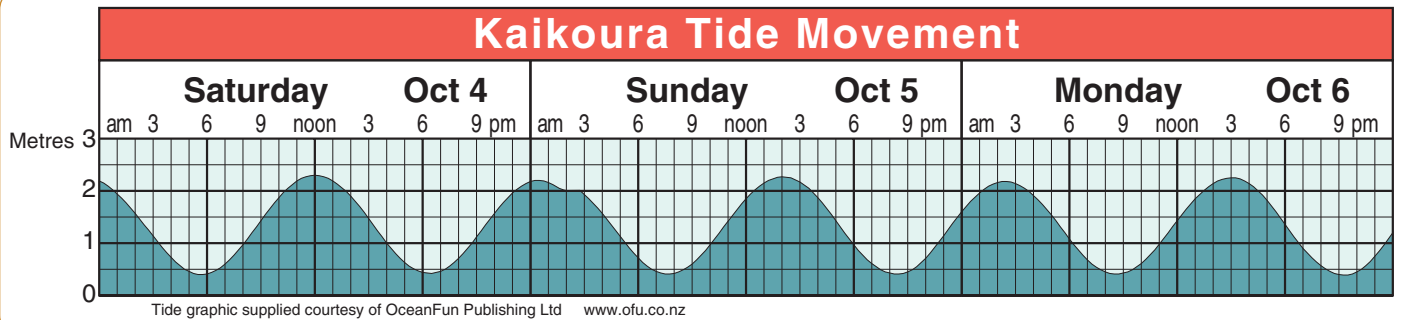


Time and Tide

ACTIVITY

As the moon orbits the Earth, its gravity creates the tides. At high tide, the sea is at its greatest height and we say the tide is “in”. When the tide is low (or “out”), much more of our beaches are exposed. In some areas, the difference between high and low tide is much greater than in others.

Here is a diagram of the tide movement in Kaikoura over 3 days:



1. When is it high tide on Saturday?
2. When is it half tide on Saturday afternoon?
3. When is the tide going out and coming in the fastest on Monday morning?
4. What is the difference in water level (measured in metres) between the morning low tide and the afternoon high tide on Monday?
5. When do you think the next full tide after 3 p.m. on Monday will be?
6. At 2 a.m. on Sunday morning, something strange happens to the graph. What might be the reason?

