

The Pacing guide for each STEM Lab provides step-by-step instructions on What, How and When to teach. The Individual STEM Lab Pacing guide contains valuable information below:

- **Pacing** - Provides the approximate time duration of each section of the STEM Lab.
- **Concepts** - Lists the themes that surround the STEM Lab.
- **Delivery** - Provides guidance on teaching strategies for each STEM Lab section to improve student mastery of the content.
- **Materials** - Lists the materials that are essential to completing the STEM Lab.
- **Resources** - Provides the linked content and resources needed by the teacher to complete the lessons and activities.

Section	Pacing	Concepts	Delivery	Materials	Resources
Seek	Building the Autopilot: 60 mins. Exploration Discussion: 5 mins.	• Building and Exploring the Autopilot	Student Centered Cooperative Learning	• 1 or more VEX IQ Super Kits • Engineering Notebook	• Build Instructions • Build Rubric • Collaboration Rubric • Engineering Notebook Rubric (Individual Reflections)
Play	Introduction to Robot	• Robot Behaviors	Teacher Direct Instruction	• Content Pages • Autopilot Robot	

	Behaviors: 5 mins. Forward and Reverse Investigation: 40 mins.	• Drivetrains • [drive] Command	Student Centered Cooperative Learning	• Charged Robot Battery • VEXCode IQ • USB Cable (if using a computer) • Engineering Notebook	• Engineering Notebook Rubric (Team Reflections Programming Rubric)
Apply	Introduction to [drive for] command: 10 mins. Introduction to Parameters: 20 mins.	• [drive for] command • Robotic Behaviors • Parameters	Discussion Student Centered	• Content Pages	
Rethink	Improve Your Project: 15 mins. Remix Your Program: 20 mins. Remix	• Iteration on Improving a Build	Student Centered Cooperative Learning	• Content Pages • Autopilot Robot • Charged Robot Battery • VEXcode IQ • USB Cable (if	Improve Your Project Remix Your Project Collaboration Rubric Engineering Notebook Rubric (Team Reflections)

	Questions: 10 mins.			using a computer)	Programming Rubric
Know	Comprehension Questions: 5 mins	Summative Assessment	Cooperative Learning	- Engineering Notebook/Graph Paper - Multiple Choice Questions	Know Questions Know Question Answer Key