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H.H. Shaikh Khalifa Bin Zayed Al Nahyan

President of the United Arab Emirates

“

“Extensive knowledge and modern science must be acquired. The educational process we see today is an ongoing escalating challenge which requires hard work. We succeeded in entering the third millennium, while we are more confident in ourselves.”

Quotes from H.H. Shaikh Khalifa Bin Zayed Al Nahyan

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Unit 1

Introduction to Global Ethics

Lesson 1 Global Ethics in the Context of Global Issues

Lesson 2 International Relations of the UAE

Lesson 3 Global Ethical Challenges

Lesson 4 World Moral Challenges

Lesson 5 Dealing with Global Ethical Challenges



What are Global Ethics and the
Global Ethical Challenges?

What is the external role of the UAE in the various international organisations and forums?

What are the most important ethical challenges faced by the global community?

How does the global community deal with the ethical challenges it is facing?

How can I face global ethical challenges individually and through group work?



Lesson 1

Global Ethics in the Context of Global Issues

Learning Outcomes:

- Explain what is meant by ethics and ethical enquiry in the context of international relations.

Vocabulary

moral imperative

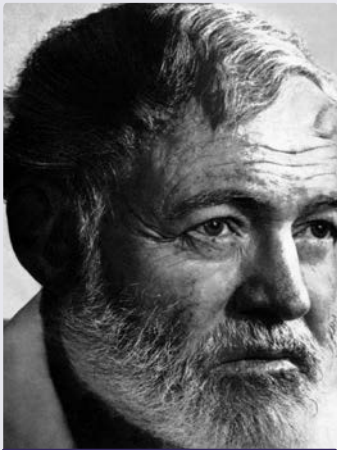
malnutrition

famine

water security

1 Read this quote by Ernest Hemingway and analyse the concept of an ethical action. Then suggest some actions you have done or could do that are moral actions.

“So far, about morals, I know only that what is moral is what you feel good after and what is immoral is what you feel bad after.”



Ernest Hemingway

2 Read the following passage about morality and discuss the points it makes.

Morals are deep-rooted values that result in actions - they can be positive and result in a good action, or negative and result in a bad action. Hence, morals play a significant role in building societies. They are the source of individuals' actions and they play a fundamental role in developing group empathy toward others and in regulating relationships among individuals. In turn, this reinforces societal ties and increases familiarity, cooperation, solidarity and strength.

Morals are also fundamental to society because laws and rules are based on them. This is the main element in creating upstanding citizens, wholesome families, sophisticated societies and developed countries. Morals protect societies from destruction and dissolution. Morals also maintain civility and civilization, which makes morals so important to a nation's development and strength. They are also a prerequisite for the sustainability of nations. Nation's morals minimise disputes and conflicts among people, which helps to reinforce relationships and social ties between the individuals of a society.

Such relationships were among the main reasons for establishing the United Nations Organisation, which works to spread peace and solidarity among people. Currently all recognised countries of the world are members of the UN, and their members work according to its founding principles.

- a. The sovereign equality of all its members.
- b. Goodwill towards the commitments made by members.
- c. Settle international disputes by peaceful means.
- d. Consult with the United Nations regarding any action countries intend to take.

a. Write about two ethical behaviours governing:

children in a public park	football fans at the stadium	student in extra-curricular activities	parents behaviour in front of their children.
.....

b. Imagine you are in a position where one of your classmates acts in an immoral manner.

Write a ten-sentence dialogue illustrating the situation, and your reaction.

3 Read and discuss a section of UNICEF's appeal regarding the most significant threats to the lives of millions of people in four different countries.

On 28 March 2017, UNICEF (United Nations Children's Fund) launched an urgent appeal to raise \$255 million dollars to respond to the urgent needs of children in the northeastern areas of Nigeria, Somalia, southern Sudan and Yemen. The spokesperson clarified, "We need this money to provide those children with food, water, health, education and protection services, during the next few months according to a new funding update."

A big part of such funding will be allocated to nutrition programs, and to provide medical care to children suffering from malnutrition, in addition to other health services, including vaccinations. The money will be also allocated to drinking water, sanitation systems, and to promoting cleanliness and hygiene advice for the protection against potentially fatal diseases.

UNICEF will work with partners in the four countries to respond to the threat of famine. In Northeast Nigeria, UNICEF will provide emergency primary health care to 3.9 million people this year and provide treatment for 220,000 children under the age of five who suffer from acute malnutrition. It will also provide more than 2 million people access to safe drinking water.

In Somalia, UNICEF supports 1.7 million children under the age of five including treating around 227,000 cases of severe malnutrition through health and nutrition services in health care facilities and mobile units.

In southern Sudan, UNICEF has provided, in collaboration with partners, life-saving aid for 145,000 people in areas affected or threatened by famine, including 33,000 children under the age of five.

In Yemen, UNICEF expanded the scale of its malnutrition response activity through healthcare facilities and mobile teams, and by deploying healthcare practitioners and volunteers who reach out to communities that are difficult to access.

UNICEF also supports children suffering from acute malnutrition and their families with cash assistance, water and sanitation services, including the provision of safe water and supplies and promoting hygiene. UNICEF, as usual, calls for the support of children and human rights and respect thereof.

UNICEF UN News Centre. "Famine, Drought and War Threaten Millions of People in Four States" 28 January 2017. (Edited)



UNICEF logo (United Nations International Children's Emergency Fund)

- Compare the situations of children in one of the countries mentioned in the text with the situation of children in the UAE, in terms of the following three aspects: healthcare, education and protection from danger.
- UNICEF seeks funding for programs to fight hunger and malnutrition, considered an international moral imperative. Carry out research about the UAE's contribution to the fight against hunger and malnutrition.

4 Read what was written in *Al Ittihad* newspaper about tolerance and peace in the UAE and then answer the questions that follow.

The approach of tolerance, peacefulness, civil coexistence and respect of beliefs adopted by the UAE stems from the legacy of its people. This approach contributed to establishing and strengthening its presence as a country that always seeks peace and supports efforts to reinforce and maintain peace. Tolerance, love and peace are principles upon which this approach depends. They serve the good of nations and stability across the region and the world.

The UAE is currently working on boosting means for reinforcing and strengthening humanitarian values shared by nations of the region based on tolerance, acceptance and respect of others, building and reinforcing trust, and maintaining the bonds of brotherhood, friendship and human coexistence among all societal groups in a friendly, tolerant and respectful environment

Al Ittihad newspaper website 25 April 2017. (Edited)

- Write about the way Sheikh Zayed, may God have mercy upon him, ruled the country. Describe his morals in dealing with citizens and residents and support your argument with examples.
- The value of tolerance builds community and protects people from extremism. Define four values that facilitate the relationship between citizens and residents, showing their importance in building a cohesive society.
- The Egyptian poet Ahmed Shawqi said,
"Nations live as long as they keep their morals. Once their morals cease, they cease to exist."

Paraphrase the lines and compare them to an essay in a newspaper.

5 Read the passage about the National Program Award for tolerance and discuss the points that follow.

National Program Award for tolerance

The United Nations General Assembly declared the year 1995 as a Year for Tolerance.

That Declaration stated, "The United Nations is committed to strengthening tolerance through reinforcing mutual understanding between cultures and peoples. This need lies in the essence of the Charter of the United States and also in the Universal Declaration of Human Rights."

In light of this commitment and in the same year, 1995, the UNESCO Member States adopted the Declaration of Principles on Tolerance.

The prize was inspired by the ideals mentioned in the UNESCO Constitution which states that "it is imperative that peace is based on the intellectual and moral solidarity of mankind."

In the same year the UNESCO-Madanjeet Singh Prize was also established to reinforce tolerance and non-violence, and to mark the United Nations Year for Tolerance and the 125th anniversary of the birth of Mahatma Gandhi.

The award is given every two years during an official ceremony marking the International Day of Tolerance. It is given as a reward to people, institutions or organisations that distinguished themselves by meritorious initiatives in particular, over the course of several years, designed to enhance understanding and resolve international or national problems in a spirit of tolerance.

Proceeding from that, in 1996 the General Assembly called on Member States to observe the International Day of Tolerance on 16 November, through appropriate activities directed towards both educational establishments and the wider public.

That is what happened in past years with the United Nations. On 8 June 2016, the Cabinet, headed by His Highness Sheikh Mohamed bin Rashid Al Maktoum, Vice President, Prime Minister and ruler of Dubai, adopted the National Tolerance Programme presented by Sheikha Lubna bint Khalid Al Quasimi, Minister of State for Tolerance, presenting "The Principles of Tolerance in Emirati Community" based on seven pillars: Islam; the UAE's Constitution; Zayed's legacy and ethics of the UAE; international conventions; archaeology and history; humanity; and common values. The programme stresses that authentic Emirati society will continue through these solid foundations to reinforce the values of tolerance, multiculturalism and acceptance of others. Emirati society will also continue to reject discrimination, hate and intolerance in ideology, education and behaviour.

The Emirati National Programme for Tolerance was launched on 26 October 2016, in response to the call by State Minister for Tolerance to participate in the initiatives and events designed to highlight the global status of the UAE as a tolerant country. It aimed to shed light on the leading role of the State, in terms of its leadership, government and citizens, in reinforcing common human values, on the local, regional and international arenas on the occasion of the International Day of Tolerance.

To elaborate, the National Tolerance Programme will work within five main subjects based on: strengthening the Government's role as an incubator of tolerance; strengthening the role of the family in society and promoting tolerance among young people; preventing intolerance and extremism; enriching scientific and cultural content; and contributing to international efforts to promote tolerance and highlighting the role of the State in this area.

National Tolerance Programme supports the State in implementing the UAE Vision 2021, and the national agenda, so as to create a cohesive society preserving its identity. This will launch targeted initiatives and national programmes in sequence, through the programme and working groups that will be formed in collaboration with the relevant main parties, such as celebrating the Week of Tolerance, and establishing a Council of Intellectuals for Tolerance and the Emirates Centre for Tolerance, in addition to launching the Cooperate Tolerance Responsibility programme and the UAE Charter of Tolerance Coexistence and Peace.

These many efforts, on many occasions and in various places that are different at the geographical level yet so close at the intellectual and humanitarian levels, work together to spread the message of global tolerance to all, across generations in all times and places.

Source: *Al Khaleej* newspaper website, National Programme for Tolerance Award, 15 November 2016.



- a. The United Nations Charter, the Universal Declaration of Human Rights, and UNESCO Declaration of Principles on Tolerance all call for tolerance among peoples.
 - Write a research paper concerning tolerance as mentioned in each of them and present it to your class.
 - Analyse the role of tolerance in facilitating international relations.
- b. Study the National Programme for Tolerance in the UAE. Prepare a collage of items of your choice.

