

# Let's Practice!

5. Pete is an avid leisure fisherman and keeps an eye on the tide timetable. Study the Simon's Town Tide Timetable for a part of November 2014 in order to answer the following questions:
- Write down the solar times for 3 November in 12-hour format.
  - Calculate the time difference between the Spring Tide and Lowest Tide on 6 November.
  - On which days should Pete go out fishing? Give a reason for your answer.
  - How much later is the first low tide on 4 November, as opposed to the first low tide on 5 November?
  - Pete is only able to go out fishing on Saturday, 8 November, from 2:15 pm - 5:00 pm. What percentage of his fishing time out will be considered as the 'best fishing time'?

**SIMON'S TOWN TIDE TABLE  
NOVEMBER 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p><b>FISH-O-METER</b></p> <p>Best fishing days Good fishing days Slow fishing days</p> <p>Solar Theory Please note that the best fishing periods are for the leisure fisherman and peak fishing times during night time have not been listed.</p> <p><b>Spring Tide:</b> 06 Nov 2014 @ 14:43 (1,92 m)</p> <p><b>Lowest Tide:</b> 06 Nov 2014 @ 21:02 (0,23 m)</p>						<p><b>1</b></p> <p><b>SOLAR</b> Sunrise 05:45 Sunset 19:14</p> <p><b>LUNAR</b> Moonset 01:58 Underfoot 07:42 Moonrise 13:31 Overhead 20:08</p> <p><b>TIDE TIMES</b> Low tide 04:00 High tide 10:19 Low tide 17:01 High tide 23:04</p> <p><b>BEST FISHING</b> 15:27 to 16:29</p>
<p><b>2</b></p> <p><b>SOLAR</b> Sunrise 05:44 Sunset 19:15</p> <p><b>LUNAR</b> Moonset 02:39 Underfoot 08:35 Moonrise 14:37 Overhead 21:01</p> <p><b>TIDE TIMES</b> Low tide 05:20 High tide 11:33 Low tide 18:07 High tide ---</p> <p><b>BEST FISHING</b> 12:05 to 13:07</p>	<p><b>3</b></p> <p><b>SOLAR</b> Sunrise 05:43 Sunset 19:16</p> <p><b>LUNAR</b> Moonset 03:19 Underfoot 09:27 Moonrise 15:42 Overhead 21:53</p> <p><b>TIDE TIMES</b> High tide 00:12 Low tide 06:21 High tide 12:31 Low tide 18:59</p> <p><b>BEST FISHING</b> 13:03 to 14:05</p>	<p><b>4</b></p> <p><b>SOLAR</b> Sunrise 05:42 Sunset 19:17</p> <p><b>LUNAR</b> Moonset 04:38 Underfoot 10:20 Moonrise 16:48 Overhead 22:46</p> <p><b>TIDE TIMES</b> High tide 01:04 Low tide 07:11 High tide 13:19 Low tide 19:44</p> <p><b>BEST FISHING</b> 13:51 to 14:53</p>	<p><b>5</b></p> <p><b>SOLAR</b> Sunrise 05:41 Sunset 19:18</p> <p><b>LUNAR</b> Moonset 05:19 Underfoot 11:13 Moonrise 17:54 Overhead ---</p> <p><b>TIDE TIMES</b> High tide 01:49 Low tide 07:55 High tide 14:02 Low tide 20:24</p> <p><b>BEST FISHING</b> 14:34 to 15:36</p>	<p><b>6</b></p> <p><b>SOLAR</b> Sunrise 05:40 Sunset 19:19</p> <p><b>LUNAR</b> Moonset 05:19 Underfoot 12:06 Moonrise 18:59 Overhead ---</p> <p><b>TIDE TIMES</b> High tide 02:30 Low tide 08:36 High tide 14:43 Low tide 21:02</p> <p><b>BEST FISHING</b> 14:11 to 15:15</p>	<p><b>7</b></p> <p><b>SOLAR</b> Sunrise 05:40 Sunset 19:20</p> <p><b>LUNAR</b> Overhead 00:33 Moonset 06:03 Underfoot 13:00 Moonrise 20:01</p> <p><b>TIDE TIMES</b> High tide 02:30 Low tide 08:36 High tide 14:43 Low tide 21:02</p> <p><b>BEST FISHING</b> 14:49 to 15:53</p>	<p><b>8 FULL</b></p> <p><b>SOLAR</b> Sunrise 05:39 Sunset 19:21</p> <p><b>LUNAR</b> Overhead 01:27 Moonset 06:50 Underfoot 13:54 Moonrise 21:01</p> <p><b>TIDE TIMES</b> High tide 03:47 Low tide 09:51 High tide 15:58 Low tide 22:12</p> <p><b>BEST FISHING</b> 14:24 to 15:26</p>

## Answers

5.1 Sunrise (05:43) → 5.43 am  
Sunset (19:16) → 7.16 pm

$$20 \quad 60 + 2 = 62$$

5.2 Lowest tide: 21:02  
- Spring tide: - 14:43  
6:19 ∴ 6 hours 19 minutes

5.3 3 - 8 November as the 'Fish-O-Meter' indicates these are the 'Best fishing days'.

5.4 First low tide on 5 November: 07:55  
- First low tide on 4 November: - 07:11  
00:44  
∴ 44 min later

5.5 Fishing Time out:

‣ 2.15 pm - 5.00 pm  
16 60  
∴ 17:00  
- 14:15  
2:45 ∴ 2 h 45 min fishing time out



‣ Best fishing time: 14:24 - 15:26  
∴ 15:26  
- 14:24  
1:02 ∴ 1 h 2 min best fishing time

‣ % =  $\frac{\text{best fishing time}}{\text{fishing time out}} \times 100\%$   
=  $\frac{1 \text{ h } 2 \text{ min}}{2 \text{ h } 45 \text{ min}} \times 100\%$   
=  $\frac{62 \text{ min}}{165 \text{ min}} \times 100\%$   
= 37,58%



$$\begin{aligned} &1 \text{ h } 2 \text{ min} \\ &= 60 + 2 = 62 \text{ min} \\ &2 \text{ h } 45 \text{ min} \\ &= 120 + 45 = 165 \text{ min} \end{aligned}$$