



The *Amanah* (Trust)

The Lesson Plan and Nature-based activities
were developed by Ruba Hinnawi and Dr. Logan Robert Cochrane



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April 2025

About Earthna

Earthna Center for a Sustainable Future (Earthna) is a non-profit policy, research, and advocacy organization, established by Qatar Foundation to promote and enable a coordinated approach to environmental, social, and economic sustainability and prosperity.

Earthna is a facilitator of sustainability efforts and action in Qatar and other hot and arid countries, focusing on sustainability frameworks, circular economies, energy transition, climate change, biodiversity and ecosystems, cities and the built environment, and education, ethics, and faith. By bringing together technical experts, academia, government and non-government organizations, businesses and civil society, Earthna fosters collaboration, innovation, and positive change.

Using their home - Education City - as a testbed, Earthna develops and trials sustainable solutions and evidence-based policies for Qatar and hot and arid regions. The organization is committed to combining modern thinking with traditional knowledge, contributing to the well-being of society by creating a legacy of sustainability within a thriving natural environment.

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PI: EEF-2025-04



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Task 1

The *Amanah* (Trust)

Task 1: Before You Begin:



To teach the Islamic value of **Amanah** (Trust) it is crucial to examine its definition from the central source of Islam which is the Holy Book Quran. The **Amanah** (Trust) is a value that allows students to realize their vocation as part of an interconnected ecosystem and thus take the responsibility to protect the nature and the biodiversity of Qatar and its endangered animals.

Defining **Amanah** (Trust)

In defining the term **Amanah** (Trust), according to Islam, one Quranic verse that mentions **Amanah** (Trust) is as Allah said; “Truly, We did offer the **Amanah** (Trust) to the heavens and the earth, and the mountains, but they declined to bear it and were afraid of it. But humanity assumed it for they are truly wrongful to themselves and ignorant of the consequences.”¹

إِنَّا عَرَضْنَا الْأَمَانَةَ عَلَى السَّمَوَاتِ وَالْأَرْضِ وَالْجِبَالِ
فَأَبَيْنَ أَنْ يَحْمِلْنَهَا وَأَشْفَقْنَ مِنْهَا وَحَمَلَهَا الْإِنْسَانُ
إِنَّهُ كَانَ ظَلُومًا جَهُولًا
سورة الأحزاب، آية ٧٢

Amanah requires people to act with integrity and responsibly, in everything that they do. This verse covers all aspects of life, including one's relationship with all species and the environment, which includes acting as a steward of the creation. With **Amanah** (Trust), comes responsibility, that is the freedom of choice given to humans, as they are the only creatures who have been blessed with the knowledge and wisdom to understand the creation of the world.

Linguistically, the root of the word **Amanah** (Trust) comes from the word **Al-amn**,

which refers to someone who feels secure from the mistreatment of others and the protection of their rights². The enactment and embodiment of stewardship of the environment and all species has many examples from the teaching of Prophet Muhammad (peace be upon him). Everyone is taught to value and respect the environment and its resources. For example, precious natural resources should be taken care of and not wasted; as he (peace be upon him) stated that even if one makes ablutions in a flowing river, was should not be wasted³. Stewardship entails actions beyond conservation, it also includes rehabilitation and regeneration, as he (peace be upon him) said: “If any Muslim plants a tree or sows a field and a human, bird, or animal eats from it, it shall be reckoned as charity from him.”⁴

Muslim scholars have interpreted the verses about **Amanah** as being general, meaning that the trust each person has applies even in the small actions. This includes everyday actions, such as what we choose to buy and how we handle our garbage. We can choose to manage these decisions responsibly or not. From a Muslim perspective, this **Amanah** (Trust) is more than actions, **Amanah** is linked to, and is an expression of, faith (**iman**), with **Amanah** (Trust) having connectivity to and a linguistic root of faith (**iman**). All of the choices each of us make are related to the responsibility of **Amanah** (Trust), and from an Islamic perspective all of us will be asked about all of the choices we made.

¹ Quran, 33:72

² Shuhari, M. H., Hamat, M. F., Basri, M. N. H., Khairuldin, W. M. K. F., Wahab, M. R., Alwi, E. A. Z. E., & Mamat, A. (2019).

Concept of al-**amanah** (trustworthiness) and al-mas' uliyyah (responsibility) for human's character from ethical Islamic perspective. *J. Legal Ethical & Regul. Issues*, 22, 1.

³ Mishkat al-Masabih 427, Book 3, **Hadith** 132

⁴ Sahih al-Bukhari **Hadith** 2320.

Task 1: Before You Begin



On the day of judgement, Allah will ask every human being about how they used Allah's blessings in the world as revealed in the verse from the Quran, "Then you will be asked about all the pleasures (you enjoyed in the world)"⁵.

ثُمَّ لَتُسْأَلُنَّ يَوْمَئِذٍ عَنِ النَّعِيمِ
سورة الكوثر ، الآية ٨

The call for stewardship, trust and responsibility by Allah is balanced with consequences for those who cause harm; Allah warns in the Quran, "Do not make mischief on earth after it has been set in order. And call upon Him with hope and fear. Indeed, Allah's mercy is always close to the good-doers."⁶

وَلَا تُفْسِدُوا فِي الْأَرْضِ بَعْدَ إِصْلَاحِهَا وَادْعُوهُ خَوْفًا وَطَمَعًا إِنَّ رَحْمَتَ اللَّهِ قَرِيبٌ مِّنَ
الْمُحْسِنِينَ
سورة الأعراف آية ٥٦

In the above verse Allah is referring to the order and balance He created on earth including the natural environment and how humans should protect it. The importance of this Amanah (Trust) and responsibility cannot be understated. For example, on one occasion the Prophet (peace be upon him) was speaking with one of his companions about the treatment of animals, which he stated, "There is a reward in doing good to every living thing."⁷ As the State of Qatar is guided by Islamic values in its Constitution and the Qatar

National Vision, it is expected that all of us do our best to enact these actions to protect, preserve and promote the environment and its biodiversity.

Environmental Framework

Biological diversity (or Biodiversity), as per the Convention on Biological Diversity, refers to "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexities of which they are part; this includes diversity within species, between species and of ecosystems."⁸ All living things form part of biodiversity, and this is translated in the Quran with numerous references to several species. From 114 surahs (chapters) in the Quran, six are titled after animals: "Al-Baqarah (the cow), Al-Anam (the cattle), Al-Nahl (the bee), Al-Naml (the ants), Al-Ankabut (the spider), and Al-Fil (the elephant)"⁹ and as reported by Tlili¹⁰ around thirty animal species are highlighted in different Quranic surahs (chapters). However, only one surah (chapter) holds a plant name, "Al-Tin" (the fig) but research has shown that there are 22 plants branched from 17 families that are stated in the Quran.¹¹ Many of these species are visible in the Quranic Botanical Garden in Education City. All of these references to animals and plants within the Quran signify the importance of all living things as part of the creation of Allah and that it is our duty to co-exist with the creations of Allah in order to protect the biodiversity of the world.

Moreover, the Quran implies that nonhuman species are not just worthy because they are part of the creation of Allah, they are also worthy of conservation due to their values and ecological services essential for the well-being of all other

⁵ Quran, 102:8

⁶ Quran, 7:56

⁷ Sahih Bukhārī Hadith 646.

⁸ Mai, L. L., Owl, M. Y., & Kersting, M. P. (2005). *The Cambridge dictionary of human biology and evolution*. Cambridge: Cambridge University Press.

⁹ Solihu, A. K. H. (2014). Valuing Biodiversity: A Qur'anic Account. *International Journal of Environmental Science and Development*, 5(3), 244.