6 #Dealing with international humanitarian problems is an international moral imperative.
Launch this as a hashtag# on one of the social media platforms and ask your classmates and teachers to leave their comments after you post your comment on the subject.

Lesson 2

International Relations of the UAE

Learning Outcome:

- Discuss the foreign relations of the UAE and its role in various international organisations and forums

Vocabulary

moral rules

globalisation

- 1** Look at the logos of the organisations and read their names. To which of those organisations do you think that the UAE belongs?



Logo of the Gulf Cooperation Council



Logo of the United Nations



Logo of the European Union



Logo of the Arab League

2 Read the statements of Sheikh Zayed bin Sultan Al Nahyan, may God have mercy upon him, and President Jimmy Carter regarding international relations and then answer the questions that follow.

The policy of the UAE internationally consolidates its relations with all states in the world according to the principles of equality, justice, mutual respect and love of good for all without exception.

Sheikh Zayed (may God have mercy upon him) said: "The UAE is keen on developing friendly relations with all countries of the world, as this benefits both the people of the UAE and the wider world."

The UAE supported the issues of rights and justice in the UN and other international institutions, which enabled it to assume an important role in establishing international relations that are based on peace and stability. Sheikh Zayed expressed that by saying: "The UAE's leading position in international organisations is the result of a moderate foreign policy that advocates truth and justice, adopts dialogue and understanding between brothers and friends, respects international conventions and laws, abides by the Charter of the United Nations, respects the rules of good neighbourliness, sovereignty and territorial integrity, does not interfere in the internal affairs of other nations, and endeavours to resolve disputes peacefully."

In 1978, during a meeting that took place in the White House to commemorate the 30th anniversary of the signing of the Universal Declaration of Human Rights, US President Jimmy Carter stated: "Human rights are the essence of our foreign policy, for they are equal to the essence of the nation itself."

- a. Compare Sheikh Zayed's words with what President Carter said about foreign policy.
- b. In your group, discuss the rights that you could claim as a member of the UN. Check your information online, and support your answer with examples.



Sheikh Zayed bin Al Nahyan,
(may God have mercy upon him)



President Jimmy Carter

3 Read about the collaboration between Japan and the UAE as an example of collaboration between countries. Then answer the questions that follow.

The Masdar Institute of Science and Technology and the University of Tokyo signed an agreement for academic and research collaboration, paving the way for many fruitful partnerships between the two parties.

The areas of the agreement include the exchange of researchers from among faculty members and graduate students, the conduct of joint research and seminars and the exchange of publications, information and research materials, as well as lectures and courses run by researchers and academics. The Masdar Institute in 2014 hosted three PhD students from the University of Tokyo.

The agreement with the University of Tokyo follows a number of cooperation projects established by the Masdar Institute throughout Asia, including the cooperation agreement with the Japan International Cooperation Center on its annual summer training programme and research cooperation agreements with Mitsubishi Heavy Industries.

Many leading Japanese companies participate in the summer training programme with the Masdar Institute. The Institute continues to play a vital role in supporting Masdar's vision and helping it achieve its objectives of helping the UAE and Abu Dhabi transform into a knowledge-based economy, as well as finding effective solutions to the most difficult challenges facing humanity, primarily climate change.

The Masdar Institute of Science and Technology and the Japan International Cooperation Center also signed an agreement setting out the framework of cooperation in annual training programmes and other collaborative activities at the World Future Energy Summit 2014 hosted by Abu Dhabi. The agreement, with all its articles, seeks to enhance cooperation between the Masdar Institute and the Center to implement the annual training programme and ensure that training programmes will include introductory courses on Japanese culture and language, while the final presentations will be given to students in Abu Dhabi.

As of 2014, faculty staff will be appointed to work with specialised companies to achieve the training objectives of each student in each category. This will enable students to work in companies related to their fields of research, directly benefitting their research activities at the Masdar Institute. In accordance with the agreement, many Japanese companies, in cooperation with faculty staff, will receive applications from students, prepare and schedule interviews and make final selections. Next year, more than one application is expected for each course. The companies will select the students who will participate in the training programme.

The years 2012 and 2013 witnessed effective cooperation between the Masdar Institute and the Japan International Cooperation Center in their summer training programmes, which are supported by the Ministry of Economy, Trade and Industry of Japan.

Emirates News Agency website, "Report: UAE-Japan relations undergo qualitative leap", 25 February 2014. (Cited)



Academic cooperation with Japan

- a. If you had the chance, would you have been interested in participating in a two-month training programme in Japan? Give reasons.
- b. Suggest four points on which to compare education in the UAE before and after the introduction of technology in the classroom, determining how students benefit from technology in learning.

4 What is the nature of EU foreign policy? Read the following text, and then answer the questions.

The EU is considered a key player on the global scene and it has security interests and responsibilities at both regional and global levels. Via its common foreign policy, the EU speaks in a unified voice with regards to the main international issues.

The EU plays a key role in world peace operations. It has soldiers, police officers and judges to help save lives, stabilise conflict-stricken countries and regions around the world, and provide emergency relief in the aftermath of disasters.

A common foreign and security policy has been adopted by the EU in light of several meetings and treaties that led to an agreement between the concerned countries on establishing a common European Council.

On 1 December 2009 the European Council appointed Catherine Ashton as the highest representative of the European Union's Security and Foreign Affairs Policy. She became the president of the European Council on Foreign Affairs and assumed responsibility for the

Department of Foreign Affairs and Joint Security Policy until 2014. After its establishment in 2011, the European Office of Foreign Services became an essential agency in helping the High Representative perform her tasks.

The goals of the common foreign policy include:

- Preserving the values of the EU, its basic and security interests, its independence and its integrity
- Promoting and supporting democracy, the rule of law, human rights and the principles of the international law
- Maintaining peace, avoiding conflicts and strengthening international security
- Helping citizens, countries and regions facing natural and man-made disasters

Quoting from www.eupolcopps.eu website (cited)



Flag of the United Nations and European Union

- a. Within the group, choose an example of an international union in the world, and list the benefits of this union and its impact on the foreign relations of countries. Then present your research to your classmates.

5 Read about customs agreements between two countries. And then answer the questions that follow.

Bilateral agreements on customs, and technical and administrative cooperation represent one of the core elements in the regional and international brief of the Federal Customs Authority (FCA). Regarding this brief, the FCA works from the basis that it is the official federal customs authority concerned with customs affairs. It also has international obligations as an active member in the World Customs Organisation, the World Trade Organisation and the international community.

Agreements on mutual technical and administrative cooperation in customs affairs are considered among the most important conventions underlined by the World Customs Organisation for several reasons:

- Effective agreements contribute to reduction of customs legislative violations that cause disruption of economic, commercial, financial, social and cultural interests of the two countries
- Its role in ensuring the exact calculation and collection of custom duties and other taxes and dues on exported and imported goods, as well as implementation of judgements related to prohibition, restriction and control
- Enforcement of actions against customs violations, in close cooperation between the two countries
- Putting an end to the increasing volume of illicit trafficking in narcotic drugs and psychotropic substances, which are a threat to public health and society
- Taking into account relevant international conventions that encourage bilateral mutual assistance, as well as the recommendations of the World Customs Organisation
- Enforcing customs cooperation in a way that serves the common interest and preparing an appropriate climate to facilitate and encourage trade exchange and economic relations in general between the two countries
- Consequent exchange of experiences and expertise between customs administrations of the two countries, especially in technical and administrative fields
- The need for international cooperation in matters relating to the management and application of the customs legislation of the two countries

The authority also seeks, through bilateral agreements, to embody and transform the goal that it has adopted as a motto since the beginning of its work: "Towards a secure society and fair trade". It seeks to make this a reality on the ground, through protecting the local community from the negative economic, social and health impacts of forged, counterfeit goods and others. Furthermore, the authority seeks to facilitate the movement of trade between the UAE and its trading partners around the world. International bilateral agreements aim to achieve both sides of the targeted customs equation.



- a. What's the role of customs in the economic cycle?
- b. Conduct research with your colleague about four countries that have a trade agreement with the UAE. What are the most important exports and imports with these countries?

Lesson 3

Global Ethical Challenges

Learning Outcomes:

- Name the key ethical challenges that humanity faces and master the methods of searching for advanced information about them (by using reliable sources on the Internet or elsewhere)

1 What are the challenges for global communities in the 21st century? Look at each of the three pictures and think about the saying that accompanies each one. How does each one make you feel? What do you think is the lesson or message?



"Climate change does not respect borders; it does not respect who you are - rich and poor, small and big. Therefore, this is what we call 'global challenges,' which require global solidarity."

Ban Ki-moon, Secretary-General of the United Nations, from 2007–2016



"Every positive value has its price in negative terms... The genius of Einstein lead to the tragedy of Hiroshima."

Pablo Picasso, a Spanish painter, (1881–1973)



"When the well is dry, we know the worth of water."

Benjamin Franklin, one of the Founding Fathers of the United States of America

2 Environmental problems - and global warming, in particular - are among the “global challenges” that the former Secretary-General of the United Nations, Mr. Ban Ki-moon, was talking about. Read the text about polar bears feeding on dolphins in the North Pole. Then complete the activity that follows.



During research in the Svalbard archipelago in Norway in April 2014, 1000 km from the North Pole, Jon Aars (from the Norwegian Polar Institute) monitored and photographed a bear feeding on white-beaked dolphins. This species of dolphins is not usually part of the diet of polar bears, which feed mainly on seals. Aars explained to Agence France-Presse that these dolphins are becoming part of the diet of the polar bears because of climate change. This is because, as the waters warm, new species are finding their way north. Despite the fact that the white-beaked dolphins swim in these northern waters during the summer after the melting of the ice, there are no previous records of these animals being in these areas during the winter.

According to the researchers, the significant reduction of sea ice—to the extent that it disappears from the areas where it is typically found in previous seasons—could be the reason why these dolphins were drawn to the area. As the waters cool and ice forms, the dolphins find themselves trapped under ice, with only small openings from which they can breathe.

Aars noted that the bear, which was apparently a hungry old male, most likely hunted the two dolphins when they surfaced to breathe through a tiny hole in the ice.

After these first observations, a further five cases of dolphins stranded or captured and then eaten by bears have been reported.

Aars added, “I don't think that this signifies a great change in the diet of this kind of animal. It's just that polar bears are coming into contact with species they have not been used to meeting until now.”

Oslo (AFP)

- a. The North Pole is far from the United Arab Emirates. Are you supposed to be interested in this issue? Conduct thorough research into the effects of the reduction of sea ice on the ecosystem. Then write a dialogue with a classmate who disagrees with you. Then present your dialogue to the class.

3 Why is climate change considered an ethical dilemma at the level of international relations?

Read the text to learn more. Then, complete the activity that follows.

