

# What Problem Do *You* Want to Solve?

## Customizable Lesson Plan



**Learning Format:** Virtual/Remote, Hybrid, and Face-to-Face

**Academy Theme:** All Academy Themes | **Duration:** Week 1 of 4

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## LESSON OBJECTIVES

Students will:

- Identify a problem they want to solve (e.g., Climate Change)
- Conduct research on the topic
- Engage in group conversations to share their knowledge about the topic
- Create a multimedia presentation to share with the class

## BLENDED LEARNING STRATEGIES

- 5E Model of Instruction
  - [What is the 5E Instructional Model?](#)
  - [How to Use the 5E Model with Blended Learning](#)
  - Templates:
    - [5E's Lesson Plan Template](#)
    - [5E's Instructional Model Outline](#)
- Whole class rotation
  - [Blended Learning: Designing a Whole Group Rotation](#)
  - [Whole Group/Class Lesson Plan Template](#)
- Virtual Breakout Discussions
  - [10 Ideas For Using Virtual Breakout Rooms During Distance Learning](#)
  - [Virtual Group Discussion Roles-Responsibilities Template](#)

## ENGAGE: Whole Group/Class

### Icebreaker Discussion & Activity:

- Engage students: watch Jaime Casap's (Google) video [What Problem Do You Want to Solve?](#)
- Review activities: use PowerPoint Presentation: [What Problem Do You want to Solve?](#)
- Brainstorm potential problems that need creative and ingenious solutions.

### Online Engagement Tools:

- [Padlet](#)
- Google Classroom Question
- [Mentimeter](#)
- [Peardeck](#)

## Small-Group Breakout

- Students discuss the following questions:
  - Which of the ideas from the whole class brainstorming resonates with you?
  - How can we breakdown a global problem such as climate change into an actionable solution you can influence?
  - What are some of the ideas you have for designing solutions?

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### EXPLORE: Independent Assignment

- Have students independently research their chosen problem.
- [Student Handout: Engage/Explore Worksheet](#)

#### Online Exploration Tools:

- Google Search; Custom Google Search Engine
- [YouTube](#)
- [Newsela](#), [Smithsonian Tween Tribune](#)
- [InsertLearning](#)
- Google Classroom Question
- Shared Google Slide Deck

### EXTENSION ACTIVITIES: Optional

#### Paradigm Challenge

- Watch the video: [Students Can Solve Global Problems](#)
- Team students up to compete in the global [Paradigm Challenge](#) (due date May 1, 2021)

#### Global Problem-Solving Series by Cisco

- Read the article: [5 Reasons Global Problem Solvers: The Series Will Inspire STEM Interest in Your Students](#)
- Have students work through the activities in the [Global Problem Solving \(GPS\)](#) series by Cisco.