¹⁰ Tlili, S. (2012). *Animals in the Qur'an*. Cambridge University Press.

¹¹ Khafagi, I., Zakaria, A., Dewedar, A., & El-Zahdany, K. (2006). A voyage in the world of plants as mentioned in the Holy Quran. *International Journal of Botany*, 2(3), 242-251.

Task 1: Before You Begin

creations. The Quran describes nonhuman species with a communal word “*umam*” a plural form of *ummah* (communities). This is reflected in the below verse of the Quran:

“There is not an animal (that lives) on the earth, nor a being that flies on its two wings, but (forms part of) communities like you”¹²

وَمَا مِنْ دَابَّةٍ فِي الْأَرْضِ وَلَا طَائِرٍ يَطِيرُ بِجَنَاحَيْهِ إِلَّا أُمَمٌ
أَمْثَالُكُمْ مَا فَرَّطْنَا فِي الْكِتَابِ مِنْ شَيْءٍ ثُمَّ إِلَىٰ رَبِّهِمْ
يُخْشَرُونَ
سورة الأنعام، آية ٣٨

This verse implies that every creature has a purpose in this world and plays a role in the biodiversity ecosystem. Other than creating the nonhuman species, they are also guided by Allah¹³ and hence they strive for the common good and fulfil their purpose given by Allah on this planet earth. Therefore, in this intricate web of coexistence and interdependence, as humans, we must practice the value of *Amanah* (Trust) and preserve the natural ecosystem created by Allah as a sign of obedience to Allah by doing the utmost good to all of His creation.

¹² Quran, 6:38

¹³ Quran, 20:50



Blue-Rock Thrush by Hamad Al Khulaifi
Photo Source: <https://themarkaz.org/>



Abdurrahman & Muslimin. 2020.

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Task 2

In classroom activities
6-9 years

Introduction:

The value of *Amanah* (Trust) is reflected in the story of Prophet Nuh (peace be upon him) and his ark journey.

Prophet Nuh's Story:

Islam teaches that everything bestowed upon a human being in this world is an *Amanah* (Trust) granted by Allah, and it is our obligation to preserve these blessings. On the Day of Judgment, we will be held accountable for the enjoyment of these blessings, as stated in the Quran: "Then you will be asked about all the pleasures (you enjoyed in the world)."¹⁴

ثُمَّ لَتُسْأَلُنَّ يَوْمَئِذٍ عَنِ النَّعِيمِ
سورة الكوثر ، الآية ٨

Every creation in the world, including our souls, bodies, intellect, provisions, homes, wealth, clothing, animals, and every other form of blessing, is an *Amanah* (Trust) given to us by Allah."¹⁵

Animals serve as an essential pillar for maintaining the stability of the biosphere's balance because they are crucial elements in the system that supports life in the environment. In this intricate web, the malfunctioning or absence of one species can trigger a decline in the overall health of the ecosystem. Humans are an integral part of this food system and rely on its functioning because every aspect of the ecosystem is necessary to maintain biodiversity and humans are commanded to fulfill their *Amanah* (Trust) by showing responsibility in preserving Allah's creation. Thus, humans are commanded to fulfil their *Amanah* (Trust) by acting responsibly in protecting and preserving Allah's creation.

In Islam, Prophet Nuh (peace be upon him) is known for his unwavering trust in Allah and his sense of responsibility. His story shows his obedience in building an ark, even without any visible signs of a flood. This context illustrates the importance of *Amanah* (Trust) to divine commands. Moreover, it emphasizes the significance of valuing and protecting every component of

the ecosystem, from the smallest organisms to the largest, as they were protected and preserved by the ark. Each organism plays a vital role in sustaining the biodiversity of the ecosystem. Prophet Nuh recognized the necessity of preserving biodiversity to maintain the equilibrium of the food system on Earth. From his example, we learn that it is our responsibility to protect biodiversity and protect all species from **extinction**.

In Qatar, numerous animals are at risk because of human activities and environmental changes. One of these animals is the dugong, and Qatar is home to the world's second-largest population of these marine mammals. Dugongs play a vital role in Qatar's ecosystem, and research is underway to protect them from extinction, as they are listed as '**vulnerable**' by the International Union for Conservation of Nature. To gain insight into Qatar's biodiversity and conservation efforts, students can visit the Qatar National Museum and explore the rich history and culture of Qatar. Within the animals' section, an exhibit features an extinct dugong, highlighting the urgency of protecting these creatures before they face extinction like the one on display. This captivating experience emphasizes the *Amanah* (Trust) that Allah has placed on us to preserve all animals, stimulating positive actions for environmental conservation.

Description of Prophet Nuh

The Quran has a whole chapter dedicated to the story of Prophet Nuh's Ark in Surah Nuh.¹⁶ Prophet Nuh (peace be upon him) is one of the first Messengers who was sent to humanity.¹⁷ "Nuh was a pious and generous man; he was intelligent and forbearing, compassionate and sincere. He was truthful and trustworthy and known for giving good counsel".¹⁸ Prophet Nuh was appointed as a Messenger within his community to guide the people to worship only Allah.



¹⁴ Quran, 102:8

¹⁵ Ibn Kathir, 1999, vol. 8, p. 477

¹⁶ Quran, 71:28

¹⁷ Quran, 3:33, *Tafsir*, Ibn Khatir

¹⁸ Sayyid Abul Hasan Ali Nadwi, "Stories of the Prophets," (Leicester: UK Islamic Academy, 1994), 14.

Introduction:



Prophet Nuh's Ark

To love Allah, it is essential to acknowledge and appreciate His magnificent creation. In a similar spirit, Prophet Nuh (peace be upon him) called his people to love Allah, prompting them to reflect on the beautiful creation, especially the intricate design of the seven heavens arranged in layers.¹⁹

أَلَمْ تَرَوْا كَيْفَ خَلَقَ اللَّهُ سَبْعَ سَمَوَاتٍ طِبَاقًا
سورة نوح، آية ١٥

As explained in the Quran, Prophet Nuh (peace be upon him) was called by Allah to build an ark, which would be used to protect all species:

“Allah commanded Prophet Nuh to build an ark. He instructed him to choose a pair of every living creature with a soul and include human beings who believe in Allah to board on the ship.”²⁰

Key Takeaway:

Humans have been entrusted to care for the ecosystem and with that power comes the responsibility to contribute to efforts to preserve all animals and all living organisms.

Extinct species occurs when there are no more individuals of that species alive anywhere in the world - the species has died out.

Vulnerable and **Endangered Species** are a type of organism that is threatened by extinction. Species become endangered for two main reasons: loss of habitat and loss of genetic variation

Summary:

- All living organisms are important: Prophet Nuh (peace be upon him) preserves biodiversity by bringing pairs of every living species onto the ark, illustrating the significance of all living organisms in maintaining a healthy and balanced ecosystem.
- **Amanah** (Trust): Prophet Nuh (peace be upon him) trusts Allah by not questioning his command in building an ark, even though there was no sign of a flood.
- Responsibility: Prophet Nuh (peace be upon him) shows responsibility and fulfills the **Amanah** (Trust) by constructing the ark on time, saving the animals and righteous people from the flood.