Climate change causes ethical challenges in the international community for three reasons. First, it is a distinctively global phenomenon. As soon as greenhouse gases spread through the air, their impact on the climate of any place on Earth can no longer be prevented. Consequently, international positions arise indicating what is known as the 'Prisoner's Dilemma'. It is true that all countries, collectively, are keen to reduce the emissions of greenhouse gases with the aim of mitigating the risk of their impacts, but each country individually prefers to keep emitting the gases unconditionally and without restriction. At the same time, those affected by these gases are not equally affected. In the short- and the medium-term, most of the severely affected countries and peoples are those who, historically, emitted and are still emitting the least percentage of the greenhouse gases.

Second, current emissions have a distinctively trans-generational impact. The most prevalent gas of all of the greenhouse gases, carbon dioxide, remains in the air for long periods contributing to negative effects on climate over hundreds, if not thousands, of years. The present generation is responsible for preventing environmental harm in the future because it is unfair to ask future generations to bear the burden of their ancestors' emissions. It is also unfair to ask the present generations, especially those that did not until now contribute to greenhouse gas emissions, not to conduct economic activities that are beneficial for these generations just because it will further worsen the ecological imbalance in the future.

Third, there are theoretical tools that we can use to decide with great clarity some of the under-addressed problems in several areas, such as international justice, trans-generational ethics and environmental justice, which consider matters to do with the relationships between humanity and other elements of nature.

- a. With your group, suggest actions that you and your classmates could do at home and at school to limit global warming.
- b. Conduct research with your group about the most notable convention that the international community has established to limit the factors causing climate change. Identify one or more obstacles, which match the reasons given in this text, to the signing of this convention.

4 Read the text. Then complete the activity that follows.



The reduction of freshwater in the Middle East and North Africa constitutes a grave danger to economic growth, social cohesion, peace and political stability. This situation has been getting worse in recent years on account of rapid climate change that greatly affects water resources, including water's quantity, timing, change, form and deposition.

The Middle East, and in particular North Africa, are the most vulnerable to the negative impacts of climate change because the countries in this area suffer most severely from water shortages. This is because water availability per capita is much less than the normal range. While some countries in the Middle East, like the Countries of the Arabian Peninsula, have almost no fresh water resources, they are not dependent on agriculture, like those in the Levant and North Africa.

In addition, countries of the Middle East and North Africa are facing a critical situation, which is low precipitation rates and very variable rainfall ratios regarding place and time. Lebanon is the best in terms of precipitation, and Qatar is the worst in terms of change in precipitation rates.

How climate change affects water resources?

High temperatures increase water vapour in the atmosphere, which in turn increase the amount of water carried by the atmosphere. This leads to early and short flow seasons and an increase in the dry seasons frequency. Additionally, increased evaporation reduces soil moisture levels, a matter with which the area may face the danger of droughts again, and thus the desertification probabilities.

Climate change also affects sea levels. Sea level rise may lead to a decline in the fresh groundwater nature and abundance in coastal areas. This in turn adversely affects the groundwater quality due to saltwater intrusion, leading to a decline in freshwater flow and reduction of freshwater bodies.

Sea level is expected to rise by about 19 to 58 cm at the end of the 21st century. This rise will affect 12 out of the 19 MENA countries. There is no doubt that these reductions in water resources will have costly social and economic consequences.

- a. What is the ethical problem of water desalination? Explain this, guided by the definition of “moral dilemma”
- b. Search on the web for water filtration methods, then chose one and perform it (homework).

5 Read the text on water desalination and its economic and environmental outcomes, then discuss the following points.

Transformation of seawater into freshwater is the lifeline for the countries with limited freshwater resources in this part of the world. For the UAE in particular, almost all of the Country's drinking water is desalinated. However, desalination needs high energy and is not cost-effective, especially with rising oil and gas prices. The Gulf region alone produces about 50% of the desalinated water in the world. In the UAE, seawater desalination requires about 10 times more energy than fresh surface water production. Desalination costs are expected to increase by 300%. In addition, like all industrial processes, seawater desalination has a negative impact on the environment, and thus on marine life. The most important reasons for this process's negative impact on the environment are summarised in the steady increase in seawater salinity. Salinity of the water returned to the sea after desalination is twice as high as the basic salinity. Moreover, the situation is likely to be more and more complicated if we take into account the high evaporation rate due to climate quality in the UAE. This process also adversely contributes to the long-term impact of global warming.

Hence, decreasing the demand for energy, mitigation of environmental impact and reduction of the cost of water desalination, which is essential, is required. To this end, Masdar (Abu Dhabi's Multifaceted Renewable Energy Initiative) has launched a pilot programme to test and develop advanced and highly efficient energy technologies for seawater desalination using renewable energy sources. The long-term objectives of the Programme are to establish renewable energy desalination plants in the UAE, so that a commercially operational plant will be completed by 2020. The Programme aims to significantly reduce energy consumption by combining advanced and highly efficient desalination technologies with renewable energy sources. The Programme contributes to create a link between promising desalination technologies being developed at universities and research centres around the world, and large-scale and renewable energy plants.

a. What is the ethical problem resulting from desalination? Explain this using the definition of “ethical problem”. Express your answer by performing an acting scene with two colleagues. One of you will play the role of a state that desalinates water, the other one will play the role of an activist in an environmental society and the third colleague will play the role of a scientist in modern techniques for seawater desalination using renewable energy.

Lesson 4

World Moral Challenges

Learning Outcomes:

- Identify the key moral challenges to humanity and find out more about them (by using reliable sources on the internet and elsewhere)

Vocabulary

treaty

propaganda

controversial

genetic map

1 Express your opinion on the moral challenges represented in the two pictures below, and then answer the questions that follow.



- a. Are we entitled to revive animal species?
- b. Are we entitled to change our genetic map so that future generations do not inherit diseases or disabilities?

2 Read about the international organisations working to protect ideas from piracy, and then complete the activity that follows.

WIPO | MADRID

International Design System

Industrial design is the decorative or aesthetic appearance of a piece consisting of two-dimensional elements, such as drawings, lines or colours. In terms of principle, the owner of the registered industrial design or registered patent owner shall be entitled to prevent others from manufacturing, selling or importing products that are designed or embody a design that is a copy of the protected design, when he undertakes such business for commercial purposes.

The laws of the majority of countries require that the industrial design shall be registered and protected under the Industrial Design Act as a “registered design”. Some countries ensure protection of industrial designs under patent law as “design patents”.

In some countries, industrial design laws stipulate that what are known as “unregistered industrial designs” have to be granted fixed term protection and scope, without registration.

The industrial designs considered artworks under copyright law may also be protected under the concerned national law and according to the type of design.

WIPO-administered treaties, together with national and regional laws, constitute the international legal framework for industrial designs.

WIPO | HAGUE

The International Trademark System

A brand is a mark distinguishing the goods or services of a company from the goods or services of other companies. Trademarks are protected by intellectual property laws at national and regional level, where the trademark can be protected by registration through filing the appropriate application form at the national/regional trademark office and paying the required fees. At international level, you have two choices: either file a trademark application at the trademark office of the country in which you wish to obtain protection, or use the World Intellectual Property Organization's (WIPO) Madrid System.

The periods of the protection vary, but trademark registration can be renewed without a time limit for an additional fee. Trademark protection is enforced by courts, which in most countries have the power to prevent trademark infringement.

A trademark can be a single word or a combination of words, letters and numbers. It may consist of three-dimensional marks, symbols and signals, such as the shape and packaging of goods, or sound signals such as music, oral sounds, smells or colours used as distinctive features.

WIPO-administered treaties, together with national and regional laws, constitute the international legal framework for trademarks.

- Explain why pirating ideas is a moral challenge, and the importance of intellectual protection in combatting piracy.
- Logos are of fundamental importance in developing and exploiting a brand globally. Draw a new mark for your school to introduce it to students from Western countries.
- Protect your intellectual product (your school's logo) by researching necessary steps in the UAE.

3 Let's learn about the measures the UAE is taking in its efforts to face climate change and the global challenges that hamper sustainable development. Read the article about Masdar City.

Masdar has committed more than US\$ 1.7 billion to renewable energy projects. Its projects are responsible for the generation of nearly one gigawatt of clean power both inside and outside of the UAE. Masdar's projects in the UAE include:

- The 100-megawatt Shams 1 solar power station project with Total, which stretches over 2.5 square kilometres in western Abu Dhabi
- The 10-megawatt solar photovoltaic plant in Abu Dhabi
- The city's 1-megawatt solar photovoltaic rooftop installations
- The Carbon Capture and sequestration projects in the UAE, which seek to add value to the national economy while also reducing industrial carbon emissions

Internationally, Masdar Clean Energy has invested in high profile, utility-scale renewable energy projects like:

- Torresol Energy, a joint venture in Spain with SENER that builds and operates 120-megawatt concentrated solar power plants
- London Array, a 650-megawatt offshore wind farm in the Thames Estuary

Now complete the activity that follows.

- a. Define the term sustainable environment. Compare how the UAE, France and India work to accomplish the objective of sustaining the environment.
- b. Design a poster to introduce classmates to different types of renewable resources.
- c. Prepare a report on the most important environmental and health indicators adopted in studying global environment and health status. Use these indicators to study the environmental and health status of your neighbourhood.

Notes:

4 Read the report about the contribution of morals to public health in the WHO bulletin, and then complete the activity that follows.



The World Health Organisation's emblem

Although the issue of health ethics dates back to the times of Hippocrates, San Si Miao and Ibn Sina, the field of bioethics emerged only after World War II. In recent years, efforts have been made to broaden ethical analysis in health care to increase direct focus on public health issues. Unlike bioethics, which have traditionally focused on the physician–patient relationship, public health ethics focus on designing, implementing and improving measures to monitor the health of the population. The perspective of public health ethics goes beyond health care to include the country-specific economic and social structural factors that contribute to or prevent the creation of healthy societies. The scope of such ethics generally covers the following main issues:

- Differences in the health status of different social groups, and their opportunities to access health care and benefit from medical research: Decisions on the allocation of resources in a health field depend largely on the importance that officials attach to the impact of simple improvements affecting the quality of life of a large segment of people, in relation to the impact of life-saving medical operations that serve only a small proportion of people.
- Addressing the risk of infectious diseases: Efforts to contain infectious diseases raise complex questions about the viability of limiting the choices of individuals to safeguard the health of other people. Examples include the use of isolation and quarantine to stop the uncontrolled spread of tuberculosis and influenza.
- Exploitation of individuals in low-income countries: Current medical research practices are likely to expose participants to significant risks without benefiting them or their communities. Therefore, limiting the obligations of foreign entities, sponsoring research activities for participants in medical experiments at the local level, is crucially ethical. In the area of organ transplantation, the growing phenomenon of “tourism for organ transplants” is one of the issues that may expose the poor to serious health risks, and at the same time raise many questions about the exploitation of the human body for commercial purposes.

