

PROJECT PLANNER

1. Project Overview

Project Title	Stranded	Public Product(s) (Individual and Team)	Students will make a video or comic strip explaining/ showing how they will survive for 30 day. Students will make a guidebook explaining the vegetation, wildlife and water sources available in the region. Students will be judged by local/ state Game and Fish on their ability to survive based on the video produced.
Driving Question	You're lost...alone...and in an unfamiliar ecosystem...can you survive..?		
Grade Level/ Subject	High School Biology/Ecology		
Time Frame	2+ Weeks		
Project Summary	Students will dive into the education of ecosystems through being "stranded" in one of the ecosystems and learning how to survive. Students will gain knowledge about the ecosystems by learning about the weather, vegetation, wild game, etc. that will aid in their survival. They will get 5 items in a backpack, along with 5 days worth of water and jerky.		

2. Learning Goals

Standards	<p>HS-LS2-6. Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.</p> <p>HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.*</p> <ul style="list-style-type: none">Humans depend on the living world for the <u>resources</u> and other benefits provided by biodiversity. <p>HS-LS2-8. Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.</p>	Literacy Skills	<p>Students will create a guidebook with descriptions of their surroundings, including sources of food, water, shelter, and terrain.</p> <p>Students will also create a script or narrate their video.</p>
-----------	---	-----------------	--

Key Vocabulary	Biome (Explain Each) Abiotic/biotic Factors Ecosystem (Explain Each) Biodiversity Predatory vs. Prey Ecology Biosphere Adaptation Habitat	Success Skills	21st Century Skills (4 C's): Critical Thinking, Collaboration, Communication and Creativity
		Rubric(s)	Collaboration (60) Critical thinking (40) Creativity (70) Total points possible: 170

3. Project Milestones

Directions: Use this section to create a high-level overview of your project. Think of this as the broad outline of the story of your project, with the milestones representing the significant 'moments' or 'stages' within the story. As you develop these, consider how the inquiry process is unfolding and what learning will take place. The Project Calendar (Section 4) will allow you to build out the milestones in greater detail.

Milestone #1 (1 Day)	Milestone #2 (1 Day)	Milestone #3 (4 Days)	Milestone #4 (2 Days)	Milestone #5 (2 Days)	Milestone #6 Public Product (1 Day)
40 sec video from Michael Scott "survival man" provide vague driving question: You're lost... alone... stranded in an unknown ecosystem... how will you survive? Bear Grylls video clips	Need to know questions. Generate list of ~20 items. Write these on the board for classroom discussions.	Provide the GPS location, date, and whose clothing options will determine their starting outfit. Research and collect data for their specific ecosystem. Provide students with the entire driving question. Introduce the Guidebook they will be making.	Students will reach out to an external source from Game and Fish, U.S. Forestry, zoologists, professors from uMary, etc. to gather more information	students create and edit their videos and finalize their guidebooks day-to-day journal, snipit video of survival man style video, how-to guide style video	provide core teachers with videos to rank students on their ability to survive guidebook of particular ecosystem (types of plants, food and water sources, terrain, weather patterns)
Key Student Question	Key Student Question	Key Student Question	Key Student Question	Key Student Question	Key Student Question

What is most important for survival? How long? Supplies or resources?	What will the weather be?	How will we explain the aspects of our ecosystem?	Are our initial ideas realistic?	How are we going to portray surviving in our video?	Will our ideas be plausible?
Formative Assessment(s)	Formative Assessment(s)	Formative Assessment(s)	Formative Assessment(s)	Formative Assessment(s)	Summative Assessment(s)
initial questions and class discussion	chalk talk	creating guidebook with specific parts to be completed each day	reflection and revision	teacher feedback and alignment with rubric	completed video and guidebook

