

Name _____

Date _____



Circuits

When you put your thinking cap on and light it up,

Current flows through a _____, let's discuss.

Three things that I made a short list for,

They are current, voltage, resistor.

_____ is the flow of charge per second,

It's measured in _____, got it? Good, next is

_____ : how bad a current wants to flow,

And this one is easy, it's measured in _____.

A lot of times voltage comes from a battery,

With two terminals, here's what's happening.

Know the tiny plus and minus on each end?

They're positive and negative, and they send

The current flowing, because opposites attract,

With a closed circuit, it has its path.

_____ impede the flow of charge when they

Resist the current to use electricity.

They're measured in _____, they're all over your homes,

In PCs, TVs and cellular phones.

More than one resistor can be on the same circuit,

Like these holiday lights with each bulb working.

Current wants to flow, but it needs a closed path,

A series circuit has one path, like a track.

If it has more than one, that's a parallel circuit,

I put my cap on, and I work it.

(x2)

This string of lights is a _____,

With only one path for the electrical current.

The voltage is shared and must pass through each

Bulb in the loop, diminishing the power, you see.

The more bulbs connected, the dimmer they glow,

And if the circuit's left open, the current won't flow.

One burned out bulb leaves the circuit open,

You got to replace the bulb in order to close it.

How's your thinking cap doing? Is the bulb still bright?

Well let's discuss a circuit of a different type.

In _____, each of the bulbs would be

Set up in paths independent and complete.

No shared paths, so each one gets full voltage

From the energy source, and you'll notice,

Turn one off, it won't affect the others at all,

And the bulbs burn bright even if you add more.

Current wants to flow, but it needs a closed path,

A series circuit has one path, like a track.

If it has more than one, that's a parallel circuit,

I put my cap on, and I work it.

(x2)

Name _____

Date _____



Current Electricity

The Flow of Electrical Energy

So, _____ is the energy produced by electrons, and a _____ is the flow of electrical energy, and a _____ is the path a current follows. Pretty shocking, right? Y'all know what time it is. Flocabulary, let's go.

Electricity is energy

Made by _____, yeah, it better be.

A current is the flow, each and every day,

And a circuit is the path that the energy takes.

(x2)

Electricity needs a circuit to flow,

That's the path that electrons take when they go.

A circuit has three parts: an energy source,

The recipient and a connection, of course.

In the source, energy is _____ and stored,

While the connection could be a wire cord.

It carries the current to the energy recipient.

You think the circuit's finished? Better think again,

Because a current can't flow until the circuit's closed,

Something every good _____ knows.

After the electrons get to the recipient,

They return to the source on a path, consider it.

They loop back around, completing the circle.

They move in a flow that's fast, not a turtle.

When the loop is complete, the circuit's closed,

But if it opens up, the current can't flow,

Which is how things get turned off.

While some materials don't carry currents at all,

Like rubber, plastics and glass.

They're _____, so the current won't pass.

But _____ carry currents, you see?

Like ABC, they do it easily.

Metal _____ and citrus fruits, too,

So if life hands you lemons, well, you know what to do.

Electricity is energy

Made by electrons, yeah, it better be.

A current is the flow, each and every day,

And a circuit is the path that the energy takes.

(x2)

I have a kid brother, he's totally a menace.

I go to put on shoes, and they're filled with lettuce.

The only way to stop him is to build an alarm

For my bedroom, so I know what's going on.

The alarm should turn on when he opens the door,

So I'll need to make a sort of _____, for sure.

When the switch is off, the circuit is open,

Because when it's open, the flow of energy is broken.

But when it's on, the circuit is closed,

And then the electrons take off and go.

I rigged up my room, so if he opens the door,

This metal wire gets pushed across the floor,

And when it makes contact with this here battery,

The circuit is closed, like it has to be.

Electricity powers a loud buzzer.

Now, my sneakers don't have any lettuce in them, sorry, brother!