- Health awareness: The growing risk of non-communicable and imminent public health diseases, including those caused in part by unhealthy behaviours such as smoking, unhealthy diets or lack of physical activity, raises the question of the powers of public health authorities to intervene in personal health issues.

- Participation, transparency and accountability: The process by which decisions are taken is morally the same as the outcome of those decisions. In medical research in recent years, the strengthening of pre-informed consent and community-based surveillance systems has been given considerable attention. The next step is to develop mechanisms to assess their effectiveness.

Since the founding of the World Health Organisation (WHO) 60 years ago, the question of ethics has been at the core of the organisation mission to globally protect and promote the health of societies. Many programmes and departments, as well as regional offices, have undertaken ethics activities. In 1994, for example, the Regional Office of the Americas developed a programme on bioethics. In 2002, the Director-General, Dr. Gro Harlem Brundtland, launched an initiative in the field of ethics and health. The identification of ethical and evidence-based policy choices is one of the six core functions of the WHO. The Organisation's 60th anniversary and the 30th anniversary of the Declaration of Alma-Ata provide an opportunity to reflect on the moral values and dilemmas that arise in the field of public health.

a. Take the role of an official at the WHO, and then discuss with your classmates the following ethical health issues:

- Using individuals to conduct medical experiments
- Use of chemical weapons

b. What ethical health issue is set to be the subject of research?

Browse the website of the UAE's Ministry of Health, and then make a presentation on the laws concerning health morals.

5 Read about the ethical problems in the field of journalism around the world and how to reduce them. Then complete the activity that follows.

A new report from the Ethical Journalism Network tackled the challenges that journalists face in the "post-truth era", where facts and enlightened opinion have been replaced by propaganda and misinformation.

The report consists of a series of articles by journalists and academics, and presents aspects of the challenges faced by the media in the United States, the United Kingdom, India, Turkey and elsewhere.

The report defines 'hate speech' as statements calling for discrimination and violence, which differ from controversial statements that others or other societies may consider offensive. Journalists face the task of distinguishing between them in order to avoid censoring speech at the risk of being offensive. This is compounded by the problem of reporting on officials who advocate intolerance. Media coverage of these controversial statements may raise viewing figures of television channels or attract more readers, but it may also inflate these statements and thus give them legitimacy that they do not deserve.

The Ethical Journalism Network has published a list to guide journalists during this process, which includes “pre-publication”, if the speech is fact-based, or “beyond the limits and unpublishable”. The report provides a detailed guide on how journalists can best deal with their sources of information. When they try to establish a good relationship with a source, the guide urges journalists to consider some of the following issues:

- Journalists must have very honest and transparent intent, and make sure that the source understands the circumstances of the interview
- If the interview is with a person at risk, the journalist must ensure that the source understands the consequences of disseminating the information provided
- The guide also includes questions that journalists must ask themselves when they deal with an anonymous source, as well as advice on what to do if they are pressured to reveal their sources or to share the content of their articles before publication
- Since journalists are now using social media as a source of information, the report includes a guide containing tips for verifying publications, videos, photos, etc.
- It is important to check that the image or video taken from social media has not been edited or distorted (e.g. using Photoshop)
- Journalists should communicate with the original source of the social media content in order to verify its accuracy, reliability and credibility

- a. Write a report explaining how the United Arab Emirates regulates journalism so that it remains a cornerstone of truth, not falsehood.
- b. Show the importance of verifying the source of information before making judgements.
- c. Look for an example of global propaganda and explain its consequences.

6 With a classmate, choose one global ethical challenge. Make your classmates aware of its seriousness and suggest ways in which to overcome it.

Lesson 5

Dealing with Global Ethical Challenges

Learning Outcomes:

- Outline some ways in which people and interested parties (such as countries and regional and international organisations) might find a solution to alleviate a specific global ethical challenge.

Vocabulary:

technology

mother language

disability

logistic processes

people of determination

1 So far, you have discussed examples of global challenges. Define what can hinder dealing with these challenges by reading the words of Her Highness Sheikha Jawaher Mohammed Al Qasimi. Then discuss the points that follow.

"... It is a sad fact that the issue of financing humanitarian assistance, although governments quickly agree that it is necessary to ensure the well-being of our global community, is often a thorny issue. To address this challenge, I think we need to start by accepting that we all have a responsibility to others. This may sound like a mere concept, but without being prepared to take on this responsibility, any solutions will be short-term solutions."

- a. In your opinion, why is funding aid often a "thorny issue"?
- b. Think of the saying "We have to take on responsibility for others."

2 Read about the education sector in the world, the challenges it faces, and how to deal with these challenges at the global level. Then discuss the points that follow.

There is an urgent need for greater progress in education. Based on current trends, primary education in both Africa and West Asia will be mainstream by 2048, and preparatory and secondary education will be mainstream by 2062 and 2082, respectively. It is worth mentioning that these dates are significantly later than the year 2030, the deadline for achieving the Sustainable Development Goals. UNESCO Director-General Irina Bokova said, "A fundamental change must be made in our view of the role of education in global development because of its great impact on the well-being of individuals on the one hand, and the future of our societies on the other." She added, "More than ever, education has a responsibility to meet the challenges and aspirations of the 21st century, as well as to promote the values and skills necessary to achieve both sustainable and inclusive growth, and peaceful coexistence."



06.09.2016 - Edited from UNESCO Press

In Sweden, the Swedish Education Minister Gustav Fridolin said that students leaving before completing high school is one of the most important problems the Education Ministry and the government are trying to resolve. He also said that it is the ministry's task to set the rules of the educational policy, which is based on granting teachers more time for their students, and providing the necessary study materials for the student. Here we see that students should not graduate from preparatory school without getting what is needed to be ready for secondary school, especially since some of them are newcomers or students whose native language is not Swedish.



Sweden aims to increase the number of teachers and encourage them to stay in the teaching profession by increasing their salaries. It is also working to provide a high level of education for those who want to practice teaching and those whose mother tongue is not Swedish.

- Write a paragraph outlining the importance of the education sector in developing the future of nations, determining the UAE's place in this global development.
- With a classmate, research the reality of education in Finland and Algeria, and then link the elements of this educational reality to the extent of the country's progress and its impact on the population's daily lives.

3 What challenges do children in the world today face? To learn about how the world is working to meet these challenges, read this report issued by the United Nations and then discuss the points that follow.

The UN Children's Fund (UNICEF) report on "The State of the World's Children 2013" is the first global study on people of determination. The main message of the report stresses that people of determination are "not problems" but they are our sisters, brothers, daughters, sons and friends.

In his introduction to the report, UNICEF Executive Director Anthony Lake wrote that the inclusion of people of determination into society is not impossible, but requires a change in perception and vision. He added, "It is a recognition that people of determination have the same rights as others; that they can be agents of change and self-determination. They are not just beneficiaries of charity. And their voices must be heard in the development of our policies and programs." The report recommends that people of determination must be encouraged and given access to participate in activities alongside their peers. For example, through the use of universal designs that can be found in the form of custom ramps instead of stairs, audio books, Velcro fastenings, cabinets with pull-out shelves, automatic doors and low-floor buses.

The Emirate of Abu Dhabi is keen to provide all forms of support to all segments of society to achieve comprehensive care for all its members in the fields of education, employment, healthcare and social development, and to build a confident, balanced and cohesive society that can meet the various social challenges. In particular, people of determination get strong support from good leadership to enable them to overcome disability in various forms and take up their role in society as active and productive individuals.

The Khalifa Award for Education offers a financial reward of AED 200,000 to people of determination and centres for people of determination, and to local community institutions working in the field of special education. There are also projects that take into account the rights of this group in order to improve the field of education locally and in the rest of the Arab world. Abu Dhabi also adopts many projects that respect the rights of people of determination.



UNICEF Executive Director Anthony Lake

16 May 2017

- a. With a classmate, research other projects sponsored by the United Arab Emirates dedicated to people with special needs, and compare these projects to relevant United Nations reports.
- b. Write a short biography of an Emirati person of determination and of an American person of determination. Focus on elements that can inspire achievements in the UAE.

4 Did you know that promoting respect for human rights is one of the objectives of the United Nations? Read the text and discuss the points that follow.

Promoting respect for human rights is one of the goals of the United Nations and one of its distinguishing factors as an organisation that cares for people all over the world. In November 2013, the Secretary-General of the United Nations renewed the commitment of the Secretariat, its funds and programs, to uphold human rights. Events over the past years attest to the need for the work of the organisation to advance human rights.

The task of early warning may be one of the most important roles of the organisation in its conflict-prevention efforts, which would liberate it from the responsibilities that fall upon the organisation's residing coordinators.

- a. Conduct research on local and international government bodies showing ways in which they work to protect human rights (ministries/courts/international laws, etc.).
- b. Explain the importance of social responsibility towards the members of the UAE society and the global community by researching local human rights associations and highlighting the role played by them in this field.

5 Read the text highlighting China's industrial challenges and the corresponding technological thinking of the UAE. Then discuss the points that follow.

Challenges facing China's industrial sector

A recent report by the Organisation of Economic Co-operation and Development (OECD), a Paris-based intergovernmental economic organisation, said that China's economy is about to move from a system driven by investment and low-cost items to a system ever more driven by innovation. The nature of this transformation is surrounded by many challenges, which is why the government is investing huge sums of money to meet them by doubling its expenditure on research and development. This expenditure from Gross Domestic Product during the period from 1995 to 2005 reached \$30 billion. China became the sixth-largest country in global expenditures in these areas.

In 2015, the Chinese government announced a plan to make Chinese society a society driven by technological innovation by 2020.



Although the report concluded that China had made great strides in its science and technology development at an unprecedented rate, it points out that these achievements had not yet translated into a corresponding increase in innovative performance.

Inaugural Global Manufacturing and Industrialisation Summit Session

Executive officials participating in the events of the "Global Manufacturing and Industrialisation Summit", held in Abu Dhabi, confirmed that the choice of the Emirate of Abu Dhabi to hold the inaugural session of the Global Summit reaffirms the UAE's commitment towards the development and support of the industrial sector to keep abreast of the latest international industrial technologies.



The inaugural session of the World Summit on Industrialization and Manufacturing (GMS)

The discussions of the first round of the Summit will work to formulate a global vision for the industry sector, based on a knowledge economy, starting from the capital of Abu Dhabi, which began to take a growing and significant role in the operation of the industrial process and logistics operations and their management. This highlights that Abu Dhabi has become an ideal destination for the launch of international events, becoming a global platform for announcing specialised international visions and strategies across all economic sectors.

