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

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

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

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| --- | --- | --- | --- |
|  | **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 cm  8.1 cm  4.8 cm        Perimeter = ………………………… cm | | **(1)** |
| **3.**  **F** | Find the **area** of these shapes. (Diagrams not to scale) | |  |
|  |  |
|  | 4 cm  8 cm  5 cm  Area = ……………………… cm2 | | **(1)** |
|  |  | |  |
|  | 6 cm  11cm  9 cm  Area = ……………………… 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 : 4  Work out the amount of money that **Jack** gets.  ………………………… | | **(3)** |
| **2.**  **M** | bd07685_To make green paint **yellow** and **blue** are mixed together  They 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.   |  | | --- | | **Ingredients**  to make **16** gingerbread men  160 g flour  50 g ginger  130 g butter  70 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 = 1  a) Write down the **next four terms** of the sequence.  \_\_1\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ | | **(2)** |
| **4.**  **M** | Here is a sequence of counters:  SAA1-5  b) 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)** |