

Unit 10 Year 5 Assessment – Time

Subject	Maths	Year level	5
Strand	Measurement		
Unit	5M02 Time		
Unit objective	Times can be written in 12-hour or 24-hour format.		
Key ideas	Attribute, comparison, unit of measure, equivalence, conversion		
Curriculum codes	VC2M5M03 compare 12- and 24-hour time systems and solve practical problems involving the conversion between them		

Name

Date

1. Convert the following times to 24-hour time.

a. 1:18 pm → ____:____

b. 8:15 pm → ____:____

c. 12:00 am → ____:____

2. Convert the following times to 12-hour time.

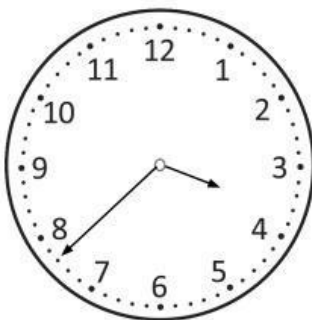
a. 05:37 → ____:____ am/pm

b. 12:00 → ____:____ am/pm

c. 22:19 → ____:____ am/pm

3. Write the time being shown on the clocks in both 12-hour and 24-hour time.

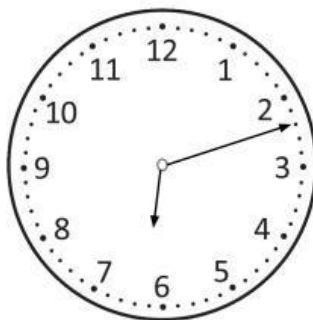
PM



12-hour: _____

24-hour: _____

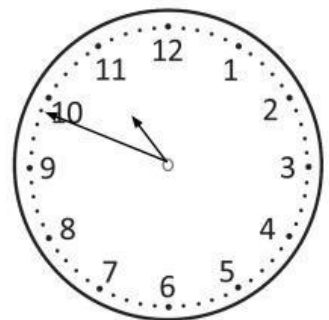
AM



12-hour: _____

24-hour: _____

PM



12-hour: _____

24-hour: _____

Name		Date	
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4. Answer the questions based on the time table shown below.

Stop	Bus A	Bus B	Bus C
Ochre Avenue	10:14	11:48	12:34
Smith Street	12:35	13:55	14:48
Davies Road	15:02	16:23	17:30
Reed Close	17:00	18:15	19:22

- a. What time (12-hour) does Bus B arrive at Davies Road? _____
- b. I reach Ochre Avenue at 11.51pm. Which is the next bus to arrive? _____
- c. Which bus arrives at Reed Close between 6pm and 7pm? _____

5. Fill in the missing start and end times in the time table below in both 12-hour and 24-hour time

Activity	Time (12-hour)	Time (24-hour)	Duration
Morning Jog	7:30am - 8:00am	07:30 - 08:00	30 mins
Music class	9:30am - _____	____:____ - ____:____	1 hour 30 mins
Movie	_____ - 3:00pm	____:____ - ____:____	2 hours 20 minutes
Dinner	_____ - _____	____:____ - 20:15	30 minutes

Name		Date	
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6. Fill in the missing information in the time table below. 

Activity	Time (12-hour)	Time (24-hour)	Duration
Shower	7:30am - ____	07:30 - ____:____	13 mins
Breakfast	8:09 am - ____	____:____ - ____:____	24 minutes
Study session	____ - 3:00pm	____:____ - ____:____	87 minutes
Break	____ - ____	____:____ - 16:08	36 minutes

6. “To convert from 12-hour to 24-hour time, add 12 hours.”
Is this true? Explain your reasoning. 

Answer:

Name		Date	
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1. Convert the following times to 24-hour time.

a. 1:18 pm $\longrightarrow$ 13:18

b. 8:15 pm $\longrightarrow$ 20:15

c. 12:00 am $\longrightarrow$ 00:00

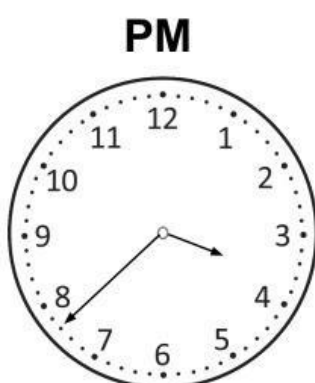
2. Convert the following times to 12-hour time.