حَتَّىٰ إِذَا جَاءَ أَمْرُنَا وَفَارَ التَّنُّورُ قُلْنَا احْمِلْ فِيهَا مِنْ كُلِّ زَوْجَيْنِ اثْنَيْنِ وَأَهْلَكَ إِلَّا مَن سَبَقَ عَلَيْهِ
الْقَوْلُ وَمَنْ ءَامَنَ وَمَا ءَامَنَ مَعَهُ إِلَّا قَلِيلٌ
سورة هود، آية ٤٠

Allah fulfilled his promise to Prophet Nuh (peace be upon him), and the flood began. The Quran says:

So, We opened the gates of the sky with pouring rain, and caused the earth to burst with springs, so the waters met for a fate already set. We carried him on that 'Ark made' of planks and nails, sailing under Our 'watchful' Eyes—a 'fair' punishment on behalf of the one 'they' denied. Punishment on behalf of the one 'they' denied.²¹

فَفَتَحْنَا أَبْوَابَ السَّمَاءِ بِمَاءٍ مُّنْهَمِرٍ
وَفَجَّرْنَا الْأَرْضَ عُيُونًا فَالْتَقَى الْمَاءُ عَلَىٰ أَمْرٍ قَدْ قُدِرَ
وَحَمَلْنَاهُ عَلَىٰ ذَاتِ الْأَلُوحِ وَدُسِّرُ
تَجْرِي بِأَعْيُنِنَا جَزَاءً لِّمَن كَانَ كُفِرَ
سورة القمر، آية ١١-١٤

¹⁹ Quran, 71:15

²⁰ Quran, 11:40

²¹ Quran, 54:11-14

Introduction:



Age Group: Eco-Schools 6-9 years old

Eco-Schools Steps: Environmental review, Action plan, curriculum linkages, inform and involve, Monitoring and evaluate.



Objectives:

Students will be able to:

- Foster an understanding of *Amanah* (Trust), what it means and how it can be applied in real life.
- Describe the story of Prophet Nuh (peace be upon him) as an example to reflect the value of *Amanah* (Trust)
- Explain how the organisms in Qatar are *Amanah* (Trust).
- Develop awareness about the role of humans towards Allah's creation.

Time required/ Duration:

Classroom Session 1: 50 minutes

- Introduction (10 minutes):
 - Begin with a brief overview of the concept of *Amanah* (Trust) using examples based on real-life situations.
 - Introduce the story of Prophet Nuh's Ark as an example of *Amanah* (Trust) and responsibility.
- Exploring Unique Organisms in Qatar (10 minutes):
 - Describe the unique organisms in Qatar and how the value of *Amanah* (Trust) and responsibility is connected to it.
 - Conduct the "Guess the Organism" activity.
- Reflection on *Amanah* (Trust): (10 minutes)
 - Students write one paragraph on *Amanah* (Trust) focusing on the story of Prophet Nuh (peace be upon him).
 - Include a photo of an organism they would choose to protect and why.
- Individual Responsibility Action Cards: (10 minutes)
 - Distribute responsibility action cards
 - Ask students to pick one action they can take individually in the class, at home and in their neighborhood.
- Conclusion (10 minutes)
 - Summarize key points about *Amanah* (Trust)
 - Ask the students to share their action cards to reflect on individual and collective actions to fulfill their responsibility.
 - Wrap up the lesson with a brief reflection on the impact of their actions in protecting Allah's creation.
- Note to Facilitator:
 - It is left up to the facilitator's discretion to extend the timings as needed to allow students to better assimilate the information and to properly devise positive actions.

Environmental Review:

Resources Required: “Before-you-begin”:

Key concepts: Overview of the unique organisms that are found in Qatar through the lens of the *Amanah* (Trust) value.

Online Resources

- Brainstorm with the students in identifying unique organisms found in Qatar, including oryx, falcon, Sidra, flamingo, desert hedgehog, whale shark, dugong, honey badger, and Hawksbill turtle. Discuss with students why they are important for the ecosystem, which human activities threaten the condition of the ecosystem, and what we can do to raise awareness and protect them.

- Resource 1: Guess the organism worksheet.
- Resource 2: *Amanah* and your favorite organism
- Resource 3: Action Card.
- Student stationary, pencils, colored markers, scissors
- Dedicated Display board



Sidra Tree
Photo Source: <https://www.freepik.com>

Action Plan:



Action Plan 1

- Discuss with the students how the value of *Amanah* (Trust) is shown in the story of Prophet Nuh (peace be upon him) and his Ark Journey.
- Prophet Nuh and his Ark Story short video:

Students need to make the connection that Prophet Nuh's Ark story is the same as our efforts to save endangered species and protect biodiversity.

Action Plan 2

- Use The Dugong Video:
- To demonstrate to the students the physical features of a dugong and its importance in the Ecosystem of Qatar.
- To showcase and provide ideas to the students of the possible positive actions they can take individually and as a school to raise awareness about dugongs.

Action Plan Activity 1

- Provide the students with resource 1: "Guess the organism worksheet".
- Reflection: Ask the students why they think animals were saved and how they benefit our ecosystem.

Action Plan Activity 2

- Use Resource 2: "*Amanah* and your favorite organism", ask the students If they had the chance to choose an organism to save, which organism would they choose and why? Include a photo for the organism and ask them to relate this to the *Amanah* value.
- Use Resource 3: "Action card" and ask the students to pick one responsibility action card that they can take individually in their daily lives.

Action Plan:



3. Curriculum Linkages: Environmental Science, Science, Ecology, Conservation, Arts & Craft, Islamic Studies.

4. Inform and Involve

- Students' work should be displayed on the Eco-Schools bulletin board as part of informing and involving the school community.

Evaluation:

- Assess the accuracy of the responses in the worksheets related to *Amanah* (Trust)
- Evaluate how well students can apply the concept of *Amanah* (Trust) to their everyday life and how they understand their responsibility towards Allah's creation and local organisms in Qatar.
- Observe students' active participation throughout the activities.

Resource 1

Guess the organism.

1. I am the national animal of Qatar, one of the four species of antelope that lives in Qatar's desert and I am native to the Arabian Peninsula. I have lengthy spear like horns and beautiful eyes.
2. I am a hook beaked and sharp visioned bird with strong talons. I am the national bird of Qatar. I am considered as a symbol of strength, grace, and nobility as I supported the Qatari people survival as I helped them with hunting.
3. I am the national tree of Qatar. I grew in the deserts of Qatar for generations with roots that reach deep into the earth. I produce fruit and leaves that heal and are rich in nutritional value.
4. I am a large bird with pink peak, long legs, large wings and short tails. I visit Qatar every year during the winter season during my migration journey, my favorite resting spot is Al Thakira mangrove forest and the Purple Island in Qatar. I feed on fish and crustaceans.
5. I am a marine mammal known as the sea cow. I am in the Arabian Gulf in the last 7,500 years ago. I eat seagrass, I have small eyes, but my hearing is sharp so that I can communicate using my chirps and squeaks that travel through water.
6. Qatar beaches are my favorite nesting habitat. I help to maintain the coral reef health by removing prey such as sponges. I am heavy, around 50 kg and have a pointed beak, same as the birds. I lay eggs on the same beach I hatched on.



KEY
1. The Arabian Oryx

2. The Falcon

3. The Sidra

4. The Flamingo

5. The Dugong

6. The Hawksbill Turtle


Resource 2



Amanah (Trust) and Your Favorite Organism.

Add a photo for your favorite organism.

I will fulfill the *Amanah* value by caring for _____,
because _____

Resource 3

Responsibility Action Card:

I will be a part- time or full- time vegetarian to reduce my carbon footprint.



I will stop using single use plastic to not pollute our oceans and seas.



I will plant more trees and shrubs to increase biodiversity in Qatar



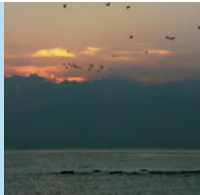
I will buy local and organic vegetables and fruits to reduce my carbon footprint



I will buy products that I can reuse so that I save our natural resources.



I will spend more time in nature to learn about the unique environment around me.