4. Project Calendar

Driving Question: You're lost...alone...and in an unfamiliar ecosystem...can you survive..?				
Week: 1		Project Milestone: Milestone #1, #2, and #3		
Key Student Question(s): What is most important for survival? How long am I stuck in the wild? Do I have any supplies/ resources with me? What will the weather be? How will we explain the aspects of our ecosystem?				
Day 1:	Day 2:	Day 3:	Day 4:	Day 5:
LEARNING TARGET/OUTCOMES I can explain the basic needs of survival (food, water, shelter) LESSON Entry event (video from Office) provide vague driving	LEARNING TARGET/OUTCOMES I can use the basic needs of survival to formulate need-to-know questions about the ecosystem I am in. LESSON Revisit driving question	LEARNING TARGET/OUTCOMES I can relate my knowledge of ecosystems to create a survival guidebook. I can explain the broad overview of my ecosystem.	LEARNING TARGET/OUTCOMES I will use the information from my group discussion to guide my own project. LESSON Students will be randomly placed in	LEARNING TARGET/OUTCOMES I can explain the beneficial animals and plants from my ecosystem. I can distinguish the difference between medicinal vegetation, vegetation for food, and

<p>question and have students turn and talk about need to know questions. When they have some ideas students will write them on the board for the whole group to see. We will then watch Bear Grylls video and start to refine list.</p> <p>SCAFFOLDS Provide visual model of survival. Offering guiding questions. Using stories and showing examples (Bear Grylls)</p> <p>FORMATIVE ASSESSMENTS Turn and Talk - basic needs for survival and write those on the board.</p> <p>REFLECTION</p>	<p>and have class create need to know questions (5-10 minutes) with sticky notes. Have class discussion about answers and probe if further clarification is needed. Will give students their GPS location, date, clothing, and allow students to begin brainstorming in their groups. Give essential vocab to further their discussions and need to know questions.</p> <p>SCAFFOLDS Pre-teach Vocab Creating conversion/discussions</p> <p>FORMATIVE ASSESSMENTS Need to Know questions written on the board.</p> <p>REFLECTION Students will reflect on the basic needs for survival from day 1 to implement with their situations.</p>	<p>LESSON Introduce Guidebook. Students start the layout as a Google Slide Trifold Pamphlet by creating sections and subsections. https://docs.google.com/presentation/d/1Sm5eQqH_ePP7vV3hZCd3hd5lp2lqktx46JC_10Hy2I/e/dit?copiedFromTrash#slide=id.p Students will begin researching their ecosystem and get a broad overview of their ecosystem.</p> <p>SCAFFOLDS Breaking a topic into parts (concept mapping). Providing context. Providing guiding questions.</p> <p>FORMATIVE ASSESSMENTS Students will gather broad information about their ecosystems. Students will make a concept map (Biome -- Ecosystem -- Animals, Vegetation, Climate, other Resources)</p> <p>REFLECTION</p>	<p>different groups to read/research scenarios of survival (ie. Christopher McCandless, Ricky Megee, and 2 articles from experts). They will then go back to their groups with new and revised solutions to their survival scenario.</p> <p>SCAFFOLDS Opportunity for student discussion.</p> <p>FORMATIVE ASSESSMENTS Teacher observations</p> <p>REFLECTION Students will get back into their long term groups and discuss their information gathered with their short term groups.</p>	<p>poisonous vegetation. I can explain predator vs. prey relationships in my ecosystem.</p> <p>LESSON We will begin class by explaining our research on biotic factors and show example of <i>Into the Wild</i>. Students will be researching and collecting data on animals and vegetation in their ecosystem to include in their guidebooks.</p> <p>SCAFFOLDS Using stories/references (Into the Wild)</p> <p>FORMATIVE ASSESSMENTS Students will show their research on animals and vegetation of their ecosystem.</p> <p>REFLECTION Students will reflect on their basic survival needs and relate it to the animals and vegetation in their ecosystems.</p>
--	---	---	---	--

Notes: Guidebooks are seen as students are experts on their ecosystem and they are creating a guide to survival for others.

Driving Question: You're lost...alone...and in an unfamiliar ecosystem...can you survive..? for 30 days with enough water and jerky for 5 days

Week: 2 Project Milestone: Milestone #3, #4, and #5

Key Student Question(s): Are our initial ideas realistic? How are we going to portray surviving in our video?