Regarding the most important characteristics of the industrial sector in the UAE, the Secretary General of the Gulf Organisation for Industrial Consulting said that the UAE's diversification of industrial activities across industries including the food, pharmaceutical and metal industries enabled the country's recent access to more advanced industrial activities such as manufacturing ships and some aircraft parts, which confirms that the UAE has a basis upon which it can build, and enables the country to interact with the rapid developments witnessed by the digital world.

- a. With classmates, discuss the importance of working to develop innovative technological thinking to meet the major challenges in the field of competitive industrial development among nations. Prepare a report showing the UAE's global standing in this field compared to a major European industrial country. Support your report with examples.
- b. In a one-minute recorded voice message, to be published through social media, state how you will play an active role in realising Abu Dhabi's universal vision of the industrial revolution of technology.

6 Socrates said, "Moral education is more important than food and dress."

- a. Discuss the philosopher Socrates's saying, bearing in mind what you have learned about meeting global ethical challenges.
- b. Write your own saying about global ethical challenges as a motto for your future life and the lives of your classmates.

7 With your classmates, prepare and implement the following project.

Remember that you can challenge many ethical problems, even with limited abilities. To complete this project, you will work with other members of your team to put a smile on the faces of others, and to alleviate their suffering in all forms.

This project may become the first step in your future path in cooperating with local and global communities. You may improve, and perhaps change, the living conditions of the needy and the poor, through either financial or moral support. Therefore, the assistance to others should not be limited to giving them money and in-kind assistance.

Notes:

Unit 2

Financial Awareness

Lesson 1 Realising the Value of Money

Lesson 2 The Dangers of Wealth and Greed

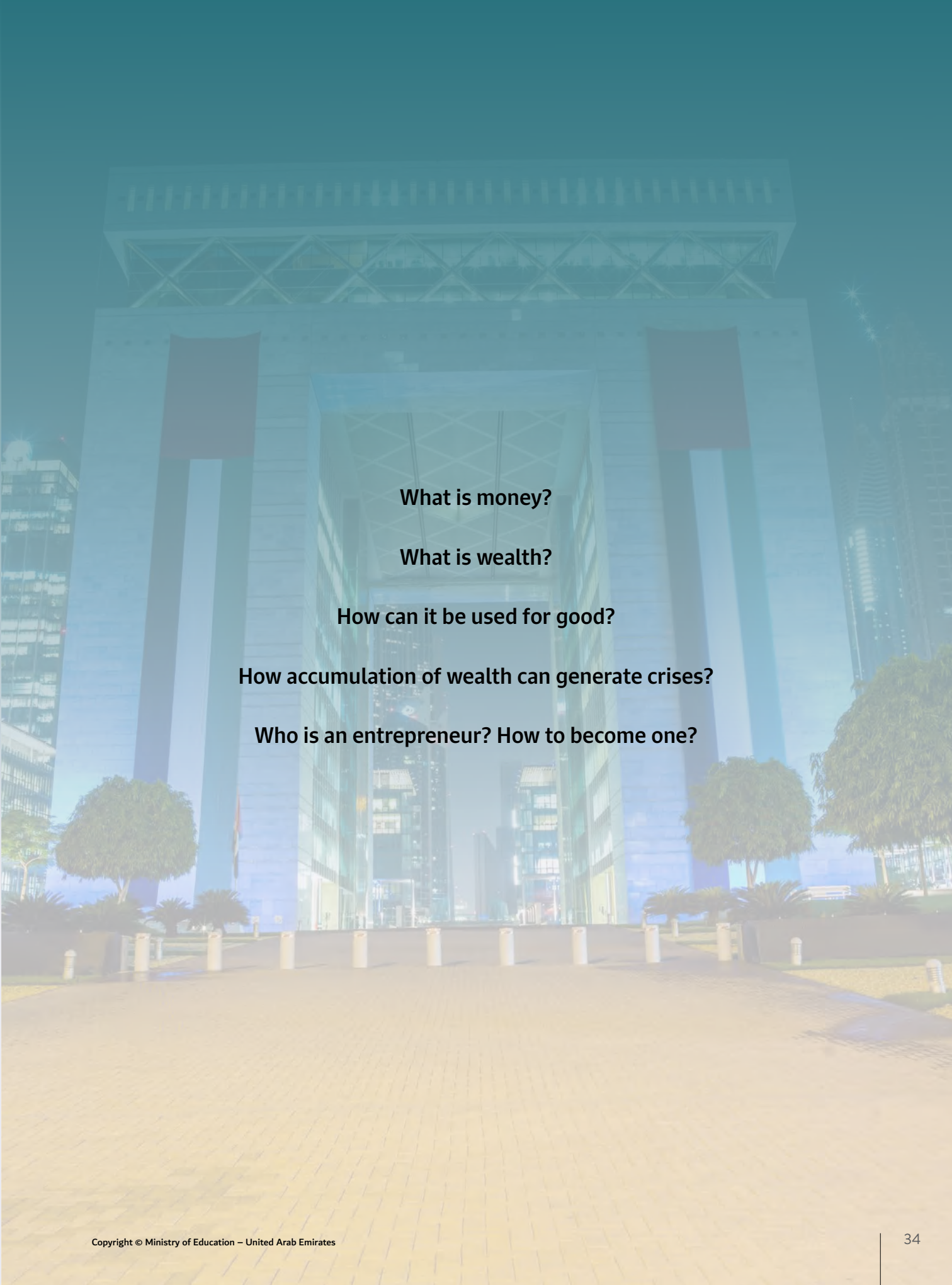
Lesson 3 How Wealth Can Be a Force of Good

Lesson 4 The Development of Entrepreneurship Skills

Lesson 5 Becoming an Entrepreneur



What is money? Why do we strive to gain wealth? And how can this wealth be used/abused to create social benefits or social costs?



What is money?

What is wealth?

How can it be used for good?

How accumulation of wealth can generate crises?

Who is an entrepreneur? How to become one?

Lesson 1

Realising the Value of Money

Learning Outcomes

- Discuss how to avoid financial complications, citing examples of financial mismanagement, greed and poor governance.
- Understand how less fortunate people can be financially supported through improved financial management and philanthropy.

Vocabulary

barter

inflation

exchange rates

1 Complete the following activities.

We all use money in our daily lives. But what is money? It enables us to buy and sell items. In other words, it is a **medium of exchange**. List three things that you recently bought.

Three things I have bought recently:

1.
2.
3.

Most people think that money is very valuable. What value does money have?

.....

.....

As well as being a medium of exchange, money is a means of change. In other words, you can use money to change your situation or the situation of others.

Look at the following currencies.



What countries are they from? What do you think you could buy with the amounts shown?

.....

.....

.....

2 Read the text below and answer the questions that follow.

The historical background of money

Money, as we know it today, is the outcome of a long evolutionary process!

Some 3000 years ago, people used barter in order to get necessary resources and goods. Early civilisations assigned values to certain scarce resources and commodities and traded them for other valuable commodities that they needed. A fisherman, for example, who caught more fish than he needed would trade that excess for surplus wheat grown by a farmer; they would exchange wheat for fish. These commodities had intrinsic value. In other words, they were worth something and that worth was determined by the amount of labour put into them and the corresponding relative scarcity of the commodity. This system, although necessary at the time, was not very efficient. People often had a hard time agreeing on the real values of the commodities being bartered, and with the need for a faster means of obtaining items, change was imminent but gradual.

Exchange then began to take place according to a consensus that some commodities such as cattle and salt were very sought after and were used as a benchmark for trading other goods. So “commodity money” was now used as a “medium of exchange”. Slowly, people realised that these highly valued commodity monies might moulder (in the case of salt), or perish (in the case of cattle).

The discovery of metal, mainly gold, copper, and silver, quickly replaced these commodity monies because it was easy to carry and non-perishable. Since metal was valued according to its weight and purity, numerical indices and government seals were carved on them to point out their real value of exchange.

As populations grew, resources became scarcer; with the introduction **of metal money**, countries could now trade resources easily with each other instead of waging wars. Now, people travelled long distances and bought all sorts of goods as the concept of money gained acceptance.

Paper money appeared at some point in the middle ages. It took the form of receipts of value given by a goldsmith for depositing gold and silver with him. The receipts themselves didn’t have any intrinsic value but they represented a store of value of items.

- Give an example of barter that is different from the one in the text.
- Compare and contrast between commodity money and paper money. Explain.
- Complete the table below.

Process	Barter	Commodity Money	Metal Money	Paper Money
Explanation				
Difficulties				
Example				

3 Read the following text and then complete the questions that follow.

I Earn, I Spend

In order to manage your money, you need to be **financially responsible**. But how do we measure financial responsibility?

First, you need to remember that money is a **means of exchange**. If you provide a good (a book) or a service (washing windows), you receive, or **earn**, money in exchange. And if you want a good or service, you give, or **spend**, money in exchange for that. So you might clean your neighbour's windows in order to **earn** money so that you can **spend** money on a new phone.

So how do you earn money? You may have an **income** from investments (such as rent on property that you own, or interest on savings). And you may earn a **salary**, from working in an office, for example, or from a shop that you own. Income is one side of your money flow; remember, this is what you earn. The other side is **expenditure**; this is what you spend. We all have living expenses, such as rent, groceries, health costs, transport and so on.

Being financially responsible means balancing your income and expenditure, and ideally trying to ensure that you don't spend more than you earn! So you need to carefully watch how much income you earn, and decide how much you can afford to spend. For example, you might decide you have enough money to go to the cinema. But do you have enough money for the bus home? Might it be cheaper to invite friends around and watch a movie at home? You need to carefully plan how you'll spend your money. This is known as **budgeting**.

There is a practical dimension here, because you want to ensure that you don't spend more than you earn. However, there is also a **moral dimension**, because you should ensure that you spend your money wisely and don't waste it. So what should you spend your money on? A widely spread rule regarding spending patterns recommends the rule of thirds: spend one third on needs (including housing, food and clothing), put another third in a medium-term saving to buy wants that are useful but pricey, and the last third in a long-term saving plan. Of course, you may want to spend money on treats every now and then. However, you should attend to your **needs** before satisfying your **wants**. For example, you should ensure you have enough to feed your family before buying an expensive new car. Spend wisely and avoid frivolous purchases. And be aware of the ongoing costs of your purchases. If you buy a new car, for example, you need to spend money on fuel and ongoing servicing, maintenance and repairs. Do you really need that car after all?

Discuss the following questions:

- a. What is a short-run goal?
- b. What is a long-run goal?
- c. Identify one short-term goal and one long-term goal that would need balancing your budget
- d. Assume you earn AED 500 per month. Would you still budget your spending to achieve your long-run goal/ your short-run goal? Justify.

