

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

Day 1

Time	Segment	Activity	Description	Academic Standards	Subjects
X:XXam	Leave school for Williams				
10:30am	Train ride to Grand Canyon	Surprise Drama	Crazy characters make a surprise appearance, setting up the theme and activities for camp.		Funology
		View/identify different habitats, geographic structures	<ul style="list-style-type: none"> - Take in the sites and view the many different habitats, ecosystems and geographic structures that exist between Williams and the Grand Canyon. - Utilize an annotated map of the train ride to identify features. 	<ul style="list-style-type: none"> - Describe ways geographic features and conditions influenced settlement in various locations (SS06-S4C6-01) - Locate physical and human features (e.g., significant waterways, mountain ranges, cities) in the United States (SS06-S4C1-04) 	Geography, Ecology
		Mini-lesson on history and importance of the steam engine / train.	<ul style="list-style-type: none"> - Learn how the steam engine transformed Arizona. - Discuss the transfer of thermal energy within a steam engine. 	<ul style="list-style-type: none"> - Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations(SC06-S2C1-01) - Scientific discovery, societal transformation, transfer of energy History of trains, steam engine (SC06-S5C3)	Science History, Physical Science
12:00pm	Lunch at Grand Canyon				
12:30pm	Tour Grand Canyon	Bus Tour	Seeing is believing, up close and personal experience with a wonder of the world. <ul style="list-style-type: none"> -geological formations -river flow, erosion Discuss Colorado River, Hoover Dam	<ul style="list-style-type: none"> - Explain the composition, properties, and structure of the Earth’s lakes and rivers. (SC06-S6C1-02) - Identify various ways in which electrical energy is generated using renewable and nonrenewable Resources (SC06-S5C3-01) - Explain that sunlight is the major source of energy for most ecosystems (SC06-S4C3-01) - Identify the physical processes that influence the formation and location of resources (SS06-S4-01) 	Earth and Space Science, Physical Science

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

				- Describe the intended and unintended consequences of human modification (SS06-S4C5-02)	
		Museum tours	Amazing pictures, stories, models and artifacts to explain the formation and history of the canyon and its people	(See Bus Tour)	Earth and Space Science, Native American History
		Personal observation	Get out and see it all up close!		
4:00pm	Train ride to Williams	Travel Log	Quick snapshot of first impressions	Nonfiction writing that describes, explains, informs, or summarizes ideas and content. (W06-S3C2)	Writing
5:30pm	Bus ride to Lost Canyon				
6:00pm	Camp check-in, orientation				
6:45pm	Dinner				
7:30pm	All-camp meeting	Skits, songs, motivational speaker	- Video of the day, trivia, review games and keynote speaker. - Life choices, social responsibility, healthy active lifestyle, motivational stories for life success	Subject determined by School. (academic, motivational, ethical, cultural, etc)	Review, Comprehensive Health, Personal Responsibility, Funology
8:30pm	Into the Darkness	Night games	No academics here, just fun with glow sticks and other zany games		Funology
9:30pm	Snack Bar – free time				Funology
11:00pm	Travel Log / Lights out	Journal activities, thoughts, experiences		Nonfiction writing that describes, explains, informs, or summarizes ideas and content. (W06-S3C2)	Writing

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

Day 2

Time	Segment	Activity	Description	Academic Standards	Subjects
8:00am	Breakfast				
8:45am	Station: Team Building (Staggered groups through stations)	Low Ropes Course	Crazy physical and mental challenges to force students to think, cooperate, communicate, tolerate and have fun! Team building exercises and follow-up discussions to apply lessons learned to everyday life.	<ul style="list-style-type: none"> - Cooperate with a group to achieve group goals in competitive as well as cooperative settings (5PA-E3) - Display sensitivity to the feelings of others during interpersonal interaction (6PA-E2 PO1) - Demonstrate cooperation (through verbal and nonverbal behaviors) with peers of different gender, race and ethnicity in a physical activity setting (6PA-E2 PO2) - Participate in physical activities with others regardless of diversity and ability (6PA-E3) - Identify reasons for conflict among young people (5CH-E2 PO1) 	Comprehensive Health
10:30am	Station: Adventure Hike (select any two options)	The Living Forest	<ul style="list-style-type: none"> -find, view, compare and discuss forest flora in reference to transpiration, absorption, stimuli, adaptations -plants need water to survive, why would plants need to lose moisture? Formulate hypothesis -perform experiment to learn why absorption is dependent on transpiration -view and discuss adaptations of local flora -discuss the benefit and dangers of natural forest fires 	<ul style="list-style-type: none"> -Formulate questions based on observations that lead to the development of a hypothesis (SC06-S1C1-02) - Evaluate the observations and data reported by others.(SC06-S1C3-03) - Apply the following scientific processes to other problem solving or decision making situations: <ul style="list-style-type: none"> • observing • predicting • questioning • comparing • generating hypotheses • classifying (SC06-S2C2-03) - Explain the importance of water to organisms (SC06-S4C1-01) - Relate the following structures of living 	Life Science

