



Science, Technology & Engineering Department

Remote Learning Resources

Last Updated: 6/2/20

The BPS Science, Technology & Engineering department has curated these resources to support you with planning virtual learning for your students. The table below organizes the resources for each unit in grades K-8 and by discipline for high school science.

We are excited to share remote learning resources for each grade level designed to connect with DESE's pre-requisite STE standards. Check out the choice boards posted below! A big thank you to our colleagues from special education for collaborating on the creation of the choice boards!

Premium access to the Next Generation FOSS units on FOSS web has been extended to August 31st, 2020.

[NEW! Assessment Guidance Document](#)

As you consider ways to assess your students' learning, we encourage you to be just as creative with your assessments as you have been with your lessons during this time of remote learning. In this document are some suggestions for creating your summative assessments. If you have fun designing them, your students will have fun completing them!

[Kindergarten](#) [Grade 1](#) [Grade 2](#) [Grade 3](#) [Grade 4](#) [Grade 5](#)

[Grade 6](#) [Grade 7](#) [Grade 8](#)

[Physics](#) [Biology](#) [Chemistry](#) [Environmental Science](#)

[Science Remote Learning Folder](#) [Links to Online Resources/Videos](#)

[Assessment Guidance Document](#)

Elementary School

Grade	Group A	Group B	Group C
K Scope & Sequence	Trees and Weather Choice board K-LS1-1 Choice board K-LS1-1 Choice board K-LS1-1	Animals 2x2	Materials & Motion Choice Board K-ESS3-3
1 Scope & Sequence	Air & Weather	Plants & Animals	Sound & Light Choice board 1-PS4-1 Choice board 1-PS4-1 Choice board 1-PS4-1 Choice board 1-PS4-3



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2 <u>Scope & Sequence</u>	Insects & Plants Choice board 2-LS4-1 Choice board 2-LS4-1 Choice board 2-LS4-1 Choice board 2-LS2-3	Solids & Liquids	Pebbles, Sand & Silt
3 <u>Scope & Sequence</u>	Motion/Design with Magnets Choice Board 3-PS2-1	Structures of Life Packet Science Journal Weekly Outline 1-5 Choice board 3-LS3-1 Choice board 3-LS4-2	Water Choice board 3-ESS2-2
4 <u>Scope & Sequence</u>	Soils, Rocks Landforms Choice board 4-ESS2-1 Choice board 4-LS1-1	Engineering Energy (Energy to Homes) Choice Board 4-PS3-2	Energy Packet Science Journal Sample Weekly Outline Choice Board 4-PS4-2
5 <u>Scope & Sequence</u>	Earth & Sun Science Journal (Draft) Sample Weekly Outline Choice Board 5-ESS1-2	Ecosystems Choice Board 5-LS1-1 Choice Board 5-LS2-1	Mixtures & Solutions Choice board 5-PS1-1

Middle School

Grade	Group A	Group B	Group C
6 <u>Scope & Sequence</u>	Weather and Water mini packet DefinedLearning: Pet Prosthetics		DefinedLearning: Create a H2O Bottle
6	FOSS Next Gen Waves Choice Board: 6.MS-PS4-2	FOSS Next Gen Human Systems Interactions	Choice Board: 6.MS-ETS1-1 Choice Board: 6.MS-ESS2-3
7 <u>Scope & Sequence</u>	DefinedLearning: Tiny House Architect		DefinedLearning: Farm to Table



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7	FOSS Next Gen Gravity & Kinetic Energy Choice Board: 7.MS-PS3-7	FOSS Next Generation Diversity of Life	Choice Board: 7.MS-ETS1-2 Choice Board: 7.MS-PS2-5 Choice Board: 7.MS-PS3-3
8 <u>Scope & Sequence</u>	Defined Learning: Climatologist	Defined Learning: LED Streetlights	
8	FOSS Next Gen Planetary Science Choice Board: 8.MS-ESS2-1	FOSS Next Gen Chemical Interactions	FOSS Next Gen Populations of Ecosystems Choice Board: 8.MS-ESS3-5

