

K-2 STEM OVERVIEW

Kindergarten

1st Grade

2nd Grade

COMPUTATIONAL THINKER: I can solve problems and think like a programmer.



Sequencing
Directions (Left/Right)
Patterns/Loops
Storytelling

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Sequence, Algorithm
Patterns/Loops
Variables
Conditionals
Game Design



Kid-friendly and hands-on way
to build and test sequences
as well as gain understanding
of directional coding.

Dash Robots respond to voice commands,
navigate objects, dance, and sing.
The Blockly app allows students to apply
coding knowledge in a variety of scenarios

INNOVATIVE DESIGNER: I can think creatively to make something new.

Directed Drawing
Same & Different
Patterns

Pattern Making
Pixel Art
Shapes Puzzles

Google Slides/Draw
Decomposition

DIGITAL CITIZEN: I can be respectful, responsible, and safe online.

Balancing Media Use
Pause, Breathe,
Finish Up Routine

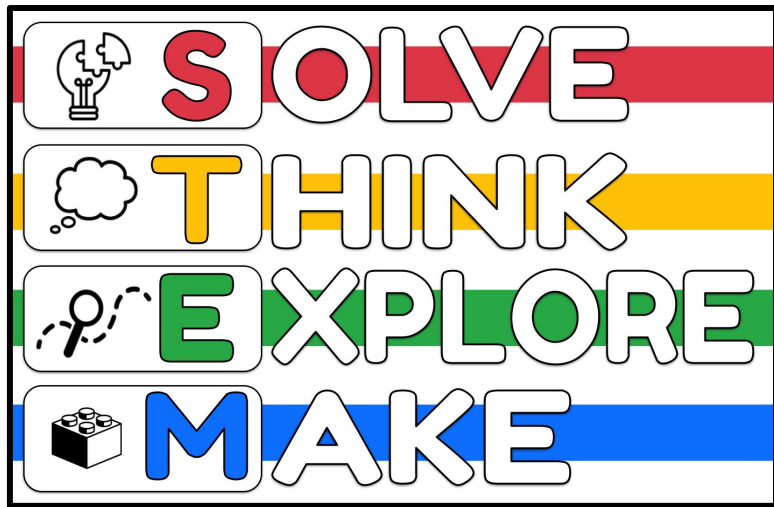
**Safety in Our Online
Neighborhood**

Pause & Think Online Learning
how to make respectful,
responsible,
& safe online choices

**How Technology
Makes You Feel**

That's Private
What kinds of information
should I keep out of
my digital footprint?

**Putting a Stop
to Online Meanness**



STEM is about developing into lifelong learners and innovators. Whether we are building an algorithm in a coding activity, designing with shapes in 2D or 3D, or discussing how we interact in the digital world, we are growing our brain to think outside the box and imagine new ways to reach our goals.

Supporting STEM Learning from Home

COMPUTATIONAL THINKER	INNOVATIVE DESIGNER	DIGITAL CITIZEN
Pretend to be a robot and plan movements to reach a destination	Play Lego, blocks, magnatiles, and other building projects	Practice asking before getting online and limiting time online
Play board games with friends and family.	Build forts with cardboard or other materials	Discuss with family what information to share and not share online.
Plan a trip in your town and discuss the steps to make it happen.	Draw designs for different things i.e. houses, cars, and toys	
Most importantly, encourage your kids to never stop asking questions and to embrace the learning that happens when mistakes are made. Foster an environment at home that values curiosity, exploration and a growth mindset.		

“Students need to be prepared for jobs that have not yet been created, for technologies that have not yet been invented, to solve problems that have not yet been anticipated.” – OECD ‘The Future of Education and Skills 2030