

Create Flexible Learning Opportunities

A STEM environment that offers learner choice and a self-paced curriculum has many benefits. First and foremost, it creates excitement in learners. Choice allows learners to select and engage in areas of interest and share personal passions with peers. Choice may be presented in a couple different ways. Learners may choose their STEM area and work through a self-paced curriculum through the entire STEM program. Or, learners may select from a choice menu within a particular STEM topic. Either option promotes more voice and choice in your STEM programming. Student engagement and motivation are a natural by-product of choice.

Additionally, when learners have control over the pace of their learning, engagement increases, problem-solving skills develop and independence thrives. Your learning environment will transform into a STEM laboratory teeming with authentic learning and real world problem solving.



HANDS-ON STEM EDUCATION

For over 30 years, PCS Edventures has inspired students to develop a passion for Science, Technology, Engineering and Mathematics (STEM), focusing our efforts on making learning and discovery a fun and interactive process for grades K-12.

- Classroom
- After-School
- Home Learning

How To Use This Resource

Ready to venture into a flexible learning environment? The resources in this freebie will help you get started. These resources will help you to: survey your learners' interests, organize your learner groups and track their progress.

STEAM Choice Survey

With our STEAM Choice Survey, learners are empowered to choose the STEAM activity that most interests them. Educators will want to explain each choice and show materials as learners make their selections

Group Profile

Our Group Profile, also found in A Noteworthy Anecdotal Records Kit, will help organize your learner groups and their activities.

Tracking Guide

The tracking guide provides an example of one way to keep track of each group's progress, while ensuring learners understand the expectations of each activity.

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STEAM Choice Survey

Name:		irade:	Period:
Choice 1:	Choice 2:	Choi	ce 3:

STEMedventures	STEAM letter	Description	Student Limit	Му	My Interest Level	
BrickLAB: Physics	S	Use bricks to experiment with physics concepts like friction, potential and kinetic energy, and Newton's Laws of Motion.	4	<u>;;</u>	;;;)	<u>;;</u>
Discover Dynamics Roller Coaster Physics	S	Tackle 12 physics challenges to discover the world of acceleration, motion and gravity as you build a variety of roller coaster models.	4	<u>;;</u>	:	(ic)
Discover Renewable Energy: Solar Power	S	Explore solar-powered experiments such as building a ventilation fan model, solar race car and solar catamaran.	4	<u>;</u>		:C
Science of the Human Body	S	Take a closer look at the microscopic mechanisms that humans tick! Explore human anatomy and physiology.	4	<u>;</u>	<u>(</u>	<u>;</u>
Scratch Camp	Т	Learn basic and advanced coding through Scratch coding platform.	unlimited	<u>;;</u>	<u>:</u>	<u>()</u>
Video Production	Т, А	Video Production empowers learners with technical skills in filming and video editing while exploring the historical significance of film and the uniqe elements of storytelling.	unlimited	:	:	<u>()</u>
Traveling Artist	А	Explore different art forms throughout history of the world. Make a project from a variety of countries and then create a final global masterpiece at the end.	unlimited	<u>;</u>		Ċ
Claymation	А	Learn how to create your own claymation movies.	4	:		<u>(</u>



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STEAM Choice Survey

Name:	G	irade:	Period:
Choice 1:	Choice 2:	Choi	ce 3:

STEAM Choice	STEAM letter	Description	Student Limit	My Interest Level
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Group Profile					
Class:			Gi	ade:	Date/Period:
Project, Activity	or Tas	k Wha	t are the s	students worki	ng on?
Student Groups	Give	groups a	name an	d list students	under each group.
	-				
	_				
	_				
Crows	ement	standing	havior	Δ	
Groups _E	Engageme	Understand	Benav	Assessme	ent

Notes:

Grade:_____ Period:_

Discover Engineering Tracking Guide



PR	OJECT 1: Pulleys	\checkmark
a.	Read "Engineering Background."	
b.	Read "How has it changed the world?"	
C.	Read "Key Terms and Concepts."	
d.	Do "It's Time to BUILD!"	
e.	Choose one "Mechanical Advantage Challenge" to complete. Either Qualitative of Quantitative. If you need to write information down, use your notebook.	
f.	Do Design Project.	
g.	Write a brief explanation of the importance of pulleys.	
h.	Disassemble your work.	

PRC	DJECT 2: Levers	\checkmark
a.	Read "Engineering Background."	
b.	Read "How has it changed the world?"	
C.	Read "Key Terms and Concepts."	
d.	Do "It's Time to BUILD!"	
e.	Do the "Projectile Motion" project. If you need to write information down, use your notebook.	
f.	Do Design Project.	
g.	Write a brief explanation of the importance of levers.	
h.	Disassemble your work.	

Grade:_____ Period:_

S.T.E.A.M. Tracking Guide



PROJECT:		
a.		
b.		
C.		
d.		
e.		

PROJECT:		
a.		
b.		
c.		
d.		
e.		



For more information, visit: <u>https://edventures.com/collections</u> or contact a STEM Program Specialist at (800) 429-3110



