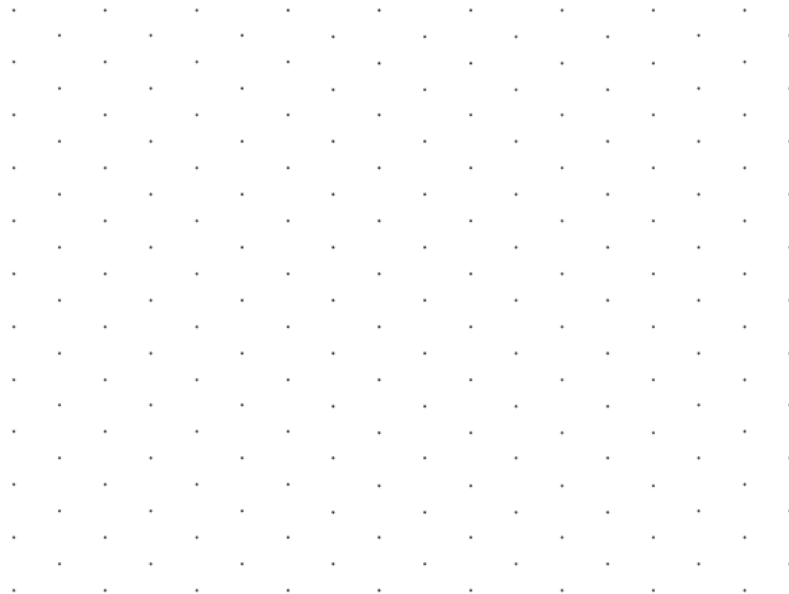
.....



.....

2. Draw the following cuboids on the isometric paper

a. **3 x 3 x 3**

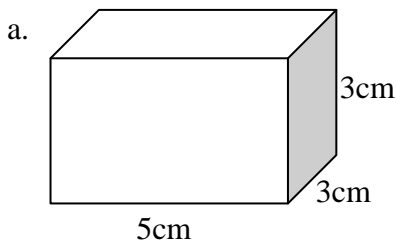


3. Complete the following sentences

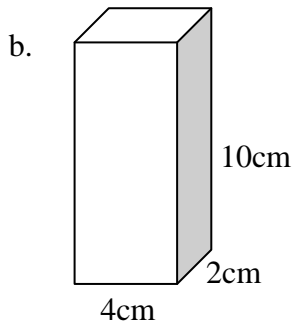
Volume = x x

The units of volume are

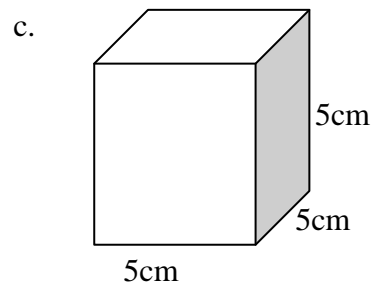
4. By using the correct formula calculate the volume of the following cuboids.



a.....



b.....



c.....

To improve I need to

Name

Functional

$\frac{\dots}{10} \times 100 = \dots\%$

1.

Railway timetable			
Kendal	09:18	10:31	11:22
Burneside	09:22	-----	11:26
Staveley	09:27	-----	11:31
Windermere	09:33	10:44	11:39

Single adult fare:

from Kendal to

Burneside	£2.00
Staveley	£2.50
Windermere	£3.80

(a) How many minutes does it take to travel from Kendal to Staveley?

.....

Answer:

[1]

(b) What time does the 11:26 train from Burneside arrive at Windermere?

Answer:

[1]

(c) How much does it cost an adult to travel from Kendal to Burneside?

Answer:

[1]

(d) Which trains from Kendal stop at Burneside?

..... and

[1]

2.

<u>Undersea World</u>	
Entrance prices:	
Children under 4 years old	FREE
Children between 4 and 16 years old	£4.95
Adults	£10.55

Mr. and Mrs. Jones take their three children, Amy, William and Tom to Undersea World.

Amy is 2 years old, William is 11 years old and Tom is 14 years old.

Complete the bill and find the total cost of the visit.

Cost for Mr. and Mrs. Jones	£	.
Cost for the three children	£	.

Total cost	£	.

[3]

To improve I need to