## Trend Task:

 Approach:
 One to one

 Focus:
 Interpreting a table and a graph

 Resources:
 Chart with table

| TIDE MOVEMENT AND HEIGHT FOR DUNEDIN |                                 |                          |                             |                                   |                            |  |  |
|--------------------------------------|---------------------------------|--------------------------|-----------------------------|-----------------------------------|----------------------------|--|--|
| Saturday                             |                                 | Mar 13                   | Sunda                       | ay n                              | Aar 14                     |  |  |
| am 3 6 9                             | noon 3<br>H 1:15ar<br>L 8:05ar  |                          | am 3 6 9                    | noon 3 6<br>H 2:01am<br>L 8:54am  | 9 pm<br>2:26pm<br>9:12pm   |  |  |
| Port Chalmers                        | H 12:40ai                       | m 1:07pm                 | Port Chalmers               | H 1:26am<br>L 7:42am              | 1:51pm<br>8:00pm           |  |  |
| Taiaroa Head                         | H 12:25a<br>L 7:15a<br>H 12:15a | m 7:31pm                 | Taiaroa Head                | H 1:11am<br>L 8:04am<br>H 1:01am  | 1:36pm<br>8:22pm<br>1:26pm |  |  |
| St. Clair<br>Oamaru                  | L 7:05a<br>H 12:20p<br>L 6:19a  | m                        | St. Clair<br>Oamaru         | L 7:54am<br>H 12:39am<br>L 7:08am | 8:12pm<br>1:04pm<br>7:26pm |  |  |
| Moeraki                              | H 12:05a                        | m 7:11pm                 | Moeraki                     | H 12:51am<br>L 7:44am             | 1:16pm<br>8:02pm           |  |  |
| Taieri Mouth                         | H 12:29a<br>L 6:37a             | m 7:05pm                 | Taieri Mouth                | H 1:20am<br>L 7:31am              | 1:42pm<br>7:55pm           |  |  |
| Sun and Moon                         |                                 |                          |                             |                                   |                            |  |  |
| Copyright OceanFun Unlimit           | U s                             | se 2:02 am<br>et 5:20 pm | Rise 7:31 am<br>Set 8:03 pm | Rise<br>Set                       | 2:59 am<br>6:03 pm         |  |  |

NEMP Access Task

| Questions / instructions:  | % responses<br>2003 ('99) |  | % responses<br>2003 ('99) |  |
|--|---------------------------|--|---------------------------|--|
| Give student tide chart.   | year 8                    | Point to Saturday 13 March tide section of the graph.  | year 8                    |  |
| his chart gives information about tides,<br>he sun and moon.   |                           | 4. Now look at the graph for Saturday  |                           |  |
| means high tide and <b>L</b> means low tide.   |                           | March 13th.  |                           |  |
| . Look for Sunday, March 14th.   |                           | What is happening between 2 am and 6 am? tide is going out                                   | 59 (55                    |  |
| At what time in the afternoon will it be high tide at Port Chalmers? 1.51pm  | 57 (70)                   | 5. Who might find this chart helpful?  |                           |  |
| Look at Saturday, March 13th. Imagine that<br>you want to catch low tide lat St.Clair.<br>What times would you catch a low tide? |                           | people who need to know about<br>the level of the sea<br><i>(or examples of such people)</i> | 85 (70                    |  |
| Correct choices: 7.05am & 7.21pm 7.05am  | 88 (88)                   |  |                           |  |
| 7.21pm   | 74 (81)                   |  |                           |  |
| . The tide chart also has information about  |                           | <b>Total score:</b> 8–9  | 27 (42                    |  |
| the sun and the moon. Look at the moon<br>for Saturday, March 13th.  |                           | 6–7  | 46 (37                    |  |
| Try to tell me three things about  | 70 (00)                   | 4–5  | 19 (14                    |  |
| the moon on this date. rises at 2.02am   | 79 (83)                   | 2–3  | 6 (5)                     |  |
| sets at 5.20pm is a crescent / $\frac{1}{3}$ moon  | 78 (84)<br>12 (49)        | 0–1  | 2 (2)                     |  |

## Commentary:

There was a slight decline in year 8 students' ability to interpret aspects of related material presented in a table and a graph from 1999 to 2003. Overall, 27 percent of students in 2003 compared with 42 percent in 1999 scored more than seven overall.

## Tides

8

Year: