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| Year  9 | | Mathematics Test  Basic Measurement | | Calculator Allowed |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this test paper. | | | |
| 1. | The jug was filled with 1 litre of water.  A number of 150 ml cups have been filled from the jug.  How many cups were filled?  ...........................................................................  ...........................................................................  ..........................................................................  ......................................................................... | | | |
| 2. | The field has a perimeter of 24.2 km. What is the value of *x*?  …….....................................................................  .............................................................................    ...............................................................................  ............................................................................... | | | |
| 3. | What is the perimeter of the shape shown?  …….....................................................................  .............................................................................    ...............................................................................  ............................................................................... | | | |
| 4. | The length of a ruler is 30 cm. A pack holds 25 rulers. If all the rulers in the pack are laid end to end, how many metres could you measure (to one decimal place)?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 5. | The two clock faces show the time that Minh arrived at her friend’s house one afternoon and the time that she left later that same day. How long did she stay at her friend’s house?  .............................................................................  .............................................................................  Arrive Leave | | | |
| 6. | Omar needs to get from Coolamon to Gosnels by train in time for a meeting at 9:30 am. What is the latest time he can catch the train at Coolamon?   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Station | am | am | am | am | | Ashmore | 6:15 | 7:09 | 8:12 | 10:29 | | Bradfield | 6:25 | 7:19 | 8:23 | 10:39 | | Coolamon | 6:33 | 7:27 | 8:30 | 10:47 | | Denison | 6:45 | 7:39 | 8:43 | 10:59 | | Endleigh | 6:52 | 7:46 | 8:50 | 11:06 | | Fordson | 6:59 | 7:53 | 8:59 | 11:13 | | Gosnels | 7:08 | -- | 9:10 | -- | | Hartley | 7:15 | 8:00 | 9:18 | 11:20 |   ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 7. | Andred buys some new weights for his gym. He buys weights that have masses of 8 kg, 5 kg and 500 g as shown. What is the total mass of his purchase (in kg)?  …….....................................................................  .............................................................................    ............................................................................... | | | |
| 8. | A shipping container can hold a total mass of 4.6 tonnes. Ursula is importing engines which weigh 300kg and generators which weigh 0.2 tonnes. If she has bought 8 engines, how many generators could she buy if she wants to load them in one container?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 9. | A tank has a capacity of 480 kilolitres and is one quarter full. Water is running into the tank at a rate of 6 litres per second. How many hours and minutes will it take to fill the tank?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 10. | The fuel gauge on a truck is shown.  The trucks fuel tank holds 240 litres.  The driver never allows the fuel tank to get less than  full  How many litres can she use before refilling the tank?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 11. | Kerry mows the lawn in the council park with a ride-on mower. The mower has a cutting width of 1.6 m and moves forward at an average speed of 2.5 m/s. If the area to be mowed is 3.6 hectares and Kerry does not go over any sections twice, how long will it take him to mow the lawn?  ..........................................................................................................................................................    ..........................................................................................................................................................  .......................................................................................................................................................... | | | |
| 12. | Six people line up to take a ride on a boat which has a maximum load limit of 0.3 tonne. The people have masses of 75 kg, 60 kg, 54 kg, 55 kg, 66 kg and 65 kg. Will they be over or under the limit, and by how much?  ..........................................................................................................................................................  .......................................................................................................................................................... | | | |

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| Year  9 | | Mathematics Test  Basic Measurement | | Calculator Allowed |
| Multiple Choice Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Mark all your answers on the accompanying multiple choice answer sheet, not on this test paper. You may do any working out on this test paper. Calculators are allowed for this section. | | | |
| 1. | David regularly cycles 14.5 km between his home and his grandparent house in two Perth suburbs. He discovers a shortcut that reduces the journey by 600 metres. How long is the journey when he uses the shortcut?  A. 8.5 km B. 13.9 km C. 14.44 km D. 15.1 km | | | |
| 2. | What is the perimeter of the field?  A. 67.0 m  B. 36.8 m  C. 18.4 m  D. 13.4 m | | | |
| 3. | The perimeter of an isosceles triangle is 29 cm. The shortest side is 5 cm long. How long are each of the other sides?  A. 12 cm B. 18 cm C. 24 cm D. 34 cm | | | |
| 4. | What is the circumference of the circle shown?  A. 37.7 cm  B. 75.4 cm  C. 452.4 cm  D. 1 809.6 cm | | | |
| 5. | Lucy cycles at an average speed of 16.8 km/h. How far could she cycle in 2 ½ hours?  A. 6.72 km B. 19.3 km C. 42.0 km D. 105.0 km | | | |
| 6. | A car travels along a straight stretch of highway on the Nullabor Plain at the speed shown on the dial.  If the straight is 132 km long, how long would it take to reach the end of the straight?  A. 8 minutes.  B. 50 minutes.  C. 1 hour and 12 minutes.  D. 1 hour and 20 minutes. | | | |
| 7. | Kaleb has a mass of 68 kg. On a training run he carries two weights which each have a mass of 3 500 g. What is the total mass of Kaleb and the weights?  A. 71.5 kg B. 75 kg C. 103 kg D. 138 kg | | | |
| 8. | A measurement was recorded as  What was being measured?  A. The mass of a teenager. B. The mass of an insect.  C. The mass of a car. D. The mass of a truck. | | | |
| 9. | A hot water urn has a capacity of 4.5 litres. How many 300 ml cups could be filled from the urn?  A. 15 B. 66 C. 150 D. 666 | | | |
| 10. | A newly constructed dam has water running into it at a rate of 500 litres/min. Its capacity is 4.5 megalitres. How long would it take to fill the dam?  A. 6 ¼ days B. 7 days  C. 7 ½ days D. 14 days | | | |
| 11. | Lorelei works on Saturday from 6:35 am to 3:50 pm. How many hours did she work?  A. 8 ¼ hours. B. 8 ¾ hours. C. 9 ¼ hours. D. 9 ¾ hours. | | | |
| 12. | Juan catches a plane at 12:50 pm on Tuesday. The flight lasts for 14.5 hours. What time does the plane land?  A. 3:20 pm on Tuesday. B. 3:33 pm on Tuesday.  C. 3:33 am on Wednesday. D. 3:20 am on Wednesday. | | | |

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| Year  9 | Mathematics Test  Basic Measurement | |  |
| Multiple Choice Answer Sheet | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

Completely fill the response oval representing the most correct answer.

1. A B C D

2. A B C D

3. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

9. A B C D

10. A B C D

11. A B C D

12. A B C D

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|  | Mathematics Test  Basic Measurement |
| Answer Sheet |

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| Short Answer | |
| 1 | 4 Cups |
| 2 | 5.3 km |
| 3 | 121.7 m |
| 4 | 7.5 m |
| 5 | 7 hours and 15 min |
| 6 | 8:30 am |
| 7 | 38 kg |
| 8 | 11 generators |
| 9 | 16 hours and 40 min |
| 10 | 90 L |
| 11 | 2.5 hours |
| 12 | Over by 75 kg |

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| Multiple Choice | |
| 1 | B |
| 2 | D |
| 3 | A |
| 4 | B |
| 5 | C |
| 6 | C |
| 7 | B |
| 8 | D |
| 9 | A |
| 10 | A |
| 11 | C |
| 12 | D |