

P3 Making Thing Work Quiz

1. A plumb line always hangs so that it is....?
2. How can you make an object more stable?
3. Use the terms 'line of action of the weight' and 'resultant moment' to explain why a stable concrete mixer does not fall over when it is given a small push.
4. What is the unit for time period?
5. How does using a shorter piece of rope for a swing change the time period?
6. Where is the centre of mass of a tyre?
7. What goes in the gap: A suspended object will come to rest with its centre of mass directly.....the point of suspension.
8. What is meant by the centre of mass of an object?
9. When packing a suitcase, why should you put the heaviest items at the end where the wheels are?
10. What is the meaning of the term moment?

11. What does the term stable mean in physics?

12. Explain why using a longer steel bar would make it easier for a gardener to lever a tree stump out of the ground.

13. Give two ways in which you can increase the turning effect of a spanner.

14. Explain why there are large concrete blocks at the end of a crane behind the operator's cabin.

15. Why can liquids be used to transmit the forces in a brake system?

16. In a hydraulic brake, the pressure in the liquid is transmitted in which direction?

17. What unit is usually used when calculating pressure?

18. If a rider applies a larger force to the brake lever, how would this increase in force affect the pressure in the brake fluid?

19. A hydraulic jack is an example of what?

20. Explain how the wheel of the London eye can move at a steady speed and the capsules accelerate at the same time.

21. What is the name of the resultant force that causes the capsules of the London eye to accelerate as the wheel moves at a steady speed?