Task 2

**In classroom activities
10-13 years**

Introduction:

The narrative of Prophet Ibrahim (peace be upon him) and his son's intended sacrifice embodies the value of *Amanah* (Trust).

Prophet Ibrahim's Story:

Allah's creation, in all its forms, is respected by Muslims as it is a sign of the power and mercy of *Allah*. *Allah* referred to humans as stewards (*khalifa*) with a responsibility to care for all creation, including animals, regardless of the benefit they provide to humans. *Allah* created the world in balance, therefore, it is vital to preserve and respect the harmony of the ecosystem's balance.²²

"Do they not see that We singlehandedly created for them, among other things, cattle which are under their control? And We have subjected these "animals" to them, so they may ride some and eat others. And they derive from them other benefits and drinks. Will they not then give thanks?"²³

أَوَلَيْكَ يٰرَبُّنَا أَنَّا خَلَقْنَا لَهُمْ مِمَّا عَمِلَتْ أَيْدِينَا أَنْعَمًا فَهُمْ لَهَا مَالِكُونَ
وَذَلَّلْنَاهَا لَهُمْ فَمِنْهَا رَكُوبُهُمْ وَمِنْهَا يَأْكُلُونَ
وَلَهُمْ فِيهَا مَنَافِعُ وَمَشَارِبٌ أَفَلَا يَشْكُرُونَ
سورة يس، آية ٧١-٧٣

This Quranic verse highlights the magnificent creation of *Allah* and how merciful He is to humanity in terms of provision and its numerous blessings. In this verse, "cattle" is a depiction of sacrifice for the benefit of humans. *Allah* has created everything in the world with a sense of balance. It is humanity's *Amanah* (Trust) on Earth to preserve this natural balance among all creations. As mentioned in the Quran, "Lo! We have created everything by measure."²⁴

إِنَّا كُلَّ شَيْءٍ خَلَقْنَاهُ بِقَدَرٍ
سورة القمر، آية ٤٩



The balance indicates that Earth's creations are formed with predetermined proportions and ratios to conserve biodiversity. In maintaining the equilibrium of the ecosystem, *Allah* created this balance within a circular system as energy transfers from one organism to the other across different food webs. While many of the organisms are not directly part of the food chain that humans consume, they indirectly play an important role in maintaining the health of the whole ecosystem which humans rely on for their survival and thus reflected on the health and wellbeing of individuals.

Amanah (Trust) and Reserves

All of *Allah's* creation play an important and unique role in their ecosystems to maintain its balance. One species in Qatar, the Arabian Oryx, is an endangered species and the nation of Qatar is dedicated to protecting it. The preservations of Qatar are in line with the international conservation initiatives to protect endangered species. Collectively, these efforts play a significant role in preserving the biodiversity of the world. The Arabian Oryx is a national animal of Qatar and preserving the Oryx also holds cultural value for the country to uphold the cultural heritage and indicates the association between the people and the environment to conserve biodiversity.

Reintroducing native species plays a key role in re-establishing ecosystem functions. One of the important positive roles that the Oryx plays is **seed dispersal**, which has been threatened by the declines in animal populations, limiting the potential for plants to adapt to climate change. Especially, the

²² Quran, 6:38

²³ Quran, 36: 71-73

²⁴ Quran, 54:49

Introduction:

Arabian Oryx are the key dispersers of seeds of *Vachellia tortilis* (which is commonly found in Qatar). Reintroducing a native organism to an ecosystem nourishes the whole ecosystem by increasing the biodiversity in which serves as an important **climate change mitigation** strategy.²⁵

To gain insight into Qatar's biodiversity and conservation efforts, students can visit the Al Samriya Oryx Reserve situated in Al Shahaniya and explore the natural surroundings of endangered animals and learn how they are preserved in Qatar. They will express appreciation for Allah's creation and exercise the value of *Amanah* (Trust) by protecting endangered animals like the Arabian Oryx.

Prophet Ibrahim's Sacrifice Story

Prophet Ibrahim (peace be upon him) had a dream that Allah had ordered him to sacrifice his only son, Ismail. The next day, Prophet Ibrahim informed Ismail about the dream and he accepted Allah's command.²⁶ Together, they strode to the valley of Mina, however Allah sent the Angel Jibril with an alternative.²⁷

"Thus have we subjected there (animals) to you so that you may express your gratitude"²⁸

وَالْبُدْنَ جَعَلْنَاهَا لَكُمْ مِّنْ شَعَائِرِ اللَّهِ لَكُمْ فِيهَا حَيْرٌ فَاذْكُرُوا اسْمَ اللَّهِ عَلَيْهَا صَوَافٍ فَإِذَا وَجَبَتْ جُنُوبُهَا فَكُلُوا مِنْهَا وَأَطِيعُوا الْقَانِعَ وَالْمُعْتَرَّ كَذَلِكَ سَخَّرْنَاهَا لَكُمْ لَعَلَّكُمْ تَشْكُرُونَ
سورة الحج، آية ٣٦

Sacrificing an animal for Allah's sake allows us to express our gratitude for the blessings we have received and to appreciate Allah's creation of the



Acacia Tortilis

https://www.floraofqatar.com/acacia_tortilis.htm

world and everything in it. The actions of Prophet Ibrahim (peace be upon him) and his son are the basis of a major annual tradition. The sacrifice is celebrated every year during Eid Al-Adha and Hajj to commemorate the Amanah of Prophet Ibrahim (peace be upon him). The animals that can be sacrificed are usually a sheep, goat, camel, or a cow. The meat is distributed equally to the poor, relatives, and the family itself. Hence, sacrificing an animal teaches not only about devotion to Allah, but also about fulfilling societal responsibilities and a commitment to giving back to the community. Animal sacrifices at Eid Al-Adha and the Hajj, in line with Islamic teachings, require people to share the meat with the poor, fostering social responsibility and creating a bridge of unity across diverse social classes.

²⁵ Sustainable Qatar, chapter: Terrestrial Biodiversity in Arid Environments: One Global Component of Climate Crisis Resilience. https://link.springer.com/chapter/10.1007/978-981-19-7398-7_13

²⁶ Quran, 37: 102

²⁷ Quran, 37: 107

²⁸ Quran, 22:36

Introduction:



Key Takeaway:

All organisms, including animals, play an essential role in sustaining communities and maintaining nature's balance.

Climate change mitigation: Involves reducing the flow of heat-trapping greenhouse gases into the atmosphere, either by reducing sources of these gases (for example, the burning of fossil fuels for electricity, heat, or transport) or enhancing the “sinks” that accumulate and store these gases such as forests and oceans.

Seed dispersal: Seed dispersal is the mechanism by which plant seeds are transported to new sites for germination and the establishment of new individuals. Animals commonly mediate this process, and consequently, the ultimate fate of seeds depends on their effectiveness as seed dispersers. In the case of oryxes, oryx-ingested seeds planted with oryx pellets had a germination success 250 times higher than non-ingested seeds planted without pellets.

Summary:

- *Amanah (Trust)*: Prophet Ibrahim (peace be upon him) trusted Allah's command, demonstrating the level of obedience that people should be encouraged to exhibit when faced with challenges.
- Responsibility: Prophet Ibrahim (peace be upon him) accepted the responsibility of the trust that was placed by Allah and acted according to his command. This indicates that people should be aware of their responsibilities in their lives and should play their part to fulfill their responsibility.
- The sacrifice of an animal represents the importance of natural balance. Animals' purpose in the world is to contribute to the sustenance of communities, and therefore, every creature has a role to contribute to the health of our planet.
- Balanced use of resources: Prophet Ibrahim (peace be upon him) equally divided the meat so that no portion of the animal went to waste. This shows the importance of taking responsibility for resource management to reduce waste.

