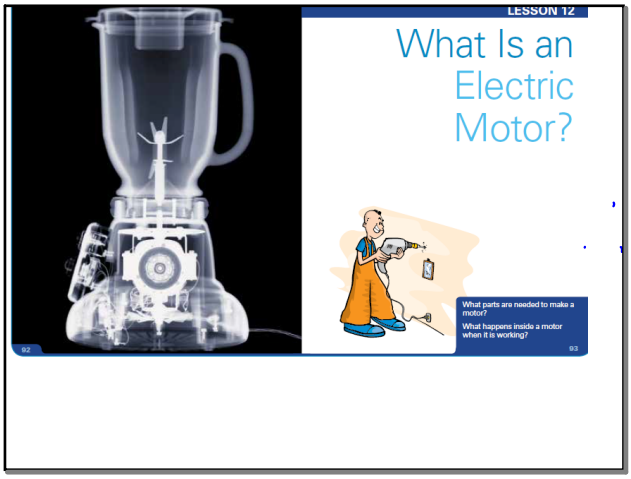

May 7-7:37 AM

page 41

Skipped

May 14-8:09 AM

On page 42 mechanical, heat, nuclear light, sound, chemical, electrical

Predict: What types of energy can you demonstrate with a rubber band? What types of energy can you demonstrate with your body?

RB - sound, heat, potential, kinetic

Body - sound, mechanical, heat, kinetic,

On page 43 Potential (stored) & Kinetic (motion)

List the different types of energy below. Include an example of each.

Sound - talking, strumming the rubber band

Nuclear - atomic bomb

Heat - rubbing hands together makes heat (mechanical)

Chemical - the food we eat, batteries

Light - flashlight has light waves come out of it

fire - heat & light energy

Electrical - SMART boards, lightning, static electricity

May 7-7:44 AM

1. What is an electric motor?

A motor that runs on Pg 51 electricity and magnetism.

2. Where can you find electric motors?

3. How do electric motors make life easier?

They power things by electricity instead of us doing it by hand which can take hard work which sometimes we're not capable of doing.

Pages 44-45 exact answers cannot be listed here because each situation is dependent on which pin students had the positive and negative wires attached and which side of the magnets were facing the motors.

Inverting the alligator clips (positive and negative wires) changed the direction of the spin.

Inverting a magnet changed the direction of the spin.

Removing the magnet stopped the motor.

May 7-8:03 AM

What kind of energy transformations occur?

(Mechanical,Electric, Heat, Chemical, Light, Sound, Atomic)

Sharpening a pencil in an electrical pencil sharpener.

Turning on a flashlight.

Music playing through a stereo

A car running on gasoline

May 7-8:00 AM

5. Draw some examples of energy transformations. page 46

example 1: flashlight

Chemical energy in the battery is transformed (changed) to electrical current in the wires, which is transformed to light energy and heat energy in the bulb, any electrical energy left returns to the battery again.

example 2 electric motor circuit

Chemical energy in the battery is transformed to electrical energy in the wires, which makes the motor an electromagnet. The magnets outside the motor make it spin, this transforms the electric energy into mechanical energy causing something else to move.

May 7-8:03 AM

page 47

1. done on page 46 in answering #2

2. Explain how an electric motor works.

The electric motor works with the flow of electric current. When the current flows through the wires, the iron core acts as a magnet (electromagnet) and is attracted or repelled by the magnets. This makes the motor spin.

3. Which part acts as an electromagnet?

The iron core (axle) of the motor acts as an electromagnet because it is wrapped in wire that has electricity flowing through it.

May 20-9:12 AM

Vocabulary pages 48-49

1. Describe the role each of these parts has in a motor. What does each part do to help a motor run?

Axle - a shaft on which a wheel turns:

The bar that the rotor spins around.

Commutator - a switching device that causes a current to reverse direction: Spins and carries the current into the coil creating the magnetism in the motor.

Contacts - a connection between two conductors that lets current flow: In an electric motor the contacts touch on either side of the commutator to close the circuit.

Electromagnets - a magnet made from a coil of insulated wire wrapped around an iron core that becomes magnetized only when electric current flows through the wire:

The rotor becomes an electromagnet and pushed away from the magnets on the case that have the same charge.

Rotor - the turning part of an electrical or mechanical device

Terminals - a point at which a wire can be connected to an electrical device: These connect the power source wires with the contacts.

May 20-10:02 AM

Page 53 from lesson 7

Observe: Lab Activity Generating Electricity

Record what you observed during each of your experiments with the generator and the LED bulb.

Generators work by having a magnet move in a coil of wire OR having a coil of wire move around a magnet

May 3-7:35 PM