

Forces

4. Pressure

CONCEPT 3

TEST YOURSELF

FLOATING AND SINKING

KNOW

- Q1 Name two materials that have a higher density than water.
- Q2 What is the upwards force that acts on an object when it is in water?

APPLY

- Q3 Explain why people feel heavy when they get out of the water after a long swim.
- Q4 Explain why a piece of wood can float in a pool of water. Use key words in your answer.

EXTEND

- Q5 Draw a force diagram that shows the forces acting on a cargo ship that has a small load, floating in water.
- Q6 Draw a force diagram of the same boat now that it is heavy and fully loaded. It is still floating in the water.
- Q7 Explain what would happen to a boat if it was gradually filled with water.