

Physical Science

Chapter 3 Reading Quiz

Name: _____

1. What is the SI unit of force? _____
2. If an object has a mass of 12kg and an acceleration of 12 m/s/s, what is its force?

3. What is the formula for Newton's second law of motion? _____
4. What is the force that prevents two surfaces from sliding past one another?

5. _____ are the source of friction.
6. While a surface might look and even feel smooth, they can be rough at the _____ level.
7. What are breaking and reforming again as an object slides across a floor?

8. Air resistance causes objects to fall with different _____ and _____.
9. Anything that has mass is attracted by the force of _____.
10. How many forces occur naturally? _____
11. The gravitational force between two objects _____ as the distance between the objects increases.
12. The location of _____ was determined by the use of Newton's laws of motion and the law of universal gravitation.
13. _____ exerts a gravitational force on you.
14. How much less is gravity on the moon compared to gravity on Earth?

15. Objects in the space shuttle seem to be floating because they are _____ with the same acceleration.
16. Anything that is thrown or shot through the air is called a _____.
17. When a car rounds a curve on a highway, a _____ force must be acting on the car to keep it moving in a curved path.
18. The moon would move in a straight line except that _____ gravity keeps pulling it.
19. To every action force there is an equal and opposite _____ force.
20. Astronauts who stay out in space for extended periods of time may develop _____.
21. The rocket engine exerts a force on gases and causes them to escape out of the _____ of the rocket.
22. A moving object has a property called _____ that is related to how much force is needed to change its motion.
23. The _____ of an object will not change unless its mass, velocity, or both change.
24. _____ is the change in velocity divided by the time it takes for the change to occur.
25. Which of Newton's laws were used in the Apollo 11 mission (or any space mission for that matter)? _____