Mission Impossible: seQRet treasure hunt
Picking the Path

Name:_____ Date:_____
Partners:_____

Land Suggestions	Plant Suggestions	Animal Suggestions
1. Background / history about our Preserve 2. Balcones Canyonlands Preserve 3. Edwards Aquifer 4. Texas Wildscapes school yard habitat 5. Texas Highland Lake System (and how our pond system reflects that system) 6. Erosion prevention areas 7. Prairie system 8. Woodland habitat 9. Butterfly habitat 10. Rabbit garden 11. Brush Fence System (provides a system for smaller / prey type animals). 12. Soil generator 13. Observation area	1. Wildflowers 2. Grasses 3. Trees 4. Pond Plants 5. Shrub 6. Vines 7. Cactus	1. Golden-cheeked warbler 2. Residential birds in our Preserve 3. Summer migratory birds (we have a sheet with all pictures you can use as part of your research) 4. Winter migratory birds (we have a sheet with all pictures you can use as part of your research) 5. Butterflies (we have a sheet with all pictures you can use as part of your research) 6. Amphibians like frogs and tadpoles (we have a sheet with all pictures you can use as part of your research). 7. Reptiles in the Preserve (we have a sheet with all pictures you can use as part of your research) 8. Mammals – We have student research projects you can use for animals such as foxes, deer, skunk, ring-tailed cats, rabbits, road runners, coyotes, wild pigs, possum, raccoons, etc.)

Rubric

	Area of Study	Excellent (3)	Satisfactory (2)	Needs Improvement (1)	Score
Plain text summary of research in QR Code (Land)	Quality of research summary	Clear, concise, thorough message based on existing or new research; 3+ facts related to the clue	Includes 1–2 facts from research	Unrelated to research / clue was based on personal observation	
	Sentence structure and formatting	Complete, proper and diverse use of complex sentences	Clear, and simple	Fragmented	
	Grammar and spelling	Proper and correct	Adequate, few errors	Several errors	
	Directions to get to next clue	Very clear and easy to follow	Able to determine, but not clear	Not clear and/or difficult to follow	
Plain text summary of research in QR Code (Plants)	Quality of research summary	Clear, concise, thorough message based on existing or new research; 3+ facts related to the clue	Includes 1–-2 facts from research	Unrelated to research / clue was based on personal observation	
	Sentence structure and formatting	Complete, proper and diverse use of complex sentences	Clear, and simple	Fragmented	
	Grammar and spelling	Proper and correct	Adequate, few errors	Several errors	
	Directions to get to next clue	Very clear and easy to follow	Able to determine, but not clear	Not clear and/or difficult to follow	
Plain text summary of research in QR Code (Animals)	Quality of research summary	Clear, concise, thorough message based on existing or new research; 3+ facts related to the clue	Includes 1–2 facts from research	Unrelated to research / clue was based on personal observation	
	Sentence structure and formatting	Complete, proper and diverse use of complex sentences	Clear, and simple	Fragmented	
	Grammar and spelling	Proper and correct	Adequate, few errors	Several errors	
	Directions to get to next clue	Very clear and easy to follow	Able to determine, but not clear	Not clear and/or difficult to follow	
Artifact	Artifact	Appropriate letter embedded and identified in clue	Letter included, but not identified and/or properly formatted	No artifact included in clue	

Outdoor work / Overall Participation	Demonstration of Safety Skills and Practices	Positive attitude; Contributes to wellbeing and safety of others and the environment.	Understands the basic requirements and avoids creating unsafe situations.	Disregard for safety rules and practices	
	Contribute to Mission of Cluster Experience	Enthusiastic and encouraging towards others who might need assistance	Positive attitude; generally helpful	Not engaging team concept; shows little interest in helping others	
	Environmental Respect / Ecological Impact	Engaged and proactive conduct to maintain and improve the Preserve and promotes safety of all participants	Understands general concepts related to the relationships in the Preserve	Shows disregard for environment; too loud; not timely	
Oral Presentation at Showcase	Knowledge of Subject Matter	Student could easily recite 3+ facts related to research about the clue and connect that clue to others in the Preserve	Student could recite 1–3 facts related to research about the clue	Student could not relate facts related to the clue; student's comments were based on personal experience	
Technology	Creation of QR Codes	Pleasant, effective use of technology	Functional use of technology	QR Code did not link through to research and/or improper size/color for the page	
	Photograph and slide formatting	Good photograph of subject matter, impressive layout	Either photograph and/or layout was improper for the clue	Neither photograph nor layout was appropriate for the clue	

SAFETY PRACTICES FOR OUT-OF-DOORS:

1. Teachers should always visit out-of-doors areas to review potential safety hazards prior to students carrying out activities.
2. Keep clear of out-of-doors areas when may have been treated with pesticides, fungicides and other hazardous chemicals.
3. When working out-of-doors, students should use appropriate personal protective equipment or PPE including safety glasses or safety goggles (when working with hazardous chemical), gloves, close toed shoes, hat, long sleeve shirt and pants, sunglasses and sun screen protection. When working near deep water, use life preservers or other floatation devices.
4. Caution students relative to poisonous plants (ivy, sumac, etc.), insects (bees, wasps, ticks, mosquitoes, etc.) and hazardous debris (broken glass, other sharps, etc.).
5. Caution students about trip/fall hazards like rocks, string/rope, etc. when walking out-of-doors.
6. Teachers need to inform parents in writing of on-site field trips relative to potential hazards and safety precautions being taken.
7. Teachers need to check with school nurse relative to student medical issues; e.g., allergies, asthma, etc. Be prepared for medical emergencies.
8. Teachers need to have a form of communications available such as a cell phone or two-way radio in case of emergencies.
9. Wash hands with soap and water after doing activities dealing with hazardous chemicals, soil, biologicals (insects, leaves, etc.) or other materials.
10. Be certain to contact be main office prior to bringing classes out of the building for science activities.
11. Wash hands with soap and water after returning to the classroom from out-of-doors activities.