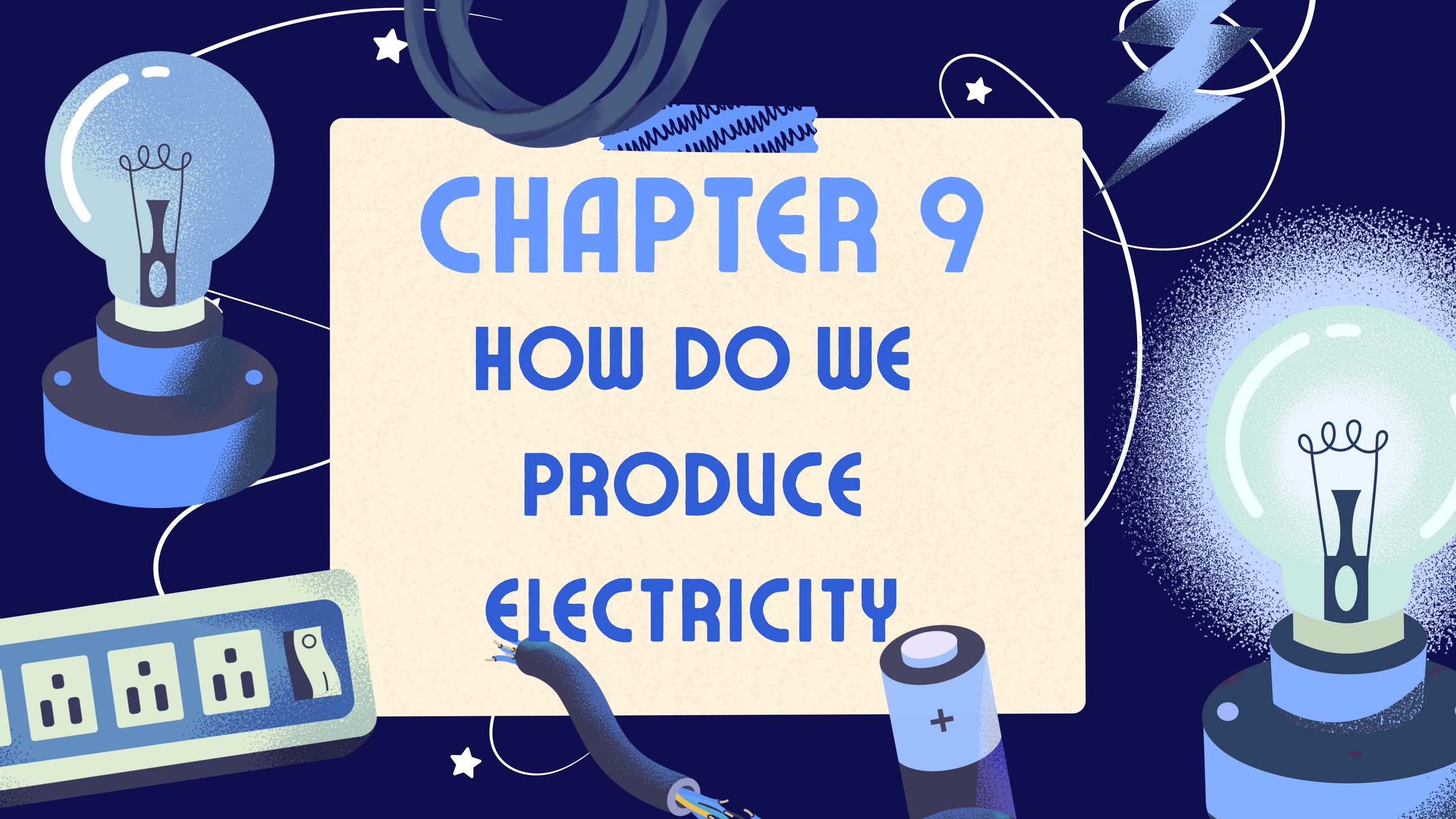
CHAPTER 9
HOW DO WE PRODUCE ELECTRICITY

BIG IDEA

- Electricity plays an important role in our daily activities.
Technologies nowadays require electricity to function.

OBJECTIVES

- Identify the good heat and electricity conductors
- Explain the difference between closed and open circuit
- Identify the difference between series and parallel circuit
- Explain what electromagnetism is

Have you noticed that nowadays, you can do things easily and comfortable? Most place in the country have electricity and, because of this, you can just click the switch to make a dark place lighted. You can can see our favorite stars, know what's happening around through actual footages and videos on TV and enjoy many available game devices are available. Most of all, the help of gadget like computer and other appliances really make life easier and allows us to do things faster.

LESSON 28

CONDUCTORS OF HEAT AND ELECTRICITY

LET'S TRY!

Name some objects in your home and school which are run by electricity and heat. How does electricity reach your homes? How is heat produced in some of the objects in your home?

IMPORTANT QUESTION?

What materials are good conductors of heat and electricity?

When you peel off the coating of an electrical wire, you will see copper wires inside. Copper wire is the most widely used material for connecting electrical devices.

Why do you think so? When you check your pots and pans in your kitchen, you will see that most of them are made of stainless steel or aluminum. Why are they suited for cooking utensils?

(a) Electrical tape

(b) rubber coating of cable wires are insulators.

Copper wires are widely used for electrical wiring because they are ductile and are good conductors of electricity, while steel and aluminum are good conductors of both heat and electricity.

Conductors are materials that allow electricity and heat to flow freely through them, allowing electricity and heat to be transferred from the source through them.

Metals are good conductors of heat and electricity. Copper and aluminum are metals. Stainless steel is an iron-based metal with chromium.

Cooking pots and pans made of metals make cooking faster because they quickly allow heat transfer from the flame to the food being cooked.

Iron, gold, silver, brass, steel, copper, nickel, and water are also conductors of heat and electricity.

Not all materials are good conductors of heat and electricity. Materials that are nonconductors or that do not allow heat and electricity to pass through them are called insulators.

Materials that are made of plastic, silk, leather, glass, oil, and rubber are insulators


THANK
YOU