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| Year  8 | Mathematics Practice Test – Metric System | **Non Calculator Practice Test** |
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| 1. | Which of the following is not the same length as 240 centimetres?  2400 mm 2.4 m 240 cm 0.24 km |
| 2. | A Barn Owl has a wingspan of 1.1 m and a Grey Currawong has a wingspan of 83 cm. Which is true?  The Barn Owl has a 27 cm longer wingspan.  The Grey Currawong has a 27 cm longer wingspan.  The Barn Owl has a 819 mm longer wingspan.  The Grey Currawong has a 72 cm longer wingspan. |
| 3. | Which two units would be appropriate to measure the distance across a student’s desk in a classroom?  kilometres or centimetres millimetres or centimetres  metres or kilometres millimetres or kilometres |
| 4. | The distance between Cairns and Kuranda is 29.1 km and the distance between Cairns and White Rock is 8 200 m. Which is closer to Cairns, White Rock or Kuranda, and by how many kilometres is it closer?    .  is closer by kilometres. |
| 5. | Which mass is equivalent to 3.26 kg?  32.6 g 326 g 3260 g 32 600 g |
| 6. | The total mass of the utility is 1.2 tonnes. If the motor in the utility weighs 180 kg, how much does the remainder of the vehicle weigh?  60 kg 168 kg 178.8 kg 1020 kg |
| 7. | A pack of Fancyful Biscuits has a mass of 220 g. Fancyful Biscuits are delivered to the store in cartons which hold 20 packs. The empty carton has a mass of 0.5 kg. What is the mass of the carton when it is full of 20 packs of biscuits?  4.4 kg 4.9 kg 4.45 kg 0.49 kg |
| 8. | Tony is writing a summary of some metric conversions. He has made one mistake. Which is incorrect?  100 centimetres (cm) = 1 metre (m)  1000 millilitres (mL) = 1 litre (L)  10 000 kilograms (kg) = 1 tonne (t)  10 millimetres (mm) = 1 centimetre (cm) |
| 9. | A motorcycle has a fuel tank which holds 5.9 litres. When Evan pours 1400 ml of fuel into the tank, it is full. How many litres of fuel were in the tank before he filled it?  .  litres. |
| 10. | Lashay wants to measure the mass of her pet labrador. Which should she use?  A kitchen scale marked in 10 gram divisions.  A bathroom scale marked in half kilogram divisions.  A stock scale marked in 10 kilogram divisions.  A truck scale marked in 100 kilogram divisions. |
| 11. | What is the amount of liquid in the measuring cylinder?  6.5 litres.  6.2 litres.  0.65 litres.  0.62 litres. |
| 12. | Maddy times herself while running by counting seconds. She counts 550 seconds.  How long was she running, in minutes and seconds?  minutes and seconds. |
| 13. | Wil works three shifts in a week. The times for his shifts were  6:15 (six hours and fifteen minutes)  8:20 (eight hours and twenty minutes)  5:35 (five hours and thirty five minutes)  What were his total hours for the week?  20:10 20:00 19:55 20:15 |
| 14. | A movie starts at 6:20pm and finishes at 9:10 pm. What is the duration of the movie?  hours and minutes. |
| 15. | Pete leaves home in Melbourne at 5:50 pm. He travels to visit his friend in Bendigo. When he enters his friend’s house, he sees the digital clock below. How long did it take to reach his friends house?  16 hours and 5 minutes 15 hours and 55 minutes    4 hours and 5 minutes 3 hours and 55 minutes |
| 16. | Harriett leaves home one afternoon at the time shown on her watch. She returns home eight and three quarter hours later.  What time does she return home?  9 : 05 pm 8 :05 pm  8 : 55 pm 9 :55 pm |
| 17. | A movie is listed as having a playing time of 2 hours and 35 minutes. Jacquie starts watching the movie at 15:22, by the clock in the lounge room. What time will the movie end, if she pauses it for 20 minutes in the middle to take a phone call?  :  ‘ |
| 18. | The area of Centennial Parklands in Sydney is 1 895 000 m2. How many hectares (ha) is this?  1.895 ha 18.95 ha 189.5 ha 1 895 ha |
| 19. | Jason designs a shield from plastic for use in a movie. The area of plastic in one shield is 2 150cm2. If the movie requires 40 shields, how many square metres of the plastic will be used?  860 m2 86 m2 8.6 m2 0.86 m2 |
| 20. | The information shown is about a water storage reservoir in South Australia. How many litres does the reservoir hold?  Barossa Reservoir  Capacity: 4 515 megalitres  Length of wall: 144m  Height of wall: 28.6m  Area of water spread: 62 hectares  4.5 million litres  4.5 billion litres  45 million litres  45 billion litres |

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|  | | Questions 21 and 22 refer to the section of a railway timetable for a Monday afternoon which is shown below. | | | | | | | |
|  | | Penrith | 1:33 | 2:03 | 2:33 | 3:44 | 4:36 |  | |
| Kingswood | ---- | ---- | ---- | ---- | ---- |  | |
| St Marys | ---- | ---- | ---- | ---- | ---- |  | |
| Mount Druitt | ---- | ---- | ---- | ---- | ---- |  | |
| Blacktown | 1:48 | 2:18 | 2:48 | 3:59 | 4:51 |  | |
| Seven Hills | ---- | ---- | ---- | ---- | ---- |  | |
| Westmead | 1:55 | 2:25 | 2:55 | ---- | 4:58 |  | |
| Parramatta | 1:58 | 2:28 | 2:58 | 4:10 | 5:01 |  | |
| Granville | ---- | ---- | ---- | 4:14 | 5:04 |  | |
| Lidcombe | ---- | ---- | ---- | ---- | ---- |  | |
| Strathfield | 2:10 | 2:40 | 3:10 | 4:25 | 5:15 |  | |
| Redfern | ---- | ---- | ---- | ---- | ---- |  | |
| Central | 2:23 | 2:53 | 3:23 | 4:37 | 5:28 |  | |

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| 21. | How long does the 1:33 train from Penrith take to get to Central?  minutes. |
| 22. | Yasmin needs to be at Parramatta for an appointment which is 10 minutes walk away from Parramatta station by 5:05pm. What is the latest train she could catch from Penrith if she wants to be on time?  2:03pm 2:33 pm 3:44 pm 4:36 pm |
| 23. | Mark measures the mass of 4 pieces of fruit. Which list shows the objects in order of increasing mass?  Banana : 210 g  Mandarin : 0.15 kg  Apple : 180 g  Orange : 0.2 kg  Mandarin, Orange, Apple, Banana  Mandarin, Apple, Orange, Banana  Banana, Orange, Apple, Mandarin  Orange, Apple, Banana, Mandarin |
| 24. | The time in Perth is three hours earlier than that in Sydney. If it is 6:45 pm in Sydney, what is the time in Perth?  :  pm. |
| 25. | A rectangular field measures 120 metres by 460 metres. What is the perimeter of the field?  Perimeter = m |
| 26. | What is perimeter of the irregular block of land shown?  341 m  468 m  537 m  682 m |
| 27. | What is the perimeter of the shape shown?  21.0 m  46.8 m  59.2 m  42.0 m |
| 28. | The trapezoidal garden bed is to be edged with a plastic border that costs $5.00/metre. What is the cost of edging the bed?  .  $ |
| 29. | What is the circumference of the circle shown?  Use π = 3.1  Circumference = cm. |
| 30. | What is the perimeter of the semicircle shown?  Use π = 3.14  15.7 cm  25.7 cm  31.4 cm  41.4 cm |