**Year 10 Review HW ASSESSMENT 2 Foundation**

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

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| **Shape 1** | **/10** | **Proportion** | **/10** | **Sequences** | **/10** | **Probability** | **/10** |

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|  | | **Topic 5: Perimeter and Area** | |  |
| 1. | | Find the perimeter of this shape:  ………………………………………………………… cm  6.3 cm  4.2 cm  3.2 cm | | (1) |
| 2. | | Find the area of each shape:  5 cm  4 cm  3 cm    7 cm  10 cm    …………………………………… cm² …………………………………… cm² | | (2) |
| 3. | | Find the area of these shapes:  2cm  3cm  4 cm  6 cm 8cm  ………………………… cm² ………………………… cm² | | (1)  (2) |
| 4. | | Find the area of the following shape (find any missing lengths first)  Image result for compound shape rectangles ………………………… cm² | | (2) |
| 5. | | Convert the following units  42mm = ……………cm 520cm = ……………m | | (2) |
|  | **TOTAL** | | /10 | |
|  | **Topic 6: Ratio and Proportion** | |  | |
| 1. | Write the ratio of shaded to unshaded circles  🌕🌕●●●🌕🌕●●●  …………………………… | | (1) | |
| 2. | Write the ratio 15 : 35 in its simplest form  …………………………… | | (1) | |
| 3. | There are 8 girls and 12 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 £20 between Paul and Fred in the ratio 2 : 3  Paul = £ ………………  Fred = £ ……………… | | (2) | |
| 5. | A recipe for cottage pie for 4 people uses 600g of potato.  How much potato would you need to make a pie for 8 people? …………………… g  How much potato would you need to make a pie for 6 people? …………………… g | | (2) | |
| 6. | If 6 packets of sweets cost £2.40, how much does 1 packet cost?  £ ………………  How much would 5 packets cost?  £ ……………… | | (2) | |
|  | **TOTAL** | | /10 | |

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|  | **Topic 7: Sequences** |  |
| 1. | Write down the rule to get to the next term and fill in the missing terms  3, 8, 13, ……, ……, …… Rule: ……… | (2) |
| 2. | Write down the rule to get to the next term and fill in the missing terms  3, 6, 12, ……, ……, …… Rule: ……… | (2) |
| 3. | Here are some patterns made from sticks.    (a) Complete the table.    (c) How many sticks make Pattern number 15?  ........................................................... | (2) |
| 4. | Find the nth term of this sequence:  6, 10, 14, 18  ......................................................... | (2) |
| 5. | Write down the first three terms of the sequence 5n - 1  ………… , ………… , ………… | (2) |
|  | **TOTAL** | /10 |
|  | **Topic 8: Probability** |  |
| 1. | On the probability scale, mark with a letter **P** the probability that when you roll a fair 6-sided dice you will score a 7    On the probability scale, mark with a letter **Q** the probability that when you roll a fair 6-sided dice you will get a number less than 3 | (1)  (1) |
| 2. | Emily has a bag of 20 fruit flavoured sweets.  **7** of the sweets are orange flavour, **11** are lime flavour, **2** are lemon flavour.  Emily takes at random a sweet from the bag.  Write down the probability that Emily  (a) takes an orange flavoured sweet: ………………  (b) takes a sweet that is not lemon: ……………… | (2) |
| 3 | Ian eats in a cafe. He can choose **one** main course and **one** piece of fruit.   |  |  | | --- | --- | | **Main Course**  Fish Lamb Salad | **Fruit**  Apple Banana Pear |   List all possible combinations he could pick:  …………………………………………………………………………………………………………………………………………………  …………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………… | (2) |
| 4 | 60 people each took a driving test one day.  32 of these people were women.  15 of the 60 people failed their test.  22 of the men passed their test.  (a)  Use this information to complete the frequency tree.    One of the men is chosen at random.  (b)  Work out the probability that this man failed his test. ................................... | (3)  (1) |
|  | **TOTAL** | /10 |