**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.

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1. Calculate the area of the shape. …………………………
2. Calculate the perimeter of the shape. …………………………
 |  2 |
| 3. | Calculate the perimeter of the triangle. 15 cm60 mm18 cm Perimeter = ………………………… cm | 1 |
| 4. | Calculate the area of the shapes.4 cm5 m6 cm8 m  Area = ………………………… Area = ………………………… | 2 |
| 5. | Find the missing height, *h*, of the rectangle if the area of the shape is 48 cm².*h* cm12 cmHeight = ……………………… | 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.

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 | 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 hotMakes 2 chocolates.

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| 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:

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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 |