Chapter 15 Study Guide

|  |  |
| --- | --- |
| A push or pull on an object. It has both size and direction. |  |
| Acceleration of an object depends on the mass of the object and the size of the net force applied.  (This is one of Newton’s laws) |  |
| The force of attraction between any object and every other object in the universe. |  |
| An object at rest remains at rest, and an object in motion stays in motion at a constant speed and in a straight line, unless acted on by an unbalanced force.  (This is one of Newton’s laws) |  |
| The force that resists the movement of one surface past another. |  |
| When a force is applied to an object, the object exerts an equal force in the opposite direction.  (This is one of Newton’s laws) |  |
| When an object speeds up or slows down. |  |

|  |  |
| --- | --- |
| The tendency of an object to stay at rest or remain in constant motion unless a force acts on it. |  |
| The measure of how fast an object is going. |  |
| This takes place in a central motion. |  |
| The speed of an object in a particular direction. |  |
| A rapid back and forth motion that is hard to see. |  |
| This can be used to find the force needed to find a moving object. |  |
| Movement in a straight line. |  |
| This resists the motion of an object just as it begins to move. |  |

|  |  |
| --- | --- |
| This resists the motion of an object of a rolling object. |  |
| This resists the motion of a sliding object. |  |
| What is the difference between speed and velocity? |  |
| A billiards player hits a ball and this ball hits another one into a pocket at the other end of the table. What happened? |  |
| Why can you feel and see the effect’s of Earth’s gravitational pull on you, but you cannot feel or see the effect of your teacher’s gravitational pull on you? |  |
| Earth’s gravitational pull will have the greatest effect on you on which of the following?  -Flying in an airplane  - Standing on a mountain  - At sea level  -Standing on the moon. |  |
| According to Newton’s 2nd law of motion, which object will have the greatest acceleration if all are thrown with the same amount of force?  -Table Tennis ball  -Baseball  -Tennis ball  -Bowling Ball |  |

|  |  |
| --- | --- |
| If you were pushing an object toward your friend, and he was pushing back at you with the SAME force. What would happen to the object? |  |
| A runner travels 6 kilometers in 30 MINUTES, what is the speed of the runner? |  |
| Explain how an observer uses a frame of reference. |  |
| What tool can be used to measure force. |  |
| A ball rolled on which surface would travel the furthest if thrown at the same force?   * Sandy beach * Grass * Carpet * Tile |  |
| Yesterday my daughter was trying to push a box across the floor, what type of friction is making it difficult for the box to start moving? |  |
| Cells that work together to perform a particular function in the body make up \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ . |  |
| Describe the action and reaction forces acting when a baseball player hits a 90 mph fastball. |  |
| Which joint allows the most movement? |  |
| What is the function of the red marrow in the spongy bone of the skeletal system? |  |

|  |  |
| --- | --- |
| Two or more tissues that work together to do a particular job are called \_\_\_\_\_\_\_\_\_. |  |
| What waste does the respiratory system remove from the body? |  |
| What is the role of the axon? |  |
| Which gland controls the amount of glucose in the blood? |  |
| The endocrine system keeps what kinds of substances in balance? |  |
| Which system of the body take in materials and breaks them down into simpler substances the body can use? |  |
| What do the cardiac and smooth muscles have in common? |  |
| What is the function of the circulatory system? |  |
| How do muscles work to lift a bone in your arm? |  |
| Explain the role of the respiratory system in keeping the body’s systems in balance. What is the role of the alveoli?  Name the three jobs of white blood cells. | **1.**  **2.**  **3.** |
| Explain how other body systems help the immune system to prevent pathogens from causing disease in the body. |  |