

21. The force that one surface exerts on another when the two rub against each other is called
- friction.
  - acceleration.
  - gravity.
  - inertia.
22. The tendency of an object to resist any change in its motion is known as
- balance.
  - mass.
  - force.
  - inertia.
23. According to Newton's third law of motion, when a hammer strikes and exerts force on a nail, the nail
- moves at a constant speed.
  - creates a friction with the hammer.
  - exerts an equal force back on the hammer.
  - disappears into the wood.
24. The greater the mass of an object,
- the easier the object starts moving.
  - the more balanced it is.
  - the more space it takes up.
  - the greater its inertia.
25. The law of universal gravitation states that any two objects in the universe, without exception,
- repel each other.
  - attract each other.
  - create friction.
  - combine to provide a balanced force.
26. A place or object used for comparison to determine if something is in motion is called
- a reference point.
  - velocity.
  - a constant.
  - a position.
27. When you know both the speed and the direction of an object's motion, you know the
- velocity of the object.
  - acceleration of the object.
  - average speed of the object.
  - distance the object has traveled.
28. One way to increase acceleration is by
- increasing mass.
  - decreasing mass.
  - decreasing force.
  - increasing both force and mass proportionally.

*Complete each sentence or statement.*

29. The overall force on an object after all the forces are added together is called the \_\_\_\_\_ force.
30. \_\_\_\_\_ forces acting on an object produce a change in motion.