High School

<u>Physics</u> <u>Scope & Sequence</u>	Active Physics 3rd & 4th Quarter Defined Learning: Accident Scene Investigation Defined Learning: Nuclear Energy Scientist Choice Board addressing HS.PS.3-1 - How do Trebuchets and Roller Coasters Work? Choice Board addressing HS.PS.2-10(MA): How Can You Get a Stapler to Staple a Piece of Paper Without Touching It? Choice Board addressing HS.PS.2-1 & HS.PS.2-10(MA): What Effect Does a Force Have on an Object's Motion? Choice Board addressing HS.PS.2-10(MA): Rocket Science
<u>Biology</u> <u>Scope & Sequence</u>	Defined Learning: Ecologist Invasive Species Defined Learning: Agriculture Lobbyist Choice Board addressing HS.LS.4-4 - Viruses and Bacteria Choice Board addressing HS.LS.4-5 - Population Genetics Choice Board addressing HS.LS.3-1 - Traits and Inheritance Choice Board addressing HS.LS.3-3 - Heredity
<u>Chemistry</u> <u>Scope & Sequence</u>	Defined Learning: Pyrotechnician Defined Learning: Chemical Engineer: Carbon Fiber Choice Board addressing HS.PS.1-4: Everyday Reactions



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	Choice Board addressing HS.PS.1-7: What Happens When You Burn Steel Wool? Choice Board addressing HS.PS.1-10(MA): What Would You Do If Your City's Tap Water Turned Brown? Choice Board addressing HS.PS.2-6: Why Don't Humans Eat Grass?
Environmental Science	Defined Learning: Waste Management Consultant Defined Learning: Civil Engineer: Water Treatment

Clever Apps

- FOSS Web
- Defined STEM
- PhET Simulations
- Celebrate Urban Birds
- Carolina Science Online

General Resources

The following information comes from our curriculum developers FOSS and Carolina Science. They have created resources to support teachers to implement virtual learning connected to the curriculum.

- [Teaching & learning with FOSS during COVID-19 Guide](#)
- [Carolina Science](#)

BPS STE Community Classroom

The members of the Science, Technology, and Engineering (STE) Department would like to **invite you to join our [STE Community \(Google\) Classroom](#)**! In this time when we are all home-bound but continuing to work remotely, we think this is a great opportunity to provide a space within which we can all stay connected, share resources, materials and ideas that you can use with your students.

To join the classroom use this code: **goncy23**. You must use your **BPS email address**. If you need help accessing the Google Classroom, click here for [How to sign into google classroom walkthrough](#) by Nick Kapura. He created this video for his students at the Winship, but it will help you all the same.

We invite you to upload as many materials as you feel would be beneficial for your colleagues to use in our [Science Remote Learning Google Folder](#). We also created a [Links to Online Resources/Videos Google Sheet](#) to add in our favorite on-line resources, videos, and remote learning recommendations. You do not have to join the Community classroom to access the Google Folder or Sheet as a BPS teacher.



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Need More Support? Contact BPS Science, Technology, & Engineering Department Staff!

Photo	Name	Title & Email	Grade band
	Holly Rosa	Director of K-12 Science Technology & Engineering hrosa@bostonpublicschools.org	PK-12
	Molly Peters	Assistant Director PK-2 mrovenko@bostonpublicschools.org	PK-5
	Nicole Guttenberg	STE Program Director (MS/HS) nguttenberg@bostonpublicschools.org	6-12
	Joyce Bowen	STE Program Director (HS) jbowen@bostonpublicschools.org	6-12
	Marianne Dunne	Senior Project Coordinator ACCT grant mdunne@bostonpublicschools.org	3-8
	Bev Nadeau	Science Materials Consultant	K-8 science instructional materials