

Name Teacher

Bill Nye: Motion

1. Everything in the universe is in motion.
2. What puts things in motion? a force
3. Forces are when something is pull or push.
4. When something is sitting still it will stay still unless acted on by an outside force.
5. Inertia is a property of matter.
6. A bowling ball weighs more than a golf ball.
7. The anvil has a lot of inertia.
8. The 2 forces acting on the anvil are gravity and the pull of the chain.
9. Whether an object is moving or staying still everything has inertia.

10. Write Newton's First Law of Motion:

Objects at rest stay at rest. Objects in motion stay in motion

11. Write Newton's Second Law of Motion:

To move a mass you need a force.

12. What is the equation that goes along with this law?

$$F = ma$$

force (pointing to F), acceleration (pointing to a), mass (pointing to m)

13. Write Newton's Third Law of Motion:

Action/Reaction

14. The apple has inertia and it also has mass.

15. The apple could be weightless but would still have a mass.

16. Do the laws of physics still apply in space? yes

17. The earth is spinning on its axis at about 1600 km/h.

18. The galaxy in which the Earth is found is the Milky Way Galaxy.

19. When things are pushed or pulled they are put in motion.

20. The more the mass the more force you need.