

# CreositySpace Educator Guides and curricular materials are designed to support a variety of implementation methods:

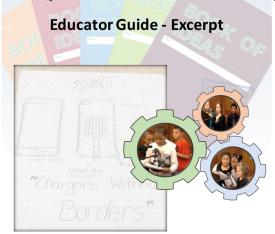
#### For the Classroom Teacher

- A variety of introduction tools to assess prior knowledge and create common experiences.
- Detailed weekly learning objectives and instructional lessons lists/pacing guides.
- Cross-curricular activities to support ELA and math learning objectives.

# For the STEM/Afterschool Teacher

- A variety of introduction tools to assess prior knowledge and create common experiences.
- Flexible lesson plans that can adjust to your instructional method and schedule
- Leveled content that supports students at different reading, writing, and language levels.

# Makerspace Launch & Challenge



### **Makerspace Launch and Challenge Packs**

Supplemental Curriculum	Grades 1–5 (Launch), Grades 3–8 (Challenge)
Notes	Standard kit comes with enough materials for 30 students. There is no refill kit as all contents are consumable.

#### Description

#### While some people find a blank slate energizing and motivating, others can find it a bit intimidating.

The same can be said for a new makerspace with its endless possibilities and focus on more freeform creativity. That's where the CreositySpace's *Makerspace* curriculum can help. Whether you're jump-starting your makerspace with the *Makerspace Launch* Pack or folding concepts around entrepreneurship with the *Makerspace Challenge Pack*, we've got you covered. *Makerspace Launch* can be used for Grades 1–5 and *Makerspace Challenge* can be used for Grades 3–8 as supplemental curriculum.

#### **Makerspace Creations**









#### The Makerspace Launch Pack includes:

- Educator Guide
- 30 copies of the *Book of Ideas*
- 30 copies of My STEM Notes™ student notebook Grades 1–2 and 3–5 versions available

#### The *Makerspace Challenge* Pack includes:

- Educator Guide
- 30 copies of the *Book of Ideas*
- 30 copies of the Cool Kid IP Challenge reference guide
- 30 copies of *My STEM Notes*™ student notebook *Grades 3–5 and 6–8 versions available*

#### Number of Lessons\*

Makerspace Launch = 13–22 lessons

Makerspace Challenge = 14–28 lessons

\* Lesson = 30–40 min. block, 50% of lessons can be delivered in non-science classes

#### Highlights

- Kids immediately dive in
- Great start for STEM-cautious educators
- Ideal for STEM/Makerspace Centers
- Very flexible (lessons and scripting)

## Overview – Makerspace Launch

The following table is a general overview of the *Makerspace Launch* design challenge. The design challenge is composed of four required steps (introduction, brainstorming, design, and feedback and design improvements) and one optional step (presentation). A detailed sequence of lesson descriptions is provided in the <u>Getting Started with Your Makerspace</u> section. Since all school schedules and student needs are different, activities can easily be shifted, expanded, or contracted to suit your specific classroom needs. It is up to you to determine how much time you want to dedicate to this design project and gauge your students' needs. We have tried to provide a variety of tools (slides, preparation activities, etc.) to support your lesson plans but, depending on your students, you may not need to use it all. An optional project rubric is provided in the Appendix.

Step	Suggested Number of Sessions	Suggested Amount of Time	
Introduction	2	~ 60 minutes	
Brainstorming	2–4	60–120 minutes	
Design	3–6	90–180 minutes	
Feedback and Redesign	4–6	120–180 minutes	
Presentation	2–4	60–120 minutes	
Total	13–22	390–660 minutes (6.5–11 hours)	

# Overview - Makerspace Challenge

The following lesson sequencing is designed to help you guide your class through the steps of the *Makerspace Challenge*, including the giving and receiving of **productive** and **respectful** feedback. The specific lesson contents and delivery associated with a given step can be adjusted, or skipped, based on your class, but we recommend keeping the suggested lesson sequencing.

It is assumed that the students will be working on this project through a series of ~30-minute lessons, but if you have longer blocks of time lessons can be combined. If you would like some help setting up a lesson sequence that fits your needs, please feel free to reach out to us. The outlined sessions are composed of a mix of *classroom lessons* and *makerspace sessions*. While the *classroom lessons* can be delivered in the makerspace area, they involve activities such as planning, discussing, and organizing vs. prototype building.

Step	Preparation	Classroom Lessons	Makerspace Sessions
Challenge Introduction	Determine: - Your total time allocation for the challenge - How you will decide on a challenge question (with or without student input)	Lessons 1 and 2	Lessons 3 and 4 (if necessary)
Brainstorming	Determine: - Student group size and how the student groups will be formed (assigned or chosen)	Lesson 5	Lessons 6 and 7
Design and Manufacturing	Determine: - Judging criteria for the prototype	Lesson 8	Lessons 9–12
Market Size and Design Refinement	Review lesson slides	Lessons 13 and 15	
Intellectual Property and Design Refinement	This is one of the most challenging lessons. We suggest you work through the warm-up activities ahead of time and contact us with any questions.	Lessons 17 and 18	Lessons 14, 16, 19, 20, 22, and 24
Presentation Development and Design Refinement	Determine: - Your expectation for presentation detail and quality	Lessons 21, 23, 25, and 26	
Presentation Delivery	Review: - Presentation rubric and scorecard  Determine: - If you want to include any external judges	Lessons 27 and 28	
Total Lessons		8 to 14	6 to 14