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| *School Name*  *Mathematics Test 2017* | | | |
| Year 7 | | *Decimals* | Non Calculator  Section |
| **Skills and Knowledge Assessed:**   * Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers (ACMNA128) * Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals, with and without digital technologies (ACMNA129) * Multiply and divide decimals by powers of 10 (ACMNA130) * Round decimals to a specified number of decimal places (ACMNA156) * Multiply decimals by other decimals. (Extension) | | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Answer all questions in the spaces provided on this test paper by:  *Writing the answer in the box provided.*  or  *Shading in the bubble for the correct answer from the four choices provided.*  Show any working out on the test paper.Calculators are **not** allowed. | | | |
|  | What part of this rectangle is shaded?    0.3 0.4 0.5 0.6 | | |
|  | What number is marked on the number line below?    2.1 2.2 2.4 2.5 | | |
|  | Which circle has 0.5 shaded? | | |
|  | Which decimal is the same as  ?  0.001 45 0.014 5 0.145 1.45 | | |
|  | Which fraction is equivalent to 0.24? | | |
|  | 0.517 0.94 4.17 5.17 | | |
|  | 0.162 1.92 1.62 19.2 | | |
|  | 1.13 1.23 1.33 2.03 | | |
|  | Three dogs have masses of 4.5 kg, 8.45 kg and 12.3 kg respectively.  What is the total mass of the 3 dogs? | | |
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|  |  | | |
|  | Round 124.8624 correct to the nearest tenth. | | |
|  | What is the value of the 3 digit in the number 0.000 39?  Hundredths Tenths Ten Thousandths Thousandths | | |
|  | 1.25 12.5 125 1250 | | |
|  | What is the product of 18.6 and 0.5? | | |
|  |  | | |
|  | Three laptops have hard drives with capacities of 0.512 TB, 1.24 TB and 0.384 TB respectively.  What is the difference in capacity between the largest and smallest hard drives? | | |
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|  |  | | |
|  | Leo has a set of 30 new pencils.  Each pencil weighs 1.36 grams.  What is the total weight of the set of pencils? | | |
|  | Take 1.35 away from 8. | | |
|  | Martin weighs the 12 bottles of water and finds the total mass is 4.5 kg.  What is the mass (in kg) of each bottle of water? | | |
|  |  | | |
|  | Round 18.1258 correct to 3 decimal places. | | |
|  | Harry cuts 2.28 metres from a roll of cloth which was originally 20 metres long.  How many metres of cloth remain on the roll? | | |
|  | Write the decimal number which is represented by the expanded notation:  . | | |
|  | What is the average of 12.5 6.4, 9.24, 5.06, and 4.5? | | |
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| *School Name*  *Mathematics Test 2017* | | | |
| Year 7 | | *Decimals* | Calculator Allowed  Short Answer  Section |
|  | | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Answer all questions in the spaces provided on this test paper by:  *Writing the answer in the box provided.*  or  *Shading in the bubble for the correct answer from the four choices provided.*  Show any working out on this test paper. Calculators are allowed. | | | |
|  | Mark the position of 1.8 on the number line below. | | |
|  | Shade a section which is 0.75 of the area of this rectangle. | | |
|  | Rick is travelling from town A to town B.  How much further would he travel if he went through town C on the way, rather than going directly from A to B? | | |
|  | The mass of a digital radio is 0.84 kg without its batteries.  (It takes four batteries which each have a mass of 0.0095 kg.)  What is the total mass of the radio and the batteries? | | |
|  | What is the value of  , when rounded correct to two decimal places?  0.75 0.755 0.76 0.765 | | |
|  | Which is **not** true? | | |
|  | Ashleigh buys 0.24 kg of lollies and divides them into equal piles which each weigh 0.012 kg.  How many piles did she have?  2 piles 20 piles 30 piles 200 piles | | |
|  | Four friends buy presents for a birthday party.  The mass of each of the four presents is:  0.256 kg, 1.4 kg, 0.824 kg and 1.05 kg.  What is the average mass of the presents? | | |
|  | Arrange the numbers below in ascending order.  4.25, 4.5, 0.45, 0.54, 0.425, 4.2 | | |
|  | There are two numbers *x* and *y* such that  and  Let *z* be equal to the product of *x* and *y.*  Which statement is true? | | |

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| *School Name*  *Mathematics Test 2017* | | |
| Year 7 | *Decimals* | Non Calculator Section |

ANSWERS

| Question | Working and Answer |
| --- | --- |
|  | There are 4 × 5 = 20 squares and of these 6 are shaded.    **1st Answer** |
|  | 10 places between 2 and 4, so each is 0.2  Dot is 2 places along, so  Number is 2 + 0.4 = 2.4  **3rd Answer** |
|  | **2nd Answer** |
|  | **3rd Answer** |
|  | **4th Answer** |
|  | **4th Answer** |
|  | **2nd Answer** |
|  | **1st Answer** |
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|  |  |
|  | 124.8624 = **124.9** (to nearest tenth) |
|  | In the number 0.000 39, the 3 is in the 4th decimal place which is ten thousandths  **3rd Answer** |
|  | **2nd Answer** |
|  |  |
|  |  |
|  | From 0.512 TB, 1.24 TB and 0.384 TB, largest is 1.24 TB and smallest is 0.384 TB  Difference is 1.24 – 0.384 |
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|  |  |
|  | 18.1258 = **18.126**  ( 3 d.p.) |
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|  | 12.5 + 6.4 + 9.24 + 5.06 + 4.5 = 37.7 |
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| *School Name*  *Mathematics Test 2017* | | |
| Year 7 | *Decimals* | Calculator Allowed  Short Answer  Section |

ANSWERS

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| Question | Working and Answer |
|  | 5 places between 1 and 2, so each is 0.2  Place the dot 4 places along from 1 to give 1 + 0.8 = 1.8 |
|  | There are 40 squares, so  Shade any 30 squares.  e.g. top 3 rows. |
|  |  |
|  |  |
|  | **3rd Answer** |
|  | which is not true.  **4th Answer** |
|  | **2nd Answer** |
|  |  |
|  | **0.425, 0.45, 0.54, 4.2, 4.25, 4.5** |
|  | Smallest possible value is greater than  Largest possible value is less than    **1st Answer** |