4 Read the following text and then complete the tasks that follow.

A Cheap Jacket in Paris

As teenagers become adults, they become more financially independent. They want to make their own financial decisions. They start to spend. They open bank accounts and get credit cards. And they start to accumulate debt. Therefore, it's important for teenagers to have a good understanding of financial concepts, so that they can make wise and informed financial decisions. Sometimes a good deal isn't as good as it seems. Consider the example of Ahmad during his holiday...

Ahmad and his family were visiting Paris. They loved the city, especially the glorious sights at night. "I can see," his father said, "why they call this the City of Lights!"

Ahmad loved the city for another reason. He loved shopping! He got very excited when he noticed that everything was only a quarter the price it was back home. That jacket he really liked in the local shopping centre cost 400 dirhams. Here, it only cost 100 euros. Only a quarter of the notes. He eagerly told his father about it.

His father explained that things weren't quite that simple.

"100 euro isn't the same as 100 dirhams," his father explained. "You have to remember the different rates of exchange."

"What's a rate of exchange?" Ahmad asked.

"It's like a translation for money. When you translate a text from English to Arabic, you allow people to read the foreign text in their own language."

"But what's that got to do with money?" Ahmad persisted.

"Most countries have their own currency. It's like the language of money. Just as every language is different, so is every currency. This helps people from different countries trade together. That's the basis of global trade."

"But I'm not talking about global trade. I'm talking about my jacket!"

"I know, Ahmad. But remember, you're in another country now. And the shops use a different currency. Here in Paris, they use the euro. And back home we use the dirham. But one euro is worth the same as four dirhams. That's the exchange rate."

"So the jacket here isn't 100 dirhams?" asked Ahmad.

"No, I'm afraid not. If one euro is worth four dirhams, how many dirhams does this Jacket here cost?"

"It's 400 dirhams," said Ahmad. "I need to remember the exchange rate when I look at the prices."

"Yes," his father said with a laugh. "But let's see if we can find a cheap jacket!"

Find out how much each of the following currencies is worth in UAE dirhams.

Now consider the following scenario.

Your friend has come home from a visit to BigLandia (a fictitious country). He has lots of Big Dollars, the local currency in BigLandia, with him. And he wants to spend them.

What would 20 Big Dollars buy you in the UAE?

- a. A PlayStation console with two controllers
- b. Two cans of orange juice
- c. Pay your school tuition
- d. The given information is not enough to determine

Euro	
Dollar	
Pound (sterling)	
Yen	
Ruble	
Won	

5 Read the following text and then complete the activity that follows.

The Power of Money

You may have heard the expression “money is the root of all evil”. However, the actual expression is “love of money is the root of all evil”. That’s an important distinction!

It is important to have a good understanding of what money really is. As you already know, it is a means of exchange. It can be income or expenditure, depending on whether we receive it or give it to someone else. It has no inherent value in itself. Also, it is, in many ways, morally neutral. In other words, it’s neither a good thing nor a bad thing. It’s how you use the money that gives it a moral value. Money can make some people greedy. They just want to accumulate money for its own sake. This is the “love of money” that can lead to evil deeds. But money can also be used for good.

Let’s consider three simple ways that money can be used as a force of good. The most basic, and perhaps most well-known, way that money can be used for good is through simple acts of charity. This could involve giving money to a friend to help him through a period of financial difficulty, or it could involve donating money to your favourite charity or cause. Perhaps you give your spare cash toward a campaign to preserve the local environment. These acts of charity also known as **philanthropy** where you use money to improve the welfare of others out of a love for others.

One of the most prominent donators is H.H Mohammad Bin Rachid Al Maktoum who has established the association Noor Dubai to deliver curative and preventive eye care services for people suffering from blindness and visual impairment all over the world or preventive care services to those at risk.

But you don’t have to donate to charity in order to use money to do good. Remember, every time you spend money in a shop, you are helping to pay the wages of the workers in that shop. Your purchasing contributes to someone else’s employment or profit-making. To think of it in another way, your expenditure leads to someone else’s income. In addition, some people choose to buy certain goods or buy from certain companies because they like the values that goods the company promotes. For example, many people choose to purchase Fair Trade coffee. This form of “ethical purchasing” helps fund the efforts to promote values that you believe in.

A third way that money can be used as a force for good is through setting up a business. A new business contributes to the local economy and addresses local needs. It also provides employment to local people, giving them a chance to improve their own welfare. This is where entrepreneurship comes into play. People see a business opportunity and use it as a way to make money not just for themselves, but for others too. The money then generated by the business (through profits and wages) can be fed back into the local economy for the good of all.

Think about how you use money. Try to identify four ways that you could use money as a force for good:

1.
2.
3.
4.

6 Money evolved over time as a means of exchange, enabling people to trade with each other.

Although it is a necessary part of the global economy, many people have strong feelings about money.

How well do you understand money and finance, do you think? When you make a purchase, do you consider all the costs. For example, if you buy a games console, do you consider the ongoing cost of new games?

And are you aware of the risks that can be associated with money?

What should you consider in each of the following circumstances?



Scenario	Considerations
You want to go to the cinema
Your brother is going to buy a motorbike
Your father wants to buy an expensive new computer
Your high-end new phone is stolen
You receive an email telling you that you have inherited a large sum of money

Lesson 2

The Dangers of Wealth and Greed

Learning Outcomes

- Discuss how to avoid financial complications, citing examples of financial mismanagement, greed and poor governance.

Vocabulary

income

human development index

inequality

crisis

1 Read the text below and answer the question that follows.

The Moral Value of Money

Wealth can bring many good things to people. They have enough money to meet their basic needs (food, shelter, clothing and so on). Once their basic needs are satisfied, they can start to take care of their wants, maybe even treating themselves to the occasional luxury item! And wealth doesn't just benefit the owner. People who have wealth are better able to help others, by donating to charitable causes, investing in businesses or promoting the local community. However, remember that money is neither good nor bad; it is morally neutral. It is how you use the money that gives it its moral value. **Think about how money could lead to good or bad deeds. Try to identify at least four good and four bad deeds that money could cause:**



What you do with your money

Good Deeds	Bad Deeds
<ul style="list-style-type: none">....................	<ul style="list-style-type: none">....................

2 Read the text below about the Human Development Index and then complete the activity that follows.

Before you can assess the dangers of wealth, you need to have a good understanding of how wealth is measured.

Human Development Index

Why do we strive so hard to make money? Why has this mere medium of exchange created this much debate, even war, in the 21st century and in the past?

Money is simply a means to an end. People in the past used to wage wars on each other to increase their resources, possessions, and access to clean water, basically everything that constitutes wealth.

Wealth, by definition, is all our valuable possessions, including money. Therefore, the wealthier you are, the more you can spend on wants and even luxuries. It is no secret, nonetheless, that wealth has been historically associated with negative connotations such as greed and inequality.

What used to be viewed as wealth is now considered as income, which includes one's wage and any other form of money one receives. Most recently, wealth has been reshaped to become a measure of human development, and it became more universal to include a nation as a whole. That being the case, if a nation is wealthy, it shouldn't have high average inequalities and discrepancies between incomes. Consequently, inequality in distribution of wealth within a nation may be due to corruption and greed within the nation itself and beyond government regulation. The results of such behaviour can have serious implications for society.

The United Nations Development Program has considered what makes nations "wealthy". In order to do this, it developed the Human Development Index (HDI). This attempts to assess the development of a nation by taking into account more than just its economic development. It looks at things such as health, expected lifespan, knowledge and education, literacy, and overall standard of living. The index, which ranges between 0 and 1, classifies a national development as being: Very high, high, medium, and low.

Below is an example of classifications of the UAE, according to the HDI in 2015:

Data retrieved from the annual UNDP report.

Country	HDI	Classification
UAE	0.840	Very high Development

When asked, present your thoughts on the following:

- What does the UAE have such a high HDI, do you think?
- How would you recommend countries with lower HDI indices to approach their problems?
- Does having more money mean you are more developed as a person?

3 Read the following article about the 2007-2008 Financial Crisis and then complete the activity that follows.

A spectacular example of money leading to bad actions occurred in 2007 when the Financial Crisis started. This became the greatest financial calamity since the Great Depression.

Years ago, investors were sitting on big piles of money in the United States, and they were looking for new investments to turn into more money. However, at the time, interest rates were low, so people weren't sure what to invest in. On the other hand, low interest rates meant cheap credit.

During that period, most people were buying houses through mortgage loans from banks (because of the easy access to credit), and as more people bought houses, the price of houses increased. Investors started buying these mortgage loans from the banks (like in the example above) and they would earn the monthly loan payments on the loan, in the process earning the interest.

As banks and investors wanted to increase their profits, banks started giving "subprime" loans. These are loans given to people without guarantee that the debtors could pay back their loans. This inevitably led to two problems. Subprime home owners were unable to keep up with their mortgage payments. As a result, they lost their houses and the banks took the houses back. The banks then started selling the houses. This led to a sudden drop in the price of houses. Now the prime debtors no longer wanted to pay their debts because it didn't make sense for them to pay back a loan of \$300,000 for a house that was now worth \$100,000, which generated even more defaults.

In addition, investors were no longer interested in financing real estate construction as the prices were too low to invest in.

This led to the bankruptcy of major financial institutions like the Lehman Brothers Bank, in addition to big firms in almost every productive sector. Unemployment rates correspondingly rose significantly, and net expenditure and production consequently decreased. In the following five years, due to consecutive recessions, the world economy, known to be tied to the economy of the United States, entered a phase of depression that was felt for many years ahead.

With your group, make a presentation on the assigned task below:

- What is the problem addressed in the article about the 2007-2008 financial crisis?
- What are the moral problems highlighted by the crisis?
- What lessons can we learn from the crisis?



Federal Reserve Building, Washington DC, USA

4

Read the following text and then complete the tasks that follow.

Unfortunately, corruption can arise in many aspects of society. Although sports can promote ethical values such as fair play, team spirit building and hard work, the arena can also lead to corruption.

In recent years, sports have been tainted by many scandals. The main charge that many officials have been involved in corruption. Some officials were arrested and charged with taking bribes, in return for favours to benefit their teams, their organisations, or themselves.

The corruption also spread into the areas of marketing and sponsorship. As we all know, sponsorship deals are extremely lucrative, and where there are vast sums of money, there can also be a temptation for corruption! The corruption involved sponsorship of teams and sports events. Bribes were used by some companies in order to ensure media and marketing rights to tournaments.

Sadly, the corruption has involved high-profile individuals across the world, with some of them facing jail time for their actions. They have all been accused of damaging the reputation of the sport world.

However, we should remember the principles that drive most sports people: fair play; hard work; team effort; and support for all players. These values remain true and important today, despite the actions of a small number of individuals.

In pairs discuss the following questions:

- a. What do you think of what you've just read? Are you surprised? Disappointed? Explain why.
- b. What effect do you think this kind of financial corruption scandal has on sport?
- c. What do you think could be done to stop this happening in the future?
- d. What was the consequence of the corruption?



