



### 5th Grade Digital Planning Guide

March 30-April 3<sup>rd</sup>, 2020

#### Standards: Electricity & Magnetism

S5P2. Obtain, evaluate, and communicate information to investigate electricity.

A. Obtain & combine information from multiple sources to explain the difference between naturally occurring electricity (static) & human-harnessed electricity.

B. Design a complete, simple electric circuit, & explain all necessary components.

C. Plan and carry out investigations on common materials to determine if they are insulators or conductors of electricity.

S5P3. Obtain, evaluate, and communicate information about magnetism & its relationship to electricity.

A. Construct an argument based on experimental evidence to communicate the differences in function & purpose of an electromagnet & magnet.

B. Plan & carry out an investigation to observe the interaction between a magnetic field and a magnetic object.

#### Digital Learning Resources to support Electricity & Magnetism

##### Highlighted CTLS Teach Lesson: It's Shocking!

Students discover why things cling and the differences between human-harnessed and static electricity. They will do several hands-on activities to better understand attraction, repulsion, static electricity, and human-harnessed electricity.

##### Mystery Science Lesson: What If There Was No Electricity?

In this Mystery, students are introduced to electricity as a form of energy. In the activity, Build a Flashlight, students investigate how electrical energy requires a circuit and make their own mini flashlights from LEDs, button batteries, and strips of aluminum foil. Along the way, they'll learn about the anatomy of a battery, begin to see how circuits work, and discover how handy an on-off switch can be. Student Link:

<https://mysteryscience.com/energy/mystery-6/electrical-energy/37?code=OTUxOTM4&t=student>

##### Legends of Learning Game: Newton Pool & Energy Ride

Engage your students with Legends of Learning science game-based simulations correlated to the Georgia GSE. You can create playlists of games based on science standards and students can work through completing each one. Teachers can use quick play which assigns playlists of the highest-ranking games, or targeted play in which you can choose games that are linked to specific standards you are working on. The best part...teachers can see exactly how students are performing! The Legends website offers training modules on how to manage classes and assign games. To sign up for a Legends of Learning account, you can register here. We have purchased this access for all Cobb Teachers in Math and Science!

##### Non-Digital Options:

- Walk around your house and make a list of all the everyday objects that produce electricity. Sort them into categories such as uses a switch or plugs into a power outlet. Write about the similarities and differences of each group you created.
- Blow up a balloon. Rub the balloon for 30 seconds on the top of your head. Lift the balloon away. Observe what happens. (*static electricity*) Find other objects to rub the balloon on and observe what happens. Create a chart or table to display your observational data.