Day 1:	Day 2:	Day 3:	Day 4:	Day 5:
<p>LEARNING TARGET/OUTCOMES I can explain the climate of my ecosystem. I can relate my ecosystem's climate to my own survival. I can explain other resources that would be beneficial to my survival.</p> <p>LESSON Students will focus on climate and other resources necessary for survival in their ecosystem.</p> <p>SCAFFOLDS Providing visual models Follow-up questions</p> <p>FORMATIVE ASSESSMENTS Students will show their research of climate and other resources relating to their survival in the</p>	<p>LEARNING TARGET/OUTCOMES I can explain my guidebook in a way that effectively portrays my ideas.</p> <p>LESSON Begin class with a gallery walk before refining their guidebook. Students will spend the remainder of the class period finishing their guidebooks and preparing questions for experts.</p> <p>SCAFFOLDS Gallery walk</p> <p>FORMATIVE ASSESSMENTS Students will have a finished draft of their guidebook. Students will have an email written and sent to someone asking</p>	<p>LEARNING TARGET/OUTCOMES I can make revisions to my guidebook based on information from my interview.</p> <p>LESSON Reflection and revision of project from interviews (emails).</p> <p>SCAFFOLDS rotating group meetings with teacher after reflecting on the emails received</p> <ol style="list-style-type: none"> 1. progress made 2. understanding of concepts/ project 3. collaboration within the group <p>FORMATIVE ASSESSMENTS 1-on-1 with the teacher.</p> <p>REFLECTION</p>	<p>LEARNING TARGET/OUTCOMES I can make revisions to my guidebook based on information from my interview.</p> <p>LESSON Reflection and revision of project from interviews (emails). By the end of today students need to have the guidebook completely finished.</p> <p>SCAFFOLDS rotating group meetings with teacher after reflecting on the emails received</p> <ol style="list-style-type: none"> 1. progress made 2. understanding of concepts/ project 3. collaboration within the group <p>FORMATIVE ASSESSMENTS</p>	<p>LEARNING TARGET/OUTCOMES</p> <p>LESSON Start designing their videos. This will include type of video from 3 options (or their own idea), roles of each group member, possible script.</p> <p>SCAFFOLDS Break up video production into smaller pieces.</p> <p>FORMATIVE ASSESSMENTS Exit slip with ideas for video.</p> <p>REFLECTION</p>

ecosystem. REFLECTION Students will reflect on their basic survival needs and relate it to the climate and other resources in their ecosystems.	questions about surviving in their ecosystem. REFLECTION Pulling the Guidebook all together. Compile questions and send email.	Students will make any needed revisions in their guidebook.	Teacher observations REFLECTION Students will use their guidebook and interview answers to plan their final video project.	
---	---	---	--	--

Notes:

Driving Question: You're lost...alone...and in an unfamiliar ecosystem...can you survive..? for 30 days with enough water and jerky for 5 days

Week: 3 **Project Milestone:** Milestone #5, and #6

Key Student Question(s): Will our ideas be plausible?

Day 1:	Day 2:	Day 3:	Day 4:	Day 5:
LEARNING TARGET/OUTCOMES I can give constructive feedback to my peers. LESSON Students will be creating video. SCAFFOLDS FORMATIVE ASSESSMENTS peer-to-peer critique teacher critique REFLECTION	LESSON TARGET/OUTCOMES I can manage my time by finishing the project. LESSON Finish video editing. SCAFFOLDS FORMATIVE ASSESSMENTS peer-to-peer critique teacher critique REFLECTION	LESSON TARGET/OUTCOMES I can reflect on criticism from my peers and the other teachers. LESSON Present videos to class and send out to teachers. SCAFFOLDS Teacher review Peer review SUMMATIVE ASSESSMENT		

completed videos

REFLECTION
Students will reflect on what they learned about their own ecosystem, their classmate's ecosystems, and how they believe they can survive in an ecosystem for 1 month.

Notes:

5. Lesson Planner (Supporting Resources)

Trifold Pamphlet Google Slides:

https://docs.google.com/presentation/d/1Sm5eQqH_ePP7vV3hZCd3hd5lp2lqIktx46JC_l0Hy2l/edit?copiedFromTrash#slide=id.p

Small Group Discussion Topics:

- Christopher McCandless "Into the Wild"
- Ricky Megee "Left for Dead"
- Cody Lundin "Hippy"
- Dave Canterbury "Military"
- Les Stroud "Survivorman"
- Bear Grylls "Man vs. Wild"
- Alexander Selkirk "Robinson Crusoe"

Concept map:

- https://docs.google.com/document/d/1f-LJUX55LL_VegQQWPrdHKmZMLZNBmBar1mYonWC2yU/edit