***This storyboard should be included with each team’s*** [***video submission***](https://youbethechemist.submittable.com/submit/5c8b453f-397d-4464-ac2f-9d6da0a81152/24-25-video-submission)***.*** Although many file types are accepted, .pdf and .doc filles preferred.

**THEME: You Be The Solution: Develop a sustainable solution to a local natural hazard that ensures community safety.**

**Sample Research Ideas:**

The concept banks below provide possible research topic suggestions for your team’s competition video. **These concept banks are not an exhaustive list**, as many topics are not included. Your team is not required to use any of the below suggestions in your video; rather, the concept banks serve as inspiration for possible topics to explore in your video. Whatever topic you choose, whether it is from this list or not, it is your team’s responsibility to connect that topic and your research to the video prompt.

**Sample Banks:**

Earth/Chemistry Concepts: Air Quality, Atmosphere, Atom, Avalanches, Chemical Reactions, Coastal Erosion, Combustion rates, Density, Droughts, Earthquakes, Elements, Erosion, Exothermic, Floods, Heat, Hurricanes, Igneous Rocks, Landslides/Mudslides, Mass, Matter, Meteorology, Minerals, Natural Hazards vs Natural Disasters, Ocean Currents, pH, Plate Tectonics, Rock Cycle, Sedimentary Rocks, States of Matter, Tornadoes, Tsunamis, Viscosity, Volcanoes, Water Cycle, Weathering, Wildfires, Wind Patterns

Company Industry: Agriscience, Biotechnology, Chemical Distribution, Chemical Engineering, Chemical Manufacturing, Construction, Disaster Management, Education, Energy Production, Entertainment and Media, Environmental Consulting, Fashion and Retail, Forestry, Hospitality and Tourism, Local and Federal Governments, Meteorology, Mining, Oil and Gas, Quality Assurance and Control, Research Institute, Transportation, Urban Planning and Development, Waste Management, Water Resource Management

Careers: Accountant, Analytical Chemist, Biochemist, Chemical Engineer, Chemist, Climatologist, Conservation Technician, Delivery Driver, Electrician, Engineer, Environmental Consultant, Equipment Operator, Farmer, Finance Director, Geologist, Geophysicist, Graphic Designer, Hydrologist, Journalist, Lab Technician, Maintenance Technician, Marketing and Communications Specialist, Mechanic, Mechanical Engineer, Meteorologist, Natural Resource Manager, Oceanographer, Operations Manager, Police Officer, President, Project Manager, Quality Specialist, Sales Manager, Seismologist, Service Technician, Social Worker, Software Developer, Soil Scientist, Surveyor, Volcanologist, Warehouse Associate, Welder

Your storyboard should guide your team’s video creation process. The storyboard provides evidence of your team’s planning process for the judges of the video component of the Challenge.

**Storyboard Guidelines and Requirements:**

1. Use this *Storyboard Template* to guide your video’s story and structure: You must submit a completed storyboard with your video submission. Each team’s video should include the following components based on the Video Rules and the Video Rubric:
	1. Opening titles – at the beginning of your video
	2. Introduction to start-up company
	3. Explanation of problem
	4. Presentation of innovative solution
	5. Clear embedding of identified career/job roles that represent diverse educational backgrounds in discussions of problem and solution
	6. Closing titles – at the end of your video

***Note-*** *With the exception of the opening and closing titles, these components do not need to follow the specific order above, but the order must make logical sense and be easy to follow for video audience.*

1. For each storyboard component:
	1. Complete the details in each box (please refer to the rubric)
	2. Outline relevant dialogue or narrative in the space provided underneath each box. **These notes do not have to be a word-for-word script** (it can be if your team wants it to be!).

**Opening Title:**

Title/Company Name:

Challenge Theme:

Group/School Name:

 Team ID:

**Closing Title:**

Group/School Name:

Group/School Address:

Team Members:

Member Name (first name and last initial) Member Contribution

*Please note, videos that do not have opening and closing titles will not be scored.*

This storyboard includes time recommendations for each section; however, sections within a video do **not** have to follow these suggestions. *Please note, videos that are not between 5-7 minutes total will not be scored.*

**Explanation of Start-Up (1-1.5 minutes)**

**Company Name:**

**Company Mission:**

**Description of Company Industry:**

**Careers and Educational Level:**

*Please note, videos that do not feature a* ***minimum*** *of three careers (one of which* ***must have a nondegree educational background****) will not be scored*

 **Job Title Educational Level**

1.
2.
3.

**Optional Additional Careers**

**:**

**Company Details - Dialogue/Narrative (Please use this space as a guide to create your dialogue/narrative. Your final video product can differ.)**

**Sketch of the scene:**

**Explanation of Problem (2-2.5 minutes)**

**Problem Identified:**

**Core STEM Concepts – Earth Science:**

**Impact:**

**Explanation of Problem - Dialogue/Narrative (Please use this space as a guide to create your dialogue/narrative. Your final video product can differ.)**

**Sketch of the scene:**

**Innovative Solution (2-3 minutes)**

**Innovative Solution:**

**How solution addresses the problem:**

**Core STEM Concepts – Earth Science:**

**Connection between solution and chemistry concepts:**

**Addressing Sustainability:**

[**United Nation SDG addressed:**](https://sdgs.un.org/goals)

**Strengths and Obstacles:**

**Strengths Obstacles**

**Connection between career(s) and solution:**

**Visual of Solution:**

**Explanation of Solution - Dialogue/Narrative (Please use this space as a guide to create your dialogue/narrative. Your final video product can differ.)**

**Sketch of the scene:**

**Citations (APA format):**

A bibliography listing all sources used in researching and creating the video in APA format must be included in the end titles of the video. Please refer to [this resource created by Science Buddies®](https://www.sciencebuddies.org/science-fair-projects/science-fair/writing-a-bibliography-examples-of-apa-mla-styles) for more step-by-step directions on creating an APA formatted bibliography.

1. Source list must include title, author, publisher, and copyright date
2. Bibliography must also include internet sources, interviews, images, and videos
	1. [Directions on how to automatically format bibliographies in Microsoft Word](https://support.microsoft.com/en-us/office/apa-mla-chicago-automatically-format-bibliographies-405c207c-7070-42fa-91e7-eaf064b14dbb#:~:text=In%20your%20Word%20document%2C%20click,that%20you%20want%20to%20cite.)
	2. [Directions on how to automatically format bibliographies in Google Docs](https://support.google.com/docs/answer/10090962?hl=en&co=GENIE.Platform%3DDesktop#:~:text=In%20your%20document%2C%20place%20your,appears%20in%20your%20selected%20style.)
	3. Use [Grammarly’s free Citation Generator](https://www.grammarly.com/citations)