

Bill Nye the Science Guy:

STATIC ELECTRICITY

Question Sheet for "Bill Nye the Science Guy: Static Electricity" Movie.

- Static electricity is when
 - atoms gain neutrons and get a greater mass
 - electrons are staying in one place, build up a charge, and then suddenly start flowing
 - protons send positive charges from one object to another
 - electrons change into neutrons
- "Static" means
 - "a single value in a group of statistics"
 - "charged"
 - "energy"
 - "staying"
- Which is an example of static electricity?
 - power outlet
 - battery
 - lightning
 - circuit
- In static electricity, opposite charges
 - repel
 - attract
 - do nothing
 - pull on each other
- Static on radios and TVs' is caused by
 - static electricity, dust, and water vapor in the air.
 - proton energy in the ground.
 - nitrogen, oxygen, and water vapor in the air.
 - neutrons hitting together under ground.
- When the electrons discharge from an object, where do they go?
 - into anything made of rubber
 - to outer space
 - into the ground
 - only into glass and plastic objects
- Static charges build up on things when they
 - sit beside each other for too long.
 - get close to water.
 - are left in the sun too long.
 - get rubbed together.
- In static electricity, electrons transfer ___?___ charges to an object.
 - neutral
 - positive
 - negative
 - no
- Bill Nye used a peanut butter jar, a wire clothes hanger, and aluminum foil to make
 - an electroscope.
 - an oscilloscope.
 - an ion detector.
 - an atom converter.
- To help protect tall buildings, such as the Space Needle in Seattle, Washington, ___?___ are attached to the roof.
 - shingles
 - lightning rods
 - knitting needles
 - wire cages

BONUS: Some electric plugs have three prongs, instead of two. What does the third prong do?