5 Read the following article about financial literacy. Then answer the questions that follow.

The more you understand about finance, the better able you will be able to make sound and ethical financial decisions.

Educating about Money

Following the global financial crisis, the Emirates Foundation-Esref Sah Programme was set up to educate the UAE's younger population on financial literacy and basic money management. This is a hot topic in the Emirates as debts levels have risen in recent years and statistics show that a large number of people under 30 are in debt. However, debt itself is not necessarily a bad thing. It's too much debt that the problem. When you don't properly budget for how much you borrow, you could end up in financial difficulty. Some have linked this to the rise of social media and today's "buy now" culture which pushes young people to avail of credit cards and loans offered to them by banks.

"Financial literacy is literally life changing," says Clare Woodcraft-Scott the chief executive of the Esref Sah Programme who has also spoken about the dangers of financial illiteracy and how much work needs to be done in the area. To date, over 40,000 people between the ages of 15 and 35 across the UAE have received financial education and the results are astounding. Programme head Hussain Al Balooshi has described how of those who attended workshops at schools, universities and government entities 64% started saving, 26% started looking for investment opportunities and 80% became more aware of financial literacy.

Esref Sah has a volunteer programme, Shabaab Club which has trained 100 volunteers in more than 70 subjects relating to effective money management. These volunteers mentor younger people directly.

The Esref Sah Programme also believes that banks have a role to play and have introduced a bank-training curriculum to educate bank employees on the right ways to market their products to young Emiratis. It is hoped that this will help young people avoid the temptation of high-interest loans and credit cards. The aim is to encourage more "responsibility" from the banking sector and some banks have taken a proactive stance. In 2016, the Abu Dhabi Commercial Bank (ADCB) announced a ground-breaking collaboration with the Emirates Foundation aimed at increasing levels of financial literacy in the UAE. This will offer branch based financial counselling to customers in an aim to encourage "the widespread adoption of sound financial management practices".



Learning about financial literacy

- Do you think that teaching young people how to manage their money is a good thing? Why?
- What do you think are the dangers of financial illiteracy?
- What do you think you can do to manage your money better?
- What role do you think banks have to play?

6 Complete the following activity.



Sheikh Zayed bin Sultan Al Nahyan

“No matter how many buildings, foundations, schools and hospitals we build, or how many bridges we raise, all these are material entities. The real spirit behind the progress is the human spirit, the able man with his intellect and capabilities.”

Sheikh Zayed - May Allah place peace upon his soul

With your group, create a poster that reflects your thoughts about the quote. Include the following:

1. Write what this quote means to you.
2. Explain how it relates to what you have read in the lesson.
3. Sketch drawings or find images to decorate your poster.

Present your completed poster to your classmates.

Lesson 3

How Wealth Can Be a Force for Good

Learning Outcomes

- Understand how less fortunate people can be financially supported through improved financial management and philanthropy.

Vocabulary

philanthropy

social responsibility

corporate social responsibility

1 Read the quote below and answer the questions that follow.

We all know people who appear to be wealthier than us. How do you feel when you see a very wealthy person? And we all know people who appear to be less wealthy than us. How do you feel when you see these people? Our feelings really depend on our attitude to wealth itself. Consider this quote from Sheikh Zayed bin Sultan Al Nahyan - may God have mercy upon his soul:

"Wealth is not money. Wealth lies in men. This is where true power lies, the power we value. This is what has convinced us to direct all our resources to building the individual, and to using the wealth which God has provided us in the service of the nation."

What does this quote mean to you? Share your thoughts with the rest of the class.



Sheikh Zayed bin Sultan Al Nahyan (May God have mercy upon his soul)

2 Read the text below and then complete the tasks that follow.

Personal Responsibility and Social Responsibility

In life, we are all motivated by different things: do well at school; help our family; become successful; stay healthy; promote a cause. These are our individual motivations. They give meaning to our daily activities, because we feel that we are working towards a bigger purpose, whether that's a short-term or long-term goal. You have individual values and motivations, and it is your personal responsibility to live by these. However, we have to think beyond our individual selves too. As an individual, you should always keep the welfare of society at the back of your mind. This is known as your social responsibility.



Everybody has a right and indeed duty to try and improve himself or herself. Being socially responsible, on the other hand, involves being committed to improving society as a whole. It might even require sacrifice and setting the priority of society ahead of your own individual benefit. You realise that society's needs are often more important than your own needs.

A socially responsible person is aware of his or her responsibility to society and the role he or she can play in making society better. When socially responsible people see social injustice, they are proactive. In other words, they take action to address the injustice. The individual's own moral code influences his or her actions. Socially responsible people aim to act in a way that does not harm society and, in fact, they hope their actions will improve society. They make decisions for the good of society as a whole. This is known as individual social responsibility. It is often undervalued and misunderstood. However, when individuals live by idealistic moral values and ethics, it can have an enormous positive impact on society in general.

So what does this have to do with money? Well, a common form of taking social responsibility is using your money for the good of others. This could involve giving money to a charity to help those less fortunate than yourself. Or you could donate to a non-government organisation (NGO) that works to promote a cause that you believe in, such as ensuring that people have access to the health care that they need. However, even this involves a certain amount of responsibility. You need to carefully pick the NGO the donation is going to, basing your decision on the transparency of the NGO's goals and operations. In other words, you need to ensure that your money will indeed be used to promote good works. You need to take personal responsibility for your socially responsible actions!

- Propose a scenario where you put the benefit of society ahead of your personal benefit.
- Why is it important that a person takes social responsibility?
- "A socially responsible person is a proactive person who is willing to make the world a better place for everyone around him". Explain this statement. Briefly suggest an action that you would take against social injustice.

3 Read the text below and then discuss the questions that follow.

Although many individuals exercise social responsibility, they are limited in what they can do, simply because they have limited resources. Big change requires big efforts. And this is where organisations can make an impact.

Non-Governmental Organisations

Non-Governmental Organisations (NGOs) are very important contributors to development projects in Africa and other underprivileged regions. These not-for profit groups have gained in popularity because many have genuine ambitions to create change. They exercise financial transparency about the aid and donations that they receive, and have clear, tangible objectives with results outlined in annual reports. Those involved in NGOs are often academics and social activists who believe in the necessity for social justice. NGOs have initiated projects that aim to end poverty and hunger by providing food, access to water, health care and educational projects.

For-Profit Organisations and Corporate Social Responsibility

Unlike NGOs, corporate social responsibility is still an emerging trend. In essence, it means corporations (companies and firms) accounting for environmental and social consequences in their costs. A private business naturally seeks to maximise its profits and minimise costs. However, this may generate many negative consequences for society and for the environment. A manufacturing plant may for example cause air or water pollution because it tries to save on the costs of air or liquid waste filters.

When firms take social responsibility, they restructure their operations in an environmentally-friendly manner that also promotes social justice. This form of responsibility is not yet regulated by governments, so firms must volunteer to include such programs in their operational strategy. Social responsibility programs can be very innovative, and can range from awareness campaigns to donating a portion of profits to charity, or producing safe and environmentally-friendly products.

- a. The text mentions several areas that NGOs participate in to help the poor in Africa. Propose an idea for a sustainable project to help children in Africa have a better life.
- b. How would you persuade the CEO of a small or medium enterprise that it pays to incorporate social responsibility into their business operations?

4 Read the text and then answer the question that follows.

Money for Good: Government Level

The process of eradicating inequality and helping underprivileged and underdeveloped nations and individuals is not a singular effort. It is rather a collection of efforts required from governments, organisations, and individuals in stepping in and taking social responsibility towards achieving long-term sustainable goals.

The Role of Governments

Countries fall into two generic categories: developed (so called first world countries) and developing (so called third world countries). We should all share the responsibility for creating a better distribution of wealth, better living conditions, and better opportunities for the underprivileged. However, the biggest responsibility lies with the more developed countries who have surpluses of wealth and better access to resources and technology.

The role these countries take could be through direct or indirect interventions. There are multiple approaches to intervention. For example, the UAE now contributes billions to fight poverty as part of the joint humanitarian vision of the UAE government. The UAE has become a role model for its commitment to achieve sustainable development goals and, previously, the millennial development goals.

Other efforts could be through direct intervention in the form of providing nutrition aid, vaccination for diseases such as malaria, and food programs that contribute to reducing famine, hunger and high mortality rates. Also, countries that enjoy political stability should strive towards achieving stability in regions that are unstable, especially where poverty and hunger rates are significantly high. In such cases, the governments of these countries also have a responsibility to collaborate with the international community towards achieving development.

- a. The text states that the UAE has so far contributed billions of dirhams towards fighting poverty. Think of a resource, other than money, that is abundant in the UAE that could possibly help the poor of the world. How would it help?

5 Read the text below and answer the questions that follow.

Wealth is not distributed equally around the world. However, all countries can work together to help less fortunate people in other countries. This is corporate social responsibility on the international level.

The United Nations' Goals for Social Responsibility

In 2000, as the world was celebrating the start of a new millennium, the United Nations hosted the Millennium Summit. At the summit, all 191 UN members, along with a host of international organisations, committed to a 15-year plan stated by the UN Millennium Declaration, to help achieve millennial goals by the year 2015. The eight Millennium Development Goals (MDGs) identified by the declaration were:

- To eradicate extreme poverty and hunger
- To achieve universal primary education
- To promote gender equality and empower women
- To reduce child mortality
- To improve maternal health
- To combat diseases
- To ensure environmental sustainability
- To develop a global partnership for development

In 2015, the United Nations Development Program (UNDP) answered the question of whether the MDGs made a difference or not. Empirically, studies showed that 21 million lives were saved after the Millennium Summit. The most significant successes were in the areas of reducing child mortality, and combating outbreaks of fatal diseases. However, the UNDP didn't boast about the accomplishment of the goals as it affirmed the need of further efforts towards achieving them.

In January 2016, the UNDP introduced the 17 Sustainable Development Goals (SDGs) in another 15-year plan that included goals from the MDGs, and added goals concerning peace and justice, climate change, and economic inequality. The role of the UNDP is to collaborate with governments, non-governmental organisations, and the private sector in order to achieve those goals.

- In your opinion, how should the UNDP go about achieving the sustainable development goals?
- The first goal in the MDGs and the SDGs is to eradicate poverty. Do you think that this goal is realistic? Explain the reasons for your answer.
- Goal number 10 in the SDGs is reducing inequality. Define inequality. Why do you think reducing inequality is important?
- As a student, do you think that you share responsibility in helping towards achieving those goals? Explain the reasons for your answer.