Introduction:



Age Group: Eco-Schools 10-13 years old

Eco-Schools Steps: Environmental review, Action plan, curriculum linkages, inform and involve, Monitoring and evaluate.



Objectives:

Students will be able to:

- Foster an understanding of *Amanah* (Trust), what it means and how it can be applied in real life.
 - Describe the story of Prophet Ibrahim (peace be upon him) as an example to reflect the value of *Amanah* (Trust) in light of gratitude and moderation.
 - Explain how the organisms in Qatar are an *Amanah* (Trust).
 - Explain the importance of nature conservation efforts for climate resilience and ecosystem balance.
 - Develop awareness about the role of humans towards Allah's creation.
 - Arabian Oryx in Qatar and the reservation initiatives impact (10 minutes):
 - Provide information about the Arabian Oryx and how it is important for the ecosystem.
 - Poster Creation (20 minutes):
 - Students in groups to create posters focusing on the Arabian Oryx and *Amanah* (Trust).
 - Reflection: 5 minutes
 - Wrap up the lesson with key takeaways and summary points.
 - Note to Facilitator:
 - It is left up to the facilitator's discretion to extend the timings as needed to allow students to better assimilate the information and to properly devise positive actions.
- ## Time required/ Duration:
- Classroom Session 1:** 50 minutes
- Introduction (5 minutes):
 - Briefly introduce the concept of *Amanah* (Trust) relating it to real-life situations.
 - Introduce the interconnected relationship between organisms and their contribution to nature balance. (10 minutes)
 - Discuss how the underpopulation or overpopulation of an organism in an ecosystem disturbs its balance.

Environmental Review:

Resources Required: “Before-you-begin”:

Key concepts: Overview of the *Amanah* (Trust) value to achieve nature balance. Introduce human efforts to protect wildlife such as the Arabian Oryx in Qatar to fulfill the *Amanah* (Trust) value.

Online Resources

- Discuss with the students the unique organisms found in Qatar, including the Arabian Oryx. Discuss with students why they are important for the ecosystem. Which human activities threaten the balance of the ecosystem, and what we can we do to raise awareness and protect them.
- Resource 1: Bring back order to our desert poster.
- Student stationary, pencils, colored markers, scissors
- Dedicated Display board



Action Plan:



Action Plan 1

- Screen the film: How Introducing Wolves Saved This Ecosystem by Sir David Attenborough.
 - Discuss with the students that Allah created the world in balance and any disruption to this balance affects all creatures.
 - Share with the students some human activities that might cause the disruption of any ecosystem. Such as overhunting, pollution, climate change, unsustainable human developments.

Action Plan 2

- Use the Arabian Oryx Video to explain about the characteristics of an Arabian Oryx and its significance in Qatar and relating it back to how it is our Amanah (Trust) to protect it.
 - To showcase and provide ideas to the students of the possible positive actions they can take individually and as a school to raise awareness about Arabian Oryx.

Action Plan Activity 1&2

- Discuss with the students how the value of Amanah (Trust) is used to bring a balance to the ecosystem.
- Ask the students to use Resource 1: Bring back order to our desert, to illustrate how they can apply their knowledge to raise awareness about Oryx in their community.
 - Poster Content:
 - Focusing on the delicate desert ecosystem, introduce the Oryx and show the impact of this introduction to the ecosystem.
 - What is the students' responsibility to protect the Arabian Oryx
 - What does the Amanah (Trust) value mean to them?

Action Plan:



3. Curriculum Linkages: Environmental Science, Science, Values, Islamic studies, Art.

4. Inform and Involve

- Student posters and short presentations can be showcased on the Eco-Schools bulletin board to inform and involve the whole school community.

Evaluation:

- Assess the content of the posters to determine how well students synthesized information on *Amanah (Trust)* value and the Arabian oryx.
- Evaluate how well students can apply the concept of *Amanah (Trust)* to their everyday life and how they understand their responsibility towards Allah's creation and local organisms in Qatar.
- Observe students' active participation throughout the activities.



Sand Gazelle or Reem

Photo Source: <https://www.enature.qa/specie/sand-gazelle-or-reem/>

Resource 1



Bring Back Order to our Desert.

- Provide a large poster of a desert photo and ask students in groups to re-introduce the oryx.
- After students reintroduce the oryx, ask them to show, on the poster, the impact of the introduction on the ecosystem with justification. Students can relate to the increase in biodiversity, new food webs, natural resources, climate change, temperature and precipitation, organism survival, etc.
- On the poster, highlight human responsibility to support and maintain the balance of the new ecosystem.



Oryx
Photo source: freepik.com



Task 2

In classroom activities
14-17 years

Introduction:

The narrative of Prophet Sulaiman (peace be upon him) and his encounter with ants embodies the value of *Amanah* (Trust).

Prophet Sulaiman's Story:

As *Allah's* stewards on earth, humans are called to act responsibly and uphold the *Amanah* (Trust) given to them by *Allah*. This is demonstrated by the responsibility every person has to choose to do good and be of upstanding moral character. The hierarchy of human responsibilities is as follows: *Allah*, self, society, and the natural environment.²⁹ *Amanah* (Trust) leads to accountability and on the Day of Judgment, every human being will be assessed for her/his *Amanah* (Trust) in the following ways: what s/he did with her/his life, use of knowledge, source of wealth and how it was spent, and how s/he used his physical and mental abilities³⁰. Unlike other creations, humans have been blessed with the tools for acquiring knowledge, as revealed in the Quran, "And *Allah* has brought you out from the wombs of your mothers while you knew nothing. And he gave you hearing, sight, and hearts that you might give thanks (to *Allah*)."³¹

وَاللَّهُ أَخْرَجَكُمْ مِنْ بُطُونِ أُمَّهَاتِكُمْ لَا تَعْلَمُونَ شَيْئًا وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ
لَعَلَّكُمْ تَشْكُرُونَ
سورة النحل، آية ٧٨

By using these tools, humans can fulfill their *Amanah*, (trust) by learning about *Allah's* creation, applying that knowledge to their everyday lives, and in showing gratitude for *Allah's* blessings. This value of gratitude is embodied in the Quran by Prophet Sulaiman (peace be upon him) in an encounter with nature. This prophetic story revealed Prophet Sulaiman's blessing and helps remind us to be thankful to *Allah*, realizing that a species as seemingly insignificant as an ant is invaluable to the system of biodiversity.³²

²⁹ Naser, 2004 as cited in Abdurrahman & Muslimin, 2020

³⁰ Al-Darimi A. M., 1987, vol. 1, p. 144, no. 537 as cited in Islam & Samsudin, 2018

³¹ Quran, 16:78

³² Quran, 27:16

Prophet Sulaiman and The Ant Story:

Allah blessed Prophet Sulaiman (peace be upon him) with the ability to communicate with animals and birds. The Quran states: "And Sulaiman inherited David. He said, "O people, we have been taught the language of birds, and we have been given from all things. Indeed, this is evident bounty."³³

وَوُورِثَ سُلَيْمَانُ دَاوُدَ وَقَالَ يَا أَيُّهَا النَّاسُ عُلِّمْنَا مَنْطِقَ الطَّيْرِ وَأُوتِينَا مِنْ كُلِّ شَيْءٍ إِنَّ هَذَا
لَهُوَ الْفَضْلُ الْمُبِينُ
سورة النمل، آية ١٦

One day, Prophet Sulaiman (peace be upon him) was marching across a valley with his army and he suddenly heard a strange voice. An ant was calling to other ants: "O ants, return to your homes, before Sulaiman and his army accidentally crush you."³⁴

