YEAR 9 **ASSESSMENT HOMEWORK** TEST 2 – NO CALCULATOR Foundation

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Teacher \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perimeter and Area |  /10 | Ratio and Proportion | /10 | Sequences |  /10 |

|  |  |  |
| --- | --- | --- |
|  | **Perimeter and Area** |  |
| **1.****S** | Complete the following:8 cm = \_\_\_\_\_\_\_\_ mm 8 m = \_\_\_\_\_\_\_\_ cm 35 mm = \_\_\_\_\_\_\_\_ cm 2463 m = \_\_\_\_\_\_\_\_ km | **(4)** |
| **2.****S** | Find the **perimeter** of this shape:10.6 cm8.1 cm4.8 cm   Perimeter = ………………………… cm | **(1)** |
| **3.****F** | Find the **area** of these shapes. (Diagrams not to scale) |  |
|  |  |
|  | 4 cm8 cm5 cmArea = ……………………… cm2 | **(1)** |
|  |  |  |
|  | 6 cm11cm9 cmArea = ……………………… cm2 |  **(2)** |
| **4.****M** | Find the **area** of this shape. Show all of your working

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | 7 cm |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | 5 cm |  |
|  9 cm |  |  |  |  | 3 cm |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

 Area = ……………………… cm2 | **(2)** |
|  | **TOTAL** | **(10)** |
|  |  |  |
|  | **Ratio and Proportion** |  |
| **1.****F** | Grace and Jack **share** £210 in the ratio 3 : 4Work out the amount of money that **Jack** gets.………………………… |  **(3)** |
| **2.****M** | bd07685_To make green paint **yellow** and **blue** are mixed togetherThey are mixed in the ratio **1 : 4**A painter uses **6** litres of **yellow** paint.How much **blue** paint will he need? …………… | **(1)** |
| **3.****M****4.****M** | an00790_4 books cost £36.a) How much will **1 book** cost? ………………………………………………b) How much will **3 books** cost? ………………………………………………Here are the ingredients needed to make **16** gingerbread men.

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| **Ingredients** to make **16** gingerbread men 160 g flour50 g ginger130 g butter70 g sugar |

Hamish wants to make **24** gingerbread men.Work out how much of each of the ingredients he needs. ……………g flour ……………g ginger  …………… g butter  …………… g sugar |  **(1)** **(1)****(4)** |
|  |  |  |
|  | **TOTAL** | **(10)** |
|  |  |  |
|  | **Sequences** |  |
| **1.****S** | Write down the missing numbers in these sequences.a) 3, \_\_\_\_\_ , 300 , 3000 , 30 000, \_\_\_\_\_b) \_\_\_\_\_ , 100 , 50 , 25 , \_\_\_\_\_c) 14, 11 , 8 , 5, \_\_\_\_\_, \_\_\_\_\_d) 1.4 , 1.7 , 2.0, \_\_\_\_\_, \_\_\_\_\_  |  **(1)****(1)****(1)****(1)** |
| **3.****F** | The nth term of a sequence is **T(n) = 3n – 2**The **first term** in the sequence is 3 x **1** – 2 = 1a) Write down the **next four terms** of the sequence. \_\_1\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_  | **(2)** |
| **4.****M** | Here is a sequence of counters:SAA1-5b) Complete this table of results:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pattern Number | 1 | 2 | 3 | 4 |
| Number of counters |  |  |  |  |

 d) How many counters are needed for the **eighth** pattern? …………e) Write down a **rule** for the number of counters in the nth pattern.…………………………………… | **(1)****(1)****(2)** |
|  | **TOTAL** | **(10)** |