**Year 8 Core: Assessment 2 Revision HW (Non-Calculator) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | **Topic 5: Perimeter and Area**  |   |
| 1. | Find the perimeter of this shape: ………………………………………………………… cm8.3 cm5.2 mm6.8 cm | (2)  |
| 2. | Find the area of each shape: 6 cm5 cm4 cm  80 mm 8 cm  …………………………………… cm² …………………………………… cm²  | (2) |
| 3. | Find the area of this triangle: 4 cm 70 mm ………………………………… cm²  |  (2) |
| 4. | Field A is a rectangle with sides of 30 m and 70 mField B is a square with the same **perimeter** as Field A. What is the length of each side on field B?You **must** show your working.   ……………………………… cm | (2) |
| 5. | Find the **area** of this shape. Show all of your working. 3 cm10 cm6 cm8cmArea = ……………………… cm2 | (2) |

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|  | **Topic 6: Ratio and Proportion** | Mark |
| 1. | Write the ratio of shaded to unshaded circles🌕🌕●●●🌕🌕●●● …………………………… | (1) |
| 2. | Write the ratio 15 : 20 in its simplest form…………………………… | (1) |
| 3. | There are 12 girls and 20 boys in a class.Write the ratio of the number of girls to the number of boys.Give your ratio in its simplest form.…………………………… | (2) |
| 4. | Share £35 between Paul and Fred in the ratio 2 : 3Paul = £ ……………… Fred = £ ……………… | (2) |
| 5. | A recipe for cottage pie for 4 people uses 800g of potato.How much potato would you need to make a pie for 8 people? …………………… gHow much potato would you need to make a pie for 6 people? …………………… g |  (2) |
| 6. | If 6 books cost £24, how much does 1 book cost? £ ………………How much would 5 books cost? £ ……………… | (2) |

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|  | **Topic 7: Sequences** | Mark |
| 1. | Write down the rule to get to the next term and fill in the missing terms 2, 5, 8, ……, ……, …… Rule: …………………… | (2) |
| 2. | Write down the rule to get to the next term and fill in the missing terms 4, 8, 16, ……, ……, …… Rule: …………………… | (2) |
| 3. | Here is a pattern made with grey square tiles and white square tiles.

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| --- | --- | --- | --- | --- |
| Pattern Number | 1 | 2 | 3 | 4 |
| Total Number of Tiles  | 4 | 6 | 8 |  |

a) How many tiles make Pattern number 12? ……………………b) How many tiles will there be in the nth term?……………………  |  (1)(2) |
| 4. | Find the nth term of this sequence:5, 8, 11, 14, 17…………………… | (2) |
| 5. | Write down the first three terms of the sequence 3n + 1 ………… , ………… , …………  | (1) |

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|  | **Topic 8: Probability** | Mark |
| 1. | Choose from the following words **impossible unlikely even chance likely certain**Getting Tails when you toss a coin …………………………Rolling a number less than 2 on a dice ………………………… | (2) |
| 2. | Place an arrow where each probability lies.

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|  |  |  |  |  |  |  |  |
| **0** |  | **¼**  |  | **½**  |  | **¾**  | **1** |

a) Next year will have 12 monthsb) Choosing the letter L from the work UNLIKELY  |  (2) |
| 3. | In a class 10 pupils have brown hair, 8 have blonde hair and 3 have black hair. What is the probability of picking: a) a person with blonde hair? ……………b) a person who does not have brown hair? …………… |  (2) |
| 4. | A spinner has four sections A, B, C and D.The table shows the probabilities of the spinner landing on A, B or C.

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|   | **Outcome** | A | B | C | D |
|   | **Probability** | 0.2 | 0.3 | 0.15 |   |

Work out the probability of landing on D. …………………… |  (2) |
| 5. | Complete the list of possible outcomes when a dice is rolled and a coin is tossed at the same time.(Heads, 1) ………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………… | (2) |