حَتَّىٰ إِذَا أَتَوْا عَلَىٰ وَادِ النَّمْلِ قَالَتْ نَمْلَةٌ يَا أَيُّهَا النَّمْلُ ادْخُلُوا مَسْكِنَكُمْ لَا يَحْطِمَنَّكُمْ سُلَيْمَانُ
وَجُنُودُهُ وَهُمْ لَا يَشْعُرُونَ
سورة النمل، آية ١٨

Witnessing this incident, Prophet Sulaiman (peace be upon him) smiled. It acted as a reminder to him that he was blessed with the unique ability to understand the language of any creature on earth. This prompted him to express gratitude to *Allah*, thanking him for His favors. As a further expression of gratitude, Prophet Sulaiman (peace be upon him) instructed his army to change their direction and be cautious of not stepping on the ants. This is recounted in the Quran:

³³ Quran, 27:17

³⁴ Quran, 27:18



Introduction:

“So [Solomon] smiled, amused at her speech, and said, “My Lord, enable me to be grateful for Your favor which You have bestowed upon me and upon my parents and to do righteousness of which You approve. And admit me by Your mercy into [the ranks of] Your righteous servants.”³⁵

فَتَبَسَّمَ ضَاحِكًا مِّن قَوْلِهَا وَقَالَ رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ الَّتِي أَنْعَمْتَ عَلَيَّ وَعَلَىٰ وَالِدَيَّ
وَأَنْ أَعْمَلَ صَالِحًا تَرْضَاهُ وَأَدْخِلْنِي بِرَحْمَتِكَ فِي عِبَادِكَ الصَّالِحِينَ
سورة النمل، آية ١٩

Amanah (Trust) and Gratitude

The story of Prophet Sulaiman (peace be upon him) and his expressing of gratitude after an interaction with ants shows that humans can learn valuable lessons from all different types of creation. For instance, ants, which are deemed to be intelligent and efficient, inspire biomimicry, particularly in the use of the ant colony optimization approach in the fields of engineering and technology. Also, another model of humans learning from Allah's creation is through bee biomimicry. The bee's efficient technique of carrying pollen illustrates Allah's purposeful design of His creation, teaching humans to live in harmony with nature. By applying these biomimicry lessons, humans fulfill their Amanah (Trust) from Allah, showing responsibility in acquiring and utilizing knowledge from Allah's creation. These examples of biomimicry highlight that the simplicity of certain organisms reveals Allah's power, acting as Ayah, evidence of His greatness.

To gain insight into Qatar's biodiversity and conservation efforts, students can visit the Heenat Salma Farm, situated in Al Shahaniya and explore the sustainable farming practices. This farm promotes communal living and has a range of activities for students to show their love and appreciation towards the creation of Allah. This captivating experience will remind students of the Amanah (Trust) that Allah has placed on us to preserve all animals, stimulating positive actions for environmental conservation.



³⁵ Quran, 27:19

Introduction:



Key Takeaway:

Appreciate Allah's creation as *Ayah* (evidence) and learn from it.

Biomimicry: is a practice that learns from and mimics the strategies found in nature to solve human design challenges.³⁶

Summary:

- *Amanah* (Trust): Prophet Sulaiman (peace be upon him) held the *Amanah* (Trust) of understanding other creature's language. The ants prompted him to reflect and accept Allah's *Amanah* (Trust), showing gratitude for his blessings.
- Responsibility: The gratitude led the Prophet to act responsibly by changing his army's direction and not stepping on the ants. This underlines that it is crucial to be just and kind to all forms of creation.
- Highlights the importance of respecting all kinds of creation in Islam. Focuses on ants as an example, exhibiting that every living creature, regardless of its size, has a purpose in the natural ecosystem. We should fulfill Allah's *Amanah* (Trust) by showing responsibility to preserve biodiversity.
- Highlights the significance of learning about nature and observing the behavior of creatures to learn from them to live in harmony with nature.
- Introduces the term biomimicry and applying it in real-life situations.

³⁶ <https://biomimicry.org/what-is-biomimicry>

Introduction:



Age Group: Eco-Schools 14-17 years old

Eco-Schools Steps: Environmental review, Action plan, curriculum linkages, inform and involve, Monitoring and evaluate.



Objectives:

Students will be able to:

- Foster an understanding of *Amanah* (Trust), what it means and how it can be applied in real life.
- Describe the story of Prophet Sulaiman (peace be upon him) as an example to reflect the value of *Amanah* (Trust) that leads to acting responsibly towards creation.
- Explain how the organisms and creations are *Ayah* (evidence) in which we need to learn from for a sustainable life.
- Develop awareness about the role of humans towards *Allah's* creation.

Time required/ Duration:

Classroom Session 1: 50 minutes

- Introduction (5 minutes):
 - Briefly introduce the concept of *Amanah* (Trust), relating it to real-life situations.
 - Describe the Prophet Sulaiman's story in relation to *Amanah* (Trust)
- What does nature mean? (10 minutes)
 - Explain that nature is the creation of *Allah*. Every creation is evidence of its creator. We need to observe and learn from nature as it offers us solutions to many challenges.
 - Explain science and nature relationship. How to avoid a materialistic view and build a meaningful relationship with nature.

- Biomimicry (10 minutes):
 - Explanation of the term biomimicry
- Poster Creation (20 minutes):
 - Students in groups to use Resource 1: Product X, to create posters focusing on biomimicry and *Amanah* (trust)
- Reflection: 5 minutes
 - Wrap up the lesson with key takeaways and summary points.
- Note to Facilitator:
 - It is left up to the facilitator's discretion to extend the timings as needed to allow students to better assimilate the information and to properly devise positive actions.

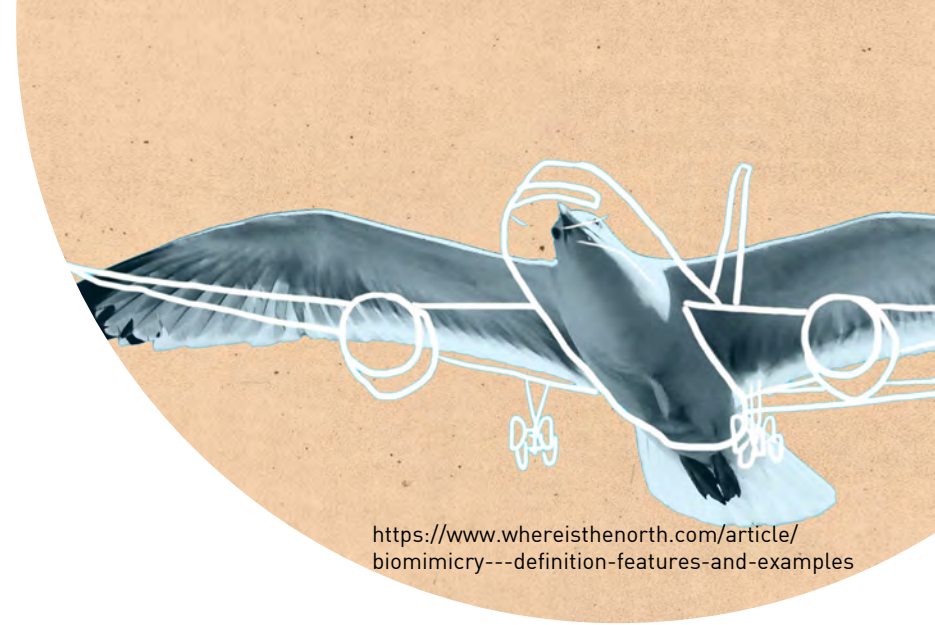
Environmental Review:

Resources Required: “Before-you-begin”:

Key concepts: Overview of the *Amanah* (trust) value towards *Allah's* creation and the potential to learn from the creation to live a sustainable life. Create a meaningful relationship with nature.

