

Introduction				
Teacher:	Grade: 6-12	Date(s):		
Unit Title: STEM Career Exploration				
Materials/Resources/Tech	Contextual Vocabulary			
Teacher: assigned/Printed PDFs Student: computer, assigned PDFs	Structural Engineer, Mechanical Engineer, Textile Engineer, Pharmacy Technician, Agricultural Engineer, Chemical Mixer, STEM Expert			
Learning Experience(s)				

Essential Standards/Objectives: Students will explore various STEM careers, identify skills and educational pathways required, and evaluate how these careers relate to real-world applications in science, technology, engineering, and mathematics.

Essential Question(s): How do different STEM careers impact our everyday lives, and what skills and knowledge are needed to succeed in these fields?

Gear Up: What careers can you think of that incorporate science and technology like those seen in Sci-Ops?

# Independent/Small Group:

(15-30 min.) STEM Careers (assign all, have students choose 1)

- **Structural Engineer**
- Mechanical Engineer
- Textile Engineer
- Pharmacy Technician
- Agricultural Engineer
- Chemical Mixer

## (15-30 min.) STEM Interviews (assign all, have students choose 1)

- STEM Expert: Mr. Pauling
- STEM Expert: Metallurgist
- STEM Expert: Manufacturing Engineer

### Additional Resources for 90 minute class

Independent/Small Group: (15-20 min) Sci-Ops Gameplay level: 3-6

Sci-Ops Play to Learn- Levels 1 to 3 Sci-Ops Play to Learn- Levels 3 to 6

# **Differentiation Strategies**

- Portal & Sci-Ops available in Spanish
- Sci-Ops Play to Learn-optional activity during gameplay if needed for student direction

## Assessment(s) & Reflection

# Assessment & Closure:

Power Down: Tell me about a STEM Expert you would like to see added to the game and what upgrade would they give to the Sci-Operatives.



Teacher Re	ilection:	(Next steps?)
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<u>Lesson Plan Feedback</u>