**Year 7 Core: Assessment 2 Revision Homework (No Calc) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | **Topic 5: Area and Perimeter** | Mark |
| 1. | Complete the following:  30 mm = \_\_\_\_\_\_\_\_ cm 2.5 cm = \_\_\_\_\_\_\_\_ mm  5 km = \_\_\_\_\_\_\_\_ m 4750 m = \_\_\_\_\_\_\_\_ km | 4 |
| 2. | Here is a shape made up of centimetre squares.   |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | |  |  |  |  1. Calculate the area of the shape. ………………………… 2. Calculate the perimeter of the shape. ………………………… | 2 |
| 3. | Calculate the perimeter of the triangle.  15 cm  60 mm  18 cm    Perimeter = ………………………… cm | 1 |
| 4. | Calculate the area of the shapes.  4 cm  5 m  6 cm  8 m    Area = ………………………… Area = ………………………… | 2 |
| 5. | Find the missing height, *h*, of the rectangle if the area of the shape is 48 cm².  *h* cm  12 cm  Height = ……………………… | 1 |

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|  | **Topic 6: Ratio** | Mark |
| 1. | A bag contains 4 blue marbles and 3 red marbles.  What is the ratio of blue marbles to red marbles?  ………………………… | 1 |
| 2. | Shade the boxes so that the ratio of shaded to unshaded is 1 : 3.   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  | | 1 |
| 3. | Write the following ratios in their simplest form.  3 : 9 18 : 12  …………………………… …………………………… | 2 |
| 4. | A pet shop has 16 hamsters and 12 gerbils.  Write the ratio of hamsters to gerbils.  Leave your answer in it’s simplest form.  …………………………… | 2 |
| 5. | Here is a recipe for hot chocolate. Write a recipe to make 6 hot  Makes 2 chocolates.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Hot water | 400 ml |  | Hot water |  | | Milk | 50 ml |  | Milk |  | | Cocoa powder | 8 teaspoons |  | Cocoa powder |  | | Marshmallows | 30 g |  | Marshmallows |  | | 2 |
| 6. | 5 pens cost £20.   1. What is the cost of 1 pen? …………………………… 2. What is the cost of 4 pens? …………………………… | 2 |
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|  | **Topic 7: Sequences** | Mark |
| 1. | Continue the sequences to find the next 3 terms:   1. 5, 9, 13, 17, …………, …………, ………… 2. 45, 39, 33, 27, …………, …………, ………… 3. -3, -5, -7, -9, …………, …………, ………… | 3 |
| 2. | Continue the sequences to find the next 2 terms:   1. 2, 4, 8, 16, …………, ………… 2. 800, 400, 200, 100, …………, ………… | 2 |
| 3. | Find the missing terms in the sequences and find the rule:   1. 4, 7, 10, …………, ………… Rule: …………………… 2. 5, 10, …………, 40, ………… Rule: …………………… 3. …………, …………, 0, -4, -8 Rule: …………………… | 6 |
| 4. | Write the first 5 terms of the following sequences:   1. First term = 5 Rule: Add 9   5, ………………, ………………, ………………, ………………   1. First term = 1 Rule: Multiply by 10   1, ………………, ………………, ………………, ……………… | 2 |
| 5. | Here is a sequence of rectangles:   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  1. Draw the next pattern in the sequence. 2. How many rectangles will be in the 5th term of the sequence?   5th term = ............   1. How many rectangles will be in the 6th term of the sequence?   6th term = ............ | 3 |

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|  | **Topic 8: Probability** | Mark |
| 1. | List the outcomes when a coin is flipped.  ………………………………………………………………………………………………………………………………………………… | 1 |
| 2. | Use a word to describe the probability of the following events:   1. I will turn into a werewolf at midnight.   …………………………………………   1. Picking a green marble out of a bag of 3 green marbles and 1 red marble.   …………………………………………   1. Choosing the letter S from the word SUCCESS.   ………………………………………… | 3 |
| 3. | On the probability line mark with an arrow and letter the following probabilities:  The probability of flipping a head on a coin (Label A).  The probability of rolling a 1 on an ordinary die (Label B).  The probability of picking a heart out of a pack of cards (Label C). | 3 |
| 4. | Complete the spinner so that you are more likely to land on an odd number than an even number. | 1 |
| 5. | A bag contains 3 red counters, 2 blue counters and 5 green counters.  I pick a counter out of the bag at random.  What is the probability that it is:   1. Green? ……………………… 2. Black? ……………………… 3. Red or green? ……………………… 4. Not blue? ……………………… | 4 |