

ISTE Student Standards

View the 28 [ISTE Student Standards](#) in their entirety and accompanying explanation videos.

1.1 Empowered Learner

Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.

1.2 Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

1.3 Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

1.4 Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.

1.5 Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

1.6 Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.

1.7 Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

Base Station Kit - Summary

Mission	Getting Started	Blink	Traffic Light	Reaction Game	Silly Stories	Tally	Guess My Number	Speak Like a Machine	Speech Command	Pose Detect
Key Skills & Competencies	Set up a microcontroller; Complete a basic circuit	Program an LED light to blink; Use a loop to repeat the program	Build a circuit with 3 LEDs; Program LEDs to light up sequentially within a loop	Create a circuit with an LED and 2 buttons; Use buttons as an input ; Program a function with a variable	Write a program with multiple variables that returns user input as strings.	Build a circuit with a button input; Add a count to a variable each time a button is pressed; Use nested loops	Program with loops, conditionals, and comparison operators to compare user input to a random value; Convert data types	Build and code a binary machine that converts binary to decimals; use a list in code	Use the microphone to recognize a set of commands and turn LED lights on or off; Program with loops, conditionals, and variables	Steer a spaceship by moving your face, write a program with pose detection and multiple functions
Vocabulary	circuit, input, output, microcontroller, GPIO pin	Circuit, Input, LED, loops, anode, cathode printed circuit board, breadboard, power, ground, resistor, current	LED, power, ground, while loop, Boolean	LED, anode, cathode, current, input, function, variable, random	Variable, console	Variable, console, loop, comparison operators, conditionals	Variable, random, console, text and number data, loops	Binary, decimal, ground, functions, variable, lists, loops, feedback	Sensor, perception, artificial intelligence, model, variable, percent confidence, LED	Lists, variables, function, artificial intelligence, model, training, machine learning
Build Difficulty	Beginner	Beginner	Intermediate	Intermediate	N/A	Beginner	N/A	Beginner	Intermediate	Intermediate
Code Difficulty	Beginner	Beginner	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Advanced	Intermediate	Advanced

Base Station Kit - ISTE STANDARDS ALIGNMENT

Mission	Getting Started	Blink	Traffic Light	Reaction Game	Silly Stories	Tally	Guess My Number	Speak Like a Machine	Speech Command	Pose Detect
Empowered Learner										
Feedback to Improve Practice 1.1.c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Technology Operations 1.1.d	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Knowledge Constructor										
Real-World Issues 1.3.d			✓						✓	✓
Innovative Designer										
Open-Ended Problems 1.4.d					✓					
Computational Thinker										
Data Sets 1.5.b									✓	✓
Decomposition 1.5.c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Algorithmic Thinking 1.5.d	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Global Collaborator										
Project Teams 1.7.c	?	?	?	?	?	?	?	?	?	?

Note: There are 28 ISTE standards. For better readability, the standards in the table show only the standards covered by the Base Station Kit.