

## Worksheet - Tides

Try Q 1 - 7 below.

### UNDERSTANDING AND INQUIRING

#### REMEMBER

- 1 What is the major cause of tides on Earth?
- 2 Why are there two high tides and two low tides in a day?
- 3 Even though the sun is much larger than the moon, it has much less effect on the tides. Why?

#### THINK

- 4 Explain why the highest tides occur during a new moon or a full moon.
- 5 If the moon did not exist, would there still be tides? If so, how would they be different?
- 6 How would the tides be different if the Earth did not rotate? Explain your answer with diagrams showing the Earth, sun and moon.
- 7 On any given day, one high tide is higher than the other one. Suggest a reason for this.

#### DRAW

- 8 Draw a diagram that shows one arrangement of the sun, moon and Earth that would cause a neap tide on the side of the Earth closest to the sun.

#### CREATE

- 9 Design and act out a role-play that shows how the orbits of the Earth around the sun and the moon around the Earth cause tides. The role-play should involve at least four people, including a narrator to provide a commentary.

**eBookplus**

- 10 Use the **Tides** interactivity in your eBookPLUS to watch how changing the positions of the sun and the moon affects the tides on Earth. **int-0225**

work  
sheet

6.2

Surf's up