Online Resources

- Brainstorm with the students, considering the *Amanah* (Trust) value, creation-human relationship. Discuss with students how we can nurture these relationships for the health of all ecosystems. Discuss how we can learn from creation to live a more sustainable life and thus what we can do to raise awareness and protect nature.
 - Resource 1: Design product X poster based on organism anatomy and/or behavior.



Action Plan:



Action Plan 1

- Share with the students, Semiotics on Nature: Recharging the World with Meaning by Dr. Recep Senturk.
- Discuss with the students their understanding of the content. Explain to the students that nature and creatures are signs of the Creator.
- How the understanding of science and nature do not require a materialist view of nature, rather to understand that science demonstrates Allah's greatness and reveals the depth of meaning contained in nature.
- Students need to understand that creation including organisms live in communities the same as humans. However, they learned by Allah to live gracefully on the planet.
- Screen the film: what does Islam have to say about the environment. By Shaykh Abdal Hakim, Murad.

Action Plan 1 Activity 1

- Ask the students to write a short paragraph that reflects their understanding of the book shared. The paragraph is to reflect their understanding of the relationship between humans and nature and how science can fit in to form a meaningful relationship and serve sustainable developments.

Action Plan:



Action Plan 2

- Screen the film: Biomimicry in Action by Janine Benyus.
- Explain the concept of biomimicry using the video and how it can be applied in the real world to solve many challenges. Creation is true *Ayah* (evidence)_of *Allah's* power and beauty in which we need to investigate and learn from to live in harmony with nature and for sustainable developments.

Action Plan 2 Activity 2

- Share with the students how humans can learn from organisms, ants, to create sustainable developments.
- Use Resource 1: Design Product X. Ask Students to design “Product X” that is inspired from nature to solve an environmental challenge we face in Qatar. Connect the solution to an organism behavior /anatomy and connect your product to verses from the Quran.

3. Curriculum Linkages: Environmental Science, Science, Islamic Values, *Amanah* (trust or responsibility)

4. Inform and Involve

- Product X Posters should be displayed on the Eco-Schools bulletin board as part of the inform and involve step to educate the other students about solutions inspired by nature to solve our daily challenges.

Evaluation:

- Assess the content of the posters and presentations to determine how well students synthesized information on *Amanah* (trust) value and the concept of biomimicry.
- Evaluate how well students can apply the concept of *Amanah* (Trust) to their everyday life and how they understand their responsibility towards *Allah's* creation and local organisms in Qatar.
- Observe students’ active participation throughout the activities.

Resource 1



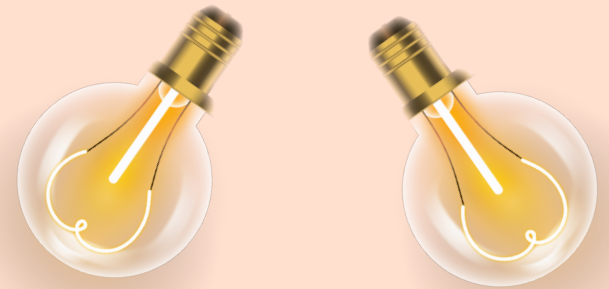
DESIGN AN INVENTION

The Product X Invention

Product name

Challenge

Inspired by





Task 3

Nature-based Activities 6-9 Years

6-9 Years

The activities are developed in a way to enhance students' understanding of the unique characteristics of the Dugongs with a hands-on experience to the Qatar National Museum.

- The activities are designed to take place in the Qatar National Museum.
- Students will develop practical skills for nature exploration, field work, nature protection and conservation.
- Students will be able to articulate the inner workings of this ecosystem, and to transfer this knowledge to their peers, family, and community.

Time required/ Duration:

Field Session 1: 5 hours

(2 hours to travel to/from the field location, 2 hours and 20 minutes for the activities, 40 minutes for lunch, supervised downtime, and a restorative action such as a cleanup of the area). It is left up to the facilitator's discretion to extend the timings as needed.

Resources Required:

"Before-you-begin": Resources

Lesson Plan: Unique organisms in Qatar



Online Resources:

Best Practices:

- **Risk Assessment:** The chosen location has been risk assessed and meets the following safety criteria:
 - Can be safely accessed by school bus
 - Is distant from anthropogenic activities such as construction and vehicular traffic
 - Near to hospitals.
- In the absence of a professional tour guide, it is highly advisable that faculty pay a site visit prior to the school field trip, to get acquainted with the surroundings, and identify and mitigate risks that may have arisen in the time since the location was first risk assessed.

Personal Safety:

- Field excursions can be very demanding in terms of energy expenditure, especially in extreme climates like the Arabian Gulf, where there is a risk of heat exhaustion.
- It is imperative that faculty and students carry with them all items listed under "Field preparedness"; that the airconditioned school bus is always near in case a participant needs reprieve from the heat or to be transferred to the emergency room. A well-stocked First Aid Kit is essential as well.
- Field preparedness:
 - Hat
 - Sunscreen
 - Water (2 liters per person)
- Field equipment: A device to take photographs; writing pads; Drawing pads; pens; colored pencils;

Activity:

Field Session 1: The National Museum of Qatar

Title of the Activity: sit and spot

- Connect the knowledge they gained in class to what they see in the field setting.
- Ask the students to explore the Museum and observe the surroundings for 1 hour,. Students should use all of their senses to wonder and ponder what they are experiencing.
- Students can use the following questions to guide them through this reflection activity:
 - What did you see?
 - Why are Dugongs important to Qatar?
 - What is it like to be a Dugong?
 - What caused the dugong to end up as skeleton?
 - Why is it your *Amanah*/responsibility to raise awareness on Dugongs?
 - What can you do to spread this message to the community?
 - What living and nonliving things are displayed in the Museum?
- Sit in a circle with the students and discuss their observations and reflections.
- Ask the students to cross compare their observations.
- Did they find any similarities? Which elements were different?



The National Museum of Qatar

Resource 1

Resource 1: The National Museum of Qatar

Location of the National Museum of Qatar.

Coordinates:

25° 17' 18.35" N

51° 32' 57.12" E



Photo Source: Google Earth

Resource 2



Resource 2: Dugong Post Card



Dear Dugong,

You are unique, because.....

And I will take care of you by.....

By,

Name.....

The background features abstract yellow line art on a light blue background. It includes a large, sweeping arc on the left, a circle on the right, and a shape at the bottom that resembles a stylized 'U' or a container.

Task 3

Nature-based Activities

10-13 Years

10-13 Years

These activities aim to deepen the students' understanding of the unique characteristics of the Arabian oryx through hands-on experiences at the Al Samriya Oryx Reserve in Al-Shahaniya.

In this protected reserve, students will observe oryx in their natural habitat, prompting reflection on the knowledge acquired during classroom activities. They will express appreciation for Allah's creation and exercise the value of *Amanah* (Trust) by protecting endangered animals like oryx.

To arrange a visit, teachers must book in advance using the provided link below:

Time required/ Duration:

Field Session 1: 5 hours

(2 hours to travel to/from the field location, 2 hours and 20 minutes for the activities, 40 minutes for lunch, supervised downtime, and a restorative action such as a clean-up of the area). It is left up to the facilitator's discretion to extend the timings as needed.

Resources Required:

"Before-you-begin": Resources

Lesson Plan: Oryx

Online Resources:



Best Practices:

- **Risk Assessment:** The chosen location has been risk assessed and meets the following safety criteria:
 - Can be safely accessed by school bus
 - Is distant from anthropogenic activities such as construction and vehicular traffic
 - Near to hospitals.
- In the absence of a professional tour guide, it is highly advisable that faculty pay a site visit prior to the school field trip, to get acquainted with the surroundings, and identify and mitigate risks that may have arisen in the time since the location was first risk assessed.

