## Newcastle Tide Times

	Table to Show Tide Times in Newcastle, County Down									
	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday			
Low	12:15am	1.29am	2:33am	3:28am	4:16am	5:02am	5:49am			
	(1.12m)	(1.06m)	(0.93m)	(0.78m)	(0.62m)	(0.48m)	(0.38m)			
High	6:31am	7:40am	8:42am	9:35am	00:23am	11:10am	11:58an			
	(3.00m)	(3.04m)	(3.14m)	(3.26m)	(3.37m)	(3.45m)	(3.50m)			
Low	1:13pm	2:18pm	3:12pm	4:00pm	4:44pm	5:29pm	6:15pm			
	(0.83m)	(0.70m)	(0.55m)	(0.43m)	(0.35m)	(0.32m)	(0.34m)			
High	7:28pm	8:29pm	9:22pm	10:09pm	10:54pm	11:39pm	11:50pm			
	(2.89m)	(3.01m)	(3.16m)	(3.29m)	(3.40m)	(3.49m)	(3.65m)			





1. Why might this data be useful to people?

- 2. What is the difference between the time for the early low tide on Saturday and Sunday?
- 3. What is the difference in height between the first high tide on Monday and the first high tide on Thursday?
- 4. What is the mean height of the first high tide throughout the week (to the nearest centimetre)?
- 5. The class want to go for a walk on the beach on Sunday. We have to be back before 7pm. What might be a good time to go? Explain your answer.

6. On what days is the first low tide after 5a.m.?





- 7. Underneath each entry for the bottom two rows of the table, convert the times to the 24-hour notation, e.g. 1:45pm. = 13:45.
- 8. What is the range for the height of the tides in row 2?
- 9. Think of some questions to ask a partner about the data.



1. Why might this data be useful to people?

Example answer: It's important to check the tide times for the beach you are going to. The tide comes in and out twice a day. This means that conditions change regularly. Knowing the tide times can help people stay safe if they like to go swimming in the sea, walk, or play on the beach.

- What is the difference between the time for the early low tide on Saturday and Sunday?
   The difference between 12:15 and 01:29 = 1 hour and 14 minutes
- 3. What is the difference in height between the first high tide on Monday and the first high tide on Thursday? **The difference between 3.14m and 3.45m = 31cm**
- 4. What is the mean height of the first high tide throughout the week (to the nearest centimetre)?
   The mean height = (3m + 3.04m + 3.14m + 3.26m + 3.37m + 3.45m + 3.50m) ÷ 7 = 3.25m or 325cm
- 5. The class want to go for a walk on the beach on Sunday. What might be a good time to go? Explain your answer.
  A good time to go would be around 2.15p.m. 2.30p.m. in the afternoon because at this time the tide will be low and you could walk on the beach. The first low tide is in the very early morning, so this time would not be suitable.
- 6. On what days is the first low tide after 5a.m.? On Thursday (5:02a.m.) and Friday (5:49a.m.).

7.
----

		1:13pm	2:18pm	3:12pm	4:00pm	4:44pm	5:29pm	6:15pm
	Low	(0.83m)	(0.70m)	(0.55m)	(0.43m)	(0.35m)	(0.32m)	(0.34m)
		13:13	14:18	15:12	16:00	16:44	17:29	18:15
	High	7:28pm	8:29pm	9:22pm	10:09pm	10:54pm	11:39pm	11:50pm
		(2.89m)	(3.01m)	(3.16m)	(3.29m)	(3.40m)	(3.49m)	(3.65m)
		19:28	20:29	21:22	22:09	22:54	23:49	23:50

8. What is the range for the height of the second high tide?

3.65m – 2.89m = 76cm