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

		<p>organisms to their functions: Plants</p> <ul style="list-style-type: none"> • transpiration • absorption • response to stimulus (SC06-S4C1-06) <p>- Explain that sunlight is the major source of energy for most ecosystems (SC06-S4C3-01)</p> <p>- Evaluate the effects of the following natural hazards: lightning-caused fire (SC06-S3C1-01)</p>	
<p>'Leave No Trace'</p> <p>-national curriculum dedicated to the responsible enjoyment and active stewardship of the outdoors by all people, worldwide</p>	<p>- Group will imagine themselves as part of a futuristic science mission returning to Earth to uncover the secrets of our planet's ancient inhabitants.</p> <p>-Participants will try to construct a picture of a vanished people based upon the objects they find.</p> <p>-education is the best means to protect natural lands from recreational impacts while helping maintain access for recreation and enjoyment;</p> <p>- stewardship is gained through understanding and connecting with the natural world; undisturbed</p>	<p>- Write a summary based on the information gathered (W06-S3C2-02)</p> <p>-Formulate questions based on observations that lead to the development of a hypothesis (SC06-S1C1-02)</p> <p>- Evaluate the observations and data reported by others.(SC06-S1C3-03)</p> <p>- Apply the following scientific processes to other problem solving or decision making situations:</p> <ul style="list-style-type: none"> • observing • predicting • questioning • comparing • generating hypotheses • classifying (SC06-S2C2-03) 	<p>Writing, Geography, Conservation</p>
<p>Native American dwellings</p> <p>(pending federal permission)</p>	<p>A very special privilege. Hike to actual Native American dwelling site.</p> <p>-'Leave no Trace' discussion on responsible hiking</p> <p>- study the value of leaving natural features and cultural artifacts</p> <p>-Navajo String Games (geometric shapes to create objects)</p>	<p>- Describe ways geographic features and conditions influenced settlement in various locations (SS06-S4C6-01)</p> <p>- Identify reflections and translations using pictures. (M06-S4C2-01)</p>	<p>Cultural awareness AZ history Geometry Geography</p>
<p>Live Animal Demonstration</p>	<p>A memorable experience - getting up-close-and-personal with</p>	<p>-Formulate questions based on observations that lead to the development</p>	<p>Life Science</p>

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

	<ul style="list-style-type: none"> -Reptiles -Raptors* -Arachnids <p>*raptors based on scheduling availability</p>	<p>critters and live flight demonstrations of birds of prey.</p> <ul style="list-style-type: none"> -Diversity, taxonomy, adaptation, conservation - Why do they have: claw types, eye types, scales, hair, exoskeleton, venom? -What can you do to help? -The amazing glowing scorpion -Discuss DNA testing to help classify and understand animal characteristics 	<p>of a hypothesis (SC06-S1C1-02)</p> <ul style="list-style-type: none"> - Describe how scientific knowledge is subject to change as new information and/or technology challenges prevailing theories. (SC06-S2C2-02) - Describe the use of technology in science-related careers. (SC06-S2C1-04) 	
	<p>Forest scavenger hunt</p>	<ul style="list-style-type: none"> - Group will perform a Nature Scavenger Hunt. Rather than collecting objects, they will be capturing items on paper. The hunt will help participants discover how much they have in common with the natural world and how the natural world influences their survival. - For every item, participants will describe the object and list: Things people Have in Common with the object; How the nature object is related to the participant (i.e. tree and people have outer coverings, both need water; tree produces oxygen we breathe). - Follow map, use resource guide for ID, collect data, map data, teamwork challenge 	<ul style="list-style-type: none"> - Interpret simple displays of data including double bar graphs, tally charts, frequency tables, circle graphs, and line graphs. (M06-S2C1-03) - Answer questions based on simple displays of data including double bar graphs, tally charts, frequency tables, circle graphs, and line graphs. (M06-S2C1-04) - Construct maps, charts, and graphs to display geographic information (SS06-S4C1-01) - Keep record of observations, notes, sketches, questions, and ideas using tools such as writing and/or computer logs (SC06-S1C2-05) 	<p>Life Science Geography</p>