a. 05:37 $\longrightarrow$ 5:37 am/pm

b. 12:00 $\longrightarrow$ 12:00 am/pm

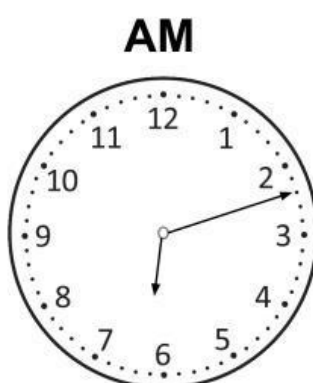
c. 22:19 $\longrightarrow$ 10:19 am/pm

3. Write the time being shown on the clocks in both 12-hour and 24-hour time.



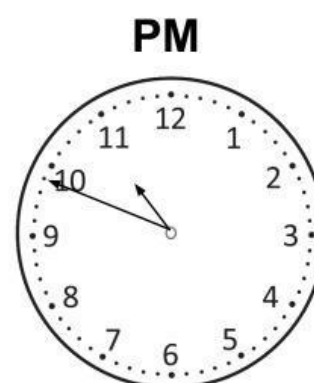
12-hour: 3:38 pm

24-hour: 15:38



12-hour: 6:12 am

24-hour: 6:12



12-hour: 10:49 pm

24-hour: 22:49

Name		Date	
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4. Answer the questions based on the time table shown below.

Stop	Bus A	Bus B	Bus C
Ochre Avenue	10:14	11:48	12:34
Smith Street	12:35	13:55	14:48
Davies Road	15:02	16:23	17:30
Reed Close	17:00	18:15	19:22

- What time (12-hour) does Bus B arrive at Davies Road? 4:23 pm
- I reach Ochre Avenue at 11:51pm. Which is the next bus to arrive? Bus C
- Which bus arrives at Reed Close between 6pm and 7pm? Bus B

5. Fill in the missing start and end times in the time table below in both 12-hour and 24-hour time

Activity	Time (12-hour)	Time (24-hour)	Duration
Morning Jog	7:30am - 8:00am	07:30 - 08:00	30 mins
Music class	9:30am - <u>11:00 am</u>	<u>09:30</u> - <u>11:00</u>	1 hour 30 mins
Movie	<u>12:40 am</u> - 3:00pm	<u>12:40</u> - <u>15:00</u>	2 hours 20 minutes
Dinner	<u>7:45 pm</u> - <u>8:15 pm</u>	<u>19:45</u> - 20:15	30 minutes

Name		Date	
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6. Fill in the missing information in the time table below.



Activity	Time (12-hour)	Time (24-hour)	Duration
Shower	7:30am - <u>7:43 am</u>	07:30 - <u>07 : 43</u>	13 mins
Breakfast	8:09 am - <u>8:33 am</u>	<u>08 : 09</u> - <u>08 : 33</u>	24 minutes
Study session	<u>1:33 pm</u> - 3:00pm	<u>13 : 33</u> - <u>15 : 00</u>	87 minutes
Break	<u>3:32 pm</u> - <u>4:08 pm</u>	<u>15 : 32</u> - 16:08	36 minutes

6. “To convert from 12-hour to 24-hour time, add 12 hours.”
Is this true? Explain your reasoning.



Answer:

This is not true. For AM time, there is no need to add 12 hours.

5M02 Teacher Marking Advice and Rubric

Question	1
Answers	a. 1:18 pm → <u>13:18</u> b. 8:15 pm → <u>20:15</u> c. 12:00 am → <u>00:00</u>
Commentary	Students are able to convert from 12-hour time to 24-hour time. Students may mistakenly add 10 hours, or add hours even for AM times. Presenting parallel timelines showing both formats to help with conversion may be beneficial.
Question	2
Answers	a. 05:37 → <u>5:37</u> am/pm b. 12:00 → <u>12:00</u> am/pm c. 22:19 → <u>10:19</u> am/pm
Commentary	Students are able to convert from 24-hour time to 12-hour time. Students may mistakenly subtract 10 hours, or subtract hours even for AM times. Presenting parallel timelines showing both formats to help with conversion may be beneficial.
Question	3
Answers	12-hour: <u>3:38 pm</u> 12-hour: <u>6:12 am</u> 12-hour: <u>10:49 pm</u> 24-hour: <u>15:38</u> 24-hour: <u>6:12</u> 24-hour: <u>22:49</u>
Commentary	Students are able to read time on clocks in 12- and 24-hour time. Students may not know the conversion from 12-hour to 24-hour time, or not pay attention to if the clock shows AM/PM. Students may also accidentally write the next hour when the minutes are close to the next hour. More practice with reading clocks and recording the time would be beneficial.

