



Design by Request: Pacing Guide

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	120 mins.	• Building and Exploring VEX Robotic Kits	Teacher Direct Instruction Cooperative Learning	• 1 or more VEX V5 Classroom Starter Kits • Engineering Notebook	• Engineering Notebook Rubric (Individual Reflections)
Play	60 mins.	• Manipulators • Accumulators • Force	Teacher Direct Instruction	• VEX V5 Classroom Starter Kit • Engineering Notebook	

Apply	30 mins.	• Career Paths • Iteration and Design	Student Centered	• Content Pages	
Rethink	240 mins.	• Response to Proposal • Time Management • Measurement • Iteration on Improving a Build	Cooperative Learning	• VEX V5 Classroom Starter Kit • Engineering Notebook • Pencil or Pen • A meter stick • A box or bin for the objects to be placed • Objects that the robot can grab (cones, bean bags, erasers, markers, cubes, etc.)	• Collaboration Rubric • Engineering Notebook Rubric (Individual Reflections) • Build Rubric • Engineering Notebook Rubric (Team Reflections)
Know	Comprehension Questions: 5 mins	Summative Assessment	Student Centered	• Multiple Choice Questions	Know Questions Know Question Answer Key