YEAR 7 Assessment Homework on TEST 2 – CALCULATOR NOT ALLOWED Foundation

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

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

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|  | **Perimeter and Area** |  |
| **1.S** | Complete the following:  1 m = \_\_\_\_\_\_\_\_ cm 1000 m = \_\_\_\_\_\_\_\_ km | **(2)** |
| **2.F** | Find the **perimeter** of this rectangle:  9 cm  3 cm  Perimeter = ………………………… cm | **(2)** |
|  |  |  |
| **3.**  **M** | Find the **area** of this shape.  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  | 8 cm |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  | | 7 cm | |  |  | **A** |  |  |  |  | 6 cm |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  | **B** |  |  | 3 cm |   Area of rectangle A = ………………………………………………  Area of rectangle B = ………………………………………………  Total area of shape = ……………………………………………… **(6)** |
|  | **TOTAL** | **(10)** |
|  |  |  |
|  | **Ratio and Proportion** |  |
| **1.**  **F** | Write the following ratios in their **simplest form**:  20 : 30 25 : 35 6 : 18  ………………………… ………………………… ………………………… | **(3)** |
| **5.**  **M** | 600 of the students walk to school. 800 of the students cycle to school.  Write the ratio of the number of students who walk to school to the number of students who cycle to school.  Give your ratio in its **simplest form**.  ………………………… | **(2)** |
| **6.**  **M** | Viennese Chocolate Fingers Complete the ingredients Makes **24** to make **12** fingers   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Butter | 100g |  | Butter |  | | Icing sugar | 60g |  | Icing sugar |  | | Self raising flour | 170g |  | Self raising flour |  | | Cornflour | 50g |  | Cornflour |  | | Dark Chocolate | 230g |  | Dark Chocolate |  | | **(3)** |
| **7.M** | 4 books cost £24.  a) How much will **1 book** cost?  ………………………  b) How much will **3 books** cost?  …………………….. | **(1)**  **(1)** |
|  |  |  |
|  | **TOTAL** | **(10)** |
|  |  |  |
|  | **Sequences** |  |
| **1.S** | Write down the **rule** for each number pattern:  a) 1, 5, 9, 13, 17, … Rule: ……………………………………………  b) 47, 45, 43, 41, 39, … Rule: …………………………………………… | **(2)** |
| **2.S** | **Complete** the missing numbers in these sequences:  a) 5, 11, 17, \_\_\_ , \_\_\_  b) 12, 15, 18, \_\_\_ , 24, \_\_\_ , 30 | **(2)** |
| **3.F** | Write down the missing numbers in these sequences.  Write down the rule for each sequence.  a) 4, \_\_\_\_\_ , 400 , 4000 , \_\_\_\_\_ Rule: ………………………………  b) \_\_\_\_\_ , 200 , 100 , 50 , \_\_\_\_ Rule: ……………………………… | **(2)**  **(2)** |
|  |
| **6M** | Here is a sequence of counters:  SAA1-5  a) How many counters are needed for the sixth pattern? …………  b) How many counters are needed for the twelth pattern? ………… | **(2)** |
|  | **TOTAL** | **(10)** |
|  |  |  |
|  | **Probability** |  |
| **1.S** | Which word describes the probability of these events happening?  **likely certain impossible unlikely**   1. I will score a number greater than 10 when I throw a fair dice   ………………………….  c) It will snow in Winter in England ……………………………  d) A person will live to be over 60 years old ……………………….  e) A person will live to be over 500 years old ……………………….  e) It will be sunny in Scotland in Summer ………………………. | **(5)** |
| **2.F** | The letters from the word **MATHEMATICS** are written onto pieces of card and placed in a bag.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **M** |  | **A** |  | **T** |  | **H** |  | **E** |  | **M** |  | **A** |  | **T** |  | **I** |  | **C** |  | **S** |   a) What is the probability of picking the letter T? …………  b) What is the probability of picking the letter S? ………… | **(2)** |
| **9.M** | Some number cards from 1 to 8 are placed in a bag.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **1** |  | **2** |  | **3** |  | **4** |  | **5** |  | **6** |  | **7** |  | **8** |   a) What is the probability of picking an even number? ………  b) What is the probability of picking a number smaller than 9? ………  c) What is the probability of picking a multiple of 4? ……… | **(3)** |
|  | **TOTAL** | **(10)** |