Personal Safety:

- Field excursions can be very demanding in terms of energy expenditure, especially in extreme climates like the Arabian Gulf, where there is a risk of heat exhaustion.
- It is imperative that faculty and students carry with them all items listed under "Field preparedness"; that the airconditioned school bus is always near in case a participant needs reprieve from the heat or to be transferred to the emergency room. A well-stocked First Aid Kit is essential as well.
- Field preparedness:
 - Hat
 - Sunscreen
 - Water (2 liters per person)
- Field equipment: A device to take photographs; writing pads; Drawing pads; pens; colored pencils.

Nature Protection:

The goal of the field trip is to instil in the students a deep founded respect for nature, in addition to enhancing students' understanding of this ecosystem. It should be conveyed to the students that the best explorers preserve nature by respecting it and not feeding the Oryx. A golden rule of explorers is to leave nature in the same or in a better state than when they first arrived. Use the motto "pick up your trash, keep nature clean".

Activity:

Pre-Field Trip Preparation:

- Ask students to take a photo of the posters prepared in the classroom. The poster reflected the students' perception on the balance Oryx created to the ecosystem when it was introduced to the reserve.

Introduction to the Oryx Reserve:

- Gather students and introduce them to the Al Samriya Oryx Reserve.

Guided Tour:

- Provide a brief overview of the reserve's mission and the importance of preserving the Oryx.
- Engage students in a guided tour of the reserve.
- Explain the natural habitat of the oryx, their behavior and their importance in Qatar's ecosystem.
- Encourage students to ask questions during the tour.
- Ask the students to note down information about the Oryx behavior, habitat features, other protected species in the area and any key observations.
- Ask students to compare their perception on the balance Oryx created for the ecosystem with what they observed in the reserve. Such as plants, insects, birds, etc.
- Ask the students to add to their poster, their observations and reflections.

Inform and Involve:

- Conclude with a discussion of students reflecting on how it is their *Amanah* (Trust) to protect the endangered animals and plants. Discuss with students how preservation efforts reflect the value of *Amanah* (Trust) where humans practice Gratitude towards Allah and his creation.



Oryx

Resource 1

Coordinates:

51° 15' 43" E



Photo Source: Google Earth



Task 3

Nature-based Activities

14-17 Years

14-17 Years



These activities aim to deepen students understanding of the sustainable farming and biodiversity through a field trip to Heenat Salma Farm.

In this farm, students will explore the farm to understand how they are organically promoting biodiversity without any harmful intervention, reflecting on the knowledge acquired during classroom activities. They will express appreciation for Allah's creation and exercise the value of *Amanah* (Trust) by hands-on activities at the farms.

To arrange a visit, teachers must book in advance using the provided link below:

Time required/ Duration:

Field Session 1: 5 hours

(2 hours to travel to/from the field location, 2 hours and 20 minutes for the activities, 40 minutes for lunch, supervised downtime, and a restorative action such as a clean up of the area). It is left up to the facilitator's discretion to expand the timings as needed.

Resources Required:

"Before-you-begin": Resources

Lesson Plan: Ages 14-17

Online Resources:

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Activity:

Pre-Field Trip Preparation:

- Introduction: Brief overview of sustainable farming, biodiversity, and a reminder on the value of *Amanah* (Trust).
- Guided tour of the Agri Education Tour
 - Interact with farmers to understand their farming practices.
 - Explore how fruits and vegetables are grown organically and how they are promoting biodiversity.
- Guided tour of the Harvesting Tour
 - Interact with farmers to understand their farming practices.
 - Explore the various vegetable produces and students will hand-pick their organic produce.
- Divide students into groups to discuss:
 - Ecosystem and the roles played by different species in that ecosystem.
 - Discuss the *Amanah* (Trust) value considering what have been learned about the agroecological cultivation techniques³⁷ practiced in the farm.
 - Ask students to list the techniques that can be applied at their school grounds to increase biodiversity.

Inform and Involve:

- Conclude with a discussion with students reflecting on how it is their *Amanah* (Trust) to protect the endangered animals and students can later write these reflections which can be displayed on the school's Eco-Schools bulletin board.

³⁷ Agroecology: is sustainable farming that works with nature. Ecology is the study of relationships between plants, animals, people, and their environment - and the balance between these relationships. Agroecology is the application of ecological concepts and principals in farming. Principles such as elimination of chemical synthesised fertilisers and pesticides, and use of biodiversity-based solutions.



Resource 1

Location Map: Heenat Salma

Coordinates:

25° 23' 56.01" N

51° 15' 38.61" E

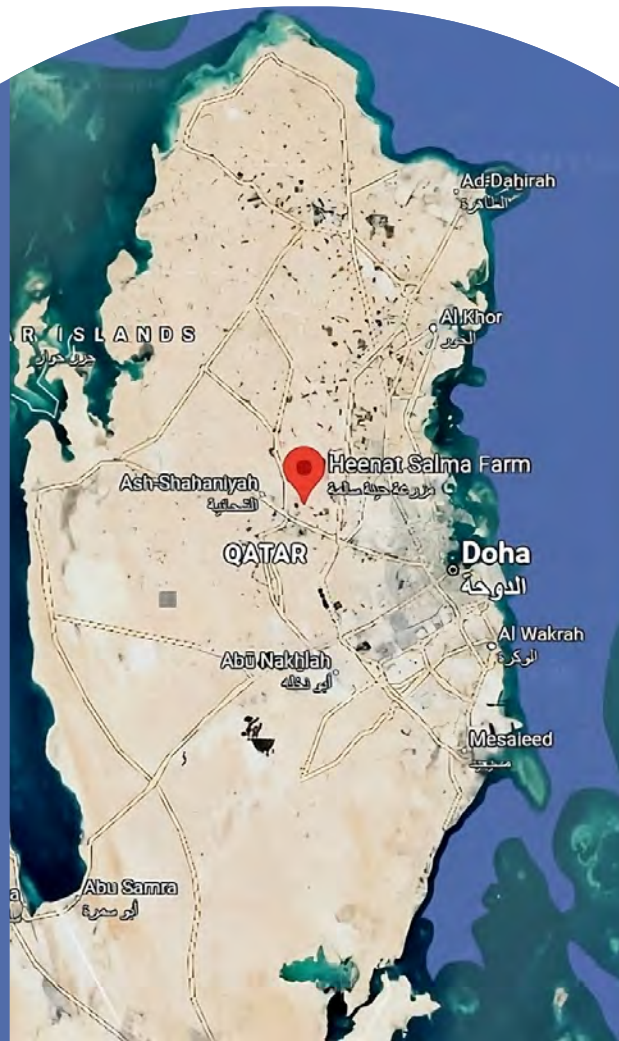


Photo Source: Google Earth



Resource 2: What can I start at my school?



WHY START A SCHOOL GARDEN

MY SCHOOL GARDEN PROPOSAL

HOW I WILL DO IT

QATAR ACADEMY SIDRA PRIMARY



Acknowledgment



Acknowledgment

The content of the lesson plans was reviewed and approved by the College of Islamic Studies in Hamad Bin Khalifa University The Dean Dr. Recep Senturk. Certain Arabic terms have nuanced meanings or synonyms that are collectively translated into English.

This research was conducted as part of the cluster project titled "SDG Education and Global Citizenship in Qatar: Enhancing Qatar's Nested Power in The Global Arena" Which is funded by the National Priorities Research Program (NPRP grant #12C-0804-190009)