

Pressure and Moments

1. Finish this equation to show how we can work out the pressure on a surface:

Pressure =

2. What are the units for pressure?

The units for pressure are _____

3. a. What is the pressure of Bobby's block on the ground at first (quote units)?

The pressure is _____

- b. What is the pressure of Bobby's block when it is turned on its side?

The pressure is _____

c. If the surface they were placed upon was soft sand, which one is more likely to sink? Explain your answer.

The one which is more likely to sink is _____

_____. The reason for this is _____

_____.

4. Why is there only a small water pressure pushing on the water out of the top hole?

This is because _____

_____.

5. Why does the water pressure get higher and higher as the water gets deeper and deeper?

This is because _____

_____.

6. Why does air pressure get lower and lower the higher we climb up a mountain?

This is because _____

_____.

7. What do we call the force applied by a human to a lever?

It is called _____

8. What is the 'Moment of the force'?

9. Finish this equation (including the units) to show how we work out the moment of a force?

Moment of the force =

10. With the example of 10N force being applied 20cm along the spanner handle, the answer given in the video is 200Nm. What is wrong with these units?

The units should be _____ not Nm

11. In the seesaw example, which direction (if any) does the seesaw move – clockwise or anticlockwise?

The seesaw would _____