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

12:15pm	Lunch			Hungerology	
1:00pm	Station: Adventures in Gravity	Rappelling	The most powerful adventure of the trip. Our experts train and guide the students through the exhilaration of going over the edge. A real break-through moment for students who think they “can’t” in life. Follow up discussion to parallel the achievement with their lives.	- Illustrate how positive health behaviors can prevent common injuries, diseases and conditions (1CH-E1 PO1)	Comprehensive Health
		(optional) Rock wall / rock climbing	Challenge strength and balance on a 3-story climbing wall.	- Participate in physical activities with others regardless of diversity and ability (6PA-E3)	Comprehensive Health
2:45pm	Station: Survivor – Lost Canyon (select any two options)	Survivor challenge	Team challenges at multiple stations. Winning teams gain hints, immunity and advantages. - Build a shape using string, metric measuring tape, compass and instructions. (orienteering, math, teamwork) - Conservation, recycling - Quiz/activity stations	- Create a list of instructions that others can follow in carrying out a procedure (SC06-S1C4-04) - Write a variety of functional texts (e.g., directions (W06-S3C3-01) - Determine a linear measurement to the appropriate degree of accuracy (M06-S4C4-03) - Measure angles using a protractor (M06-S4C4-04) - Convert within a single measurement system (U.S. customary or metric) (M06-S4C4-05) - Perform measurements using appropriate scientific tools (SC06-S1C2-04)	Math Geometry Writing Geography
		Survival skills	Learn life-saving wilderness survival tactics. What to do, where to go, what to eat. Safety, nutrition, first aid, amazing tips and tricks.	- Identify emergency preparedness and emergency resources (2CH-E5) - Perform basic safety, first aid and life saving techniques (3CH-E6)	Life Science
		Lost! (Canyon)	Emergency Planning/simulation	- Describe how people plan for, and respond to natural disasters (SC06-S3C1-02)	Comprehensive Health Science
			Scenario Type 1: Choose Survival Equipment - Your plane crashed...your group	- Create a list of instructions that others can follow in carrying out a procedure	Social Studies

Grand Canyon Outdoor Education Program – Example Curriculum Matrix

			needs to choose the 12 most useful items to survive... -Safety, planning, group decision making, emergency response and preparedness	(SC06-S1C4-04) - Cooperate with a group to achieve group goals in competitive as well as cooperative settings (5PA-E3) - Display sensitivity to the feelings of others during interpersonal interaction (6PA-E2 PO1) - Demonstrate cooperation (through verbal and nonverbal behaviors) with peers of different gender, race and ethnicity in a physical activity setting (6PA-E2 PO2)	
4:15pm	Open camp	Fellowship, relationship building, energy burn			- Participate in activities both in and out of school based on individual interests and Capabilities (3PA-E2 PO1)
6:45pm	Dinner				
7:30pm	All-camp meeting	Skits, songs, motivational speaker	- Video of the day, trivia, review games and keynote speaker. - Life choices, social responsibility, healthy active lifestyle, motivational stories for life success	Subject determined by School. (academic, motivational, ethical, cultural, etc) Example: Illustrate the harmful effects of use of tobacco, alcohol and other drugs (1CH-E1 PO2)	Review, Comprehensive Health, Personal Responsibility, Funology
8:45pm	Bonfire	Bonfire Indian Dance			Funology Arts - Perform dances from a variety of cultures. (A06-S2C2-201)
10:00pm	Travel Log / Lights out			Nonfiction writing that describes, explains, informs, or summarizes ideas and content. (W06-S3C2)	Writing