5M02 Teacher Marking Advice and Rubric

Question	4
Answers	a. What time (12-hour) does Bus B arrive at Davies Road? <u>4:23 pm</u> b. I reach Ochre Avenue at 11:51pm. Which is the next bus to arrive? <u>Bus C</u> c. Which bus arrives at Reed Close between 6pm and 7pm? <u>Bus B</u>
Commentary	Students are able to read and interpret a bus time table. Students may not know that stated times are arrival times, or be confused on how to read a time table down columns/across rows. Practicing with a simpler 3x2 time table before advancing to larger ones may be beneficial.

Question	5																				
Answers	<table><tr><th>Activity</th><th>Time (12-hour)</th><th>Time (24-hour)</th><th>Duration</th></tr><tr><td>Morning Jog</td><td>7:30am - 8:00am</td><td>07:30 - 08:00</td><td>30 mins</td></tr><tr><td>Music class</td><td>9:30am - <u>11:00 am</u></td><td><u>09 : 30</u> - <u>11 : 00</u></td><td>1 hour 30 mins</td></tr><tr><td>Movie</td><td><u>12:40 am</u> - 3:00pm</td><td><u>12 : 40</u> - <u>15 : 00</u></td><td>2 hours 20 minutes</td></tr><tr><td>Dinner</td><td><u>7:45 pm</u> - <u>8:15 pm</u></td><td><u>19 : 45</u> - 20:15</td><td>30 minutes</td></tr></table>	Activity	Time (12-hour)	Time (24-hour)	Duration	Morning Jog	7:30am - 8:00am	07:30 - 08:00	30 mins	Music class	9:30am - <u>11:00 am</u>	<u>09 : 30</u> - <u>11 : 00</u>	1 hour 30 mins	Movie	<u>12:40 am</u> - 3:00pm	<u>12 : 40</u> - <u>15 : 00</u>	2 hours 20 minutes	Dinner	<u>7:45 pm</u> - <u>8:15 pm</u>	<u>19 : 45</u> - 20:15	30 minutes
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Commentary	Students are able to fill in a time table from provided data. Students may have difficulty converting between 12-hour and 24-hour time, or in working backwards/forwards from a given end/start time. Practicing finding start/end times given a duration may be beneficial, followed by practice in writing real-life time table/planners.																				

5M02 Teacher Marking Advice and Rubric

Question	6																				
Answers	<table><tr><th>Activity</th><th>Time (12-hour)</th><th>Time (24-hour)</th><th>Duration</th></tr><tr><td>Shower</td><td>7:30am - <u>7:43 am</u></td><td>07:30 - <u>07 : 43</u></td><td>13 mins</td></tr><tr><td>Breakfast</td><td>8:09 am - <u>8:33 am</u></td><td><u>08 : 09</u> - <u>08 : 33</u></td><td>24 minutes</td></tr><tr><td>Study session</td><td><u>1:33 pm</u> - 3:00pm</td><td><u>13 : 33</u> - <u>15 : 00</u></td><td>87 minutes</td></tr><tr><td>Break</td><td><u>3:32 pm</u> - <u>4:08 pm</u></td><td><u>15 : 32</u> - 16:08</td><td>36 minutes</td></tr></table>	Activity	Time (12-hour)	Time (24-hour)	Duration	Shower	7:30am - <u>7:43 am</u>	07:30 - <u>07 : 43</u>	13 mins	Breakfast	8:09 am - <u>8:33 am</u>	<u>08 : 09</u> - <u>08 : 33</u>	24 minutes	Study session	<u>1:33 pm</u> - 3:00pm	<u>13 : 33</u> - <u>15 : 00</u>	87 minutes	Break	<u>3:32 pm</u> - <u>4:08 pm</u>	<u>15 : 32</u> - 16:08	36 minutes
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Question	7
Answers	Answer: This is not true. For AM time, there is no need to add 12 hours.
Commentary	Students are able identify misconceptions in converting between 12-hour and 24-hour time. Students may not think about AM times, and may think that the statement is correct. Having students practice converting a mix of both AM and PM times to 24-hour formats may be beneficial.

For more resources

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 @OchreEducation

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