6

A good example of how small NGOs could create big impacts on impoverished societies are microfinance NGOs. Microfinance organisations are examples of small banks that give microcredit to debtors who usually don't qualify for loans from big banks. Microfinance organisations give loans as small as AED2000 to help people create their own small startup businesses that would help them subsist. These microloans sometimes serve as a beacon of hope for individuals, and many have had their lives transformed by this small amount of money. These organisations were criticised at the beginning as it was considered very risky to give loans to these individuals, but the default rates proved to be very low. The debtors were so grateful for this help they were glad to repay the loans.

- a. Now that you know about microfinance, think of a business idea that a debtor who borrows AED 4000 could implement.

Now consider the following quote from Sheikh Mohammed bin Rashid Al Maktoum:

"Sheikh Zayed's name has become synonymous with generosity and giving, not only in the UAE., but in the whole world. However, he didn't like talking about his philanthropy. Zayed is the source of generosity and its origin, and he is the one who has instilled a love of giving in the hearts of his people, and we must remember him for his humanity and generosity for all people, which made the Emirates a global humanitarian platform for giving."

- b. What examples do you know about that show Sheikh Zayed's sense of social responsibility?

Notes:

Lesson 4

The Divisibility of Entrepreneurial Skills

Lifestyle Objectives

- Make informed decisions about budgeting, saving, investing and borrowing.
- Develop entrepreneurial skills by producing a plan for a 'business', and making financial decisions based on how the business copes with economic pressures.
- Give evidence of acting responsibly when using money, for example by spending within a budget.

Vocabulary

start-up

entrepreneurship

entrepreneur

1 Many start-ups are the result of an entrepreneur's vision.

What do these men have in common? Mention the contribution of each to the world we live in today.



1. Steve Jobs



2. Henry Ford



3. Mohammed Al Habtoor

2 Read the following article about entrepreneurship and then complete the task that follows.

An entrepreneur is a person who invests his money in the creation of a business that produces a good or a service and bears the risks of that investment. This good or service may already be in the market, but the entrepreneur sees an opportunity for his company to make profit in this market. Or it may be the result of an innovative idea. Lately the entrepreneurship world has been bustling with innovative businesses. You have surely heard the word start-up or even heard of one of them. But what is exactly a start-up?



Cafe owner

First of all, a start-up is a new venture, usually in a business. Second, it aims to meet market demand with a new product or service. They are disruptive and innovative, bringing exciting ideas to the market. And third, although they are small, they are scalable. In other words, they have potential for growth over time.

Because they are innovative, start-ups can be risky ventures. But they can also be spectacularly successful. Facebook, Alibaba, and Amazon are examples of start-ups that changed the world we live in today.

The individuals responsible for designing, managing, and growing the company are called entrepreneurs. They have the vision and the resources to make their ideas a reality. If it weren't for Mark Zuckerberg, the emerging market of social media possibly wouldn't have been the same. Jack Ma of Alibaba revolutionised the concept of online shopping and changed the retail world forever.

- Think of the role of the entrepreneur in the business world.

Start-ups	Claim to fame

3 Read the article about Elon Musk and then complete the activities that follow.

"If something is important enough, even if the odds are against you, you should still do it."

Elon Musk: Risky Dreams

Elon Musk is a South African engineer, inventor, philanthropist, and entrepreneur. He is the current CEO and founder of SpaceX, X.com (now known as PayPal), Tesla, and also the co-founder and former chairman of SolarCity. Musk, a one-of-a-kind visionary, has been involved in multiple endeavours to change the world and humanity. SolarCity, Tesla, and SpaceX all share the same goal: saving humanity through clean sustainable energy, and making life multiplanetary through building human colonies on different planets. His ideas have always faced big waves of criticism and rejection. However, his continuous success and net worth of \$20 billion silence many opposing voices!

Early Life and Education

Musk faced a lot of adversity growing up. He was brought up by divorced parents, and was constantly bullied at school. He was then called up to the serve with the South African army. Musk migrated to Canada and pursued a double degree in Physics and Economics. He also learned basic programming language when he was as young as 10 years old.

The Success

In 1995, Elon and his brother Kimbal borrowed \$28,000 from their father and founded Zip2, a software company that was particularly important for newspapers that wanted to take part in the digital transformation to online publishing. Musk wanted to be CEO of the company but the board of executives refused and in 1999 they sold the company to Compaq for over \$300 million. Although he received a whopping \$22 million, Musk was devastated by the sale and was determined to start another new company of his own. In the same year, he founded X.com, which was a type of online bank. Shortly after, the company merged with Confinity, and the two became PayPal. Again, short-sighted investors decided to sell the company, this time for \$1.5 billion, which Musk received a decent share of.

Musk then started to pursue his vision of establishing a human colony on Mars. For that he needed to purchase space rockets from Russia. However, his attempts failed as the representatives of the space companies did not take him seriously and quoted him extremely expensive prices for the rockets. This drove Musk to start his own company, SpaceX, to build affordable space rockets with the integration of software engineering to create a space civilisation environment. The first non-governmental owned space company was a success as it became a leader in the rocket manufacturing industry, and its sales were sky rocketing. Pun intended!

In 2003, Musk started another new company, Tesla Motors, that specializes in manufacturing environmentally friendly electric cars. The lack of electric-car charging stations prompted Musk to then start SolarCity, a company that designs and installs solar panels and electric car charging stations. In a relatively short period of time, Musk has managed to create a legacy, and has become a benchmark for innovation and entrepreneurship.



With your group, make a short presentation about entrepreneurship, using Elon Musk as an example. Your group will be assigned one of the following proposals to present:

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4 Read the text below and then complete the activities that follow.

Dreams only get you so far in business! You also need money. And, perhaps more importantly, you need excellent financial skills. All entrepreneurs understand the basics of business finance.

- **Return on Investment:** Profits gained from a decision to invest a certain amount of capital in a business.
- **Normal Rate of Return:** Profit from investing money in a bank, in the form of interest or through earning annual returns from purchasing government bonds.
- **Total Revenues:** The total sum of money earned from the sale of products or services.
- **Total Costs:** The total sum of money paid for running a business. Includes variable costs of operations and fixed costs of investment.
- **Profits:** The difference between total revenues and total expenses. If the difference is positive, it's a gain, if the difference is negative, it's a loss.

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Scenario 1	You deposit your money in the bank for a normal rate of return of 8%
Scenario 2	<p>AYour friend is an entrepreneur. He has a business plan but needs financing to launch it. Your friend offers you a 50% share of profits in return for investing your capital in his start-up. The projected revenues of the first year of operating are AED 400, 000, and the projected expenses and costs are AED 360,000</p>

Entrepreneurs use their financial skills to help them to make the correct investment decisions. In order to determine if you have what it takes to make a financial decision, evaluate with your team the following scenarios and make the proper decision.

Scenario 1	You are in Grade 9, and your dream is to buy a car in your first year in university. In order to fulfil this dream, you can either wait until you are in university and take a loan out to buy the car, or you can start saving now.
Scenario 2	You want to buy a mobile, but you are already spending all of your allowance on other stuff. You currently have a mobile.
Scenario 3	You have an idea for a killer mobile application, but you don't have any money to invest in this idea. You have one year to develop the application or else you risk someone else thinking of it and investing in it. For this purpose, you can either take out a loan to invest in this application, borrow money from a friend, or save money so that you can invest in it later.

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5 Read the following article about debt and then complete the activities that follow.

Most people don't have enough available money themselves to set up a business. They need to borrow money. In other words, they go into debt.

You don't need to set up a business in order to go into debt. Suppose you want to buy a new computer. You don't have enough money available to buy it, so you get a loan. However, you'll have to pay interest on the loan. So you have to pay the cost of the computer, and the cost of the interest. That's the bad news. However, the good news is that the loan enables you to buy the computer now and pay for it later. So sometimes it make sense to go into debt, as long as you are able to repay the debt in the future.

Is Debt Always Bad?

Debt is an amount of money borrowed by an individual or an entity (such as a business) from another individual or entity (such as a bank). We usually borrow money when we cannot afford to buy certain goods or services, if we want to make an investment and we don't have the necessary resources to make it, or if we want to buy something now instead of in the future. The most popular forms of debt are loans which can be, for example, educational, for buying a house (a mortgage), or credit loans. Loans are usually tied to a certain interest rate that you have to pay as a form of rental fee for the money. Normally, when we want to borrow big amounts of money we would approach banks or other financial institutions. However, for small amounts we can approach family or friends. This is a more informal approach to debt. Regardless of the approach, you need to be responsible when borrowing money.

In addition to loans, credit cards are another famous credit instrument. Credit cards are issued by banks and they are a form of debt that enable you to buy things on the spot without the need to save. You need to consider various constraints before seeking credit.

You first need to consider why you are borrowing money. What is your objective? And what is the risk? You need to have criteria that validate your intention to borrow. You also should consider your ability to repay the loan, especially if your loan is long term and needs a consistent source of income to support it. This is to make sure that your job or business is stable in the long run, and that taking out a loan will not expose you to financial complications. When going for credit, consider what portion of your income will go towards the repayments. The lower the portion, the safer the credit. Make sure you borrow from safe parties. The lender should be a rational and trusted individual or entity. Otherwise, borrowing could be dangerous.

All in all, debt is not bad unless the debtor is irresponsible. Financial awareness of this topic is a must, in order to prevent any financial complications.

Q1. What is the main purpose of the article?
Q2. What are the two main types of debt mentioned in the article?
Q3. What are the advantages and disadvantages of borrowing money?
Q4. What are the criteria for borrowing money?
Q5. What are the risks of borrowing money?

a. The article discusses the importance of financial awareness when borrowing money.

b. The article discusses the importance of financial awareness when borrowing money.

Credit Risk

The ability to manage credit risk is an important skill for an entrepreneur. Entrepreneurs are often exposed to risky situations, where their corresponding success or failure is measured by how well they cope with these situations. When they take out a loan, they need to understand the risks involved. This is known as credit risk.

ABDUL STUDIES IN THE UNIVERSITY. HIS FATHER HAS SUFFERED A RECENT SETBACK DUE TO THE DECREASING ECONOMIC ACTIVITY, AND HE CAN NO LONGER AFFORD TO PAY HIS SON'S TUITION. ABDUL, HOWEVER, IS AMBITIOUS, AND REFUSES TO STOP ATTENDING UNIVERSITY BECAUSE OF HIS FATHER'S CIRCUMSTANCES. HE DECIDES TO TAKE OUT AN EDUCATIONAL LOAN TO PURSUE HIS STUDIES BUT THE BANK REJECTS HIS PROPOSAL SINCE HE DOES NOT HAVE A STABLE SOURCE OF INCOME. HE THEN TURNS TO A FRIEND TO BORROW THE NECESSARY AMOUNT TO CONTINUE HIS STUDIES AND HIS FRIEND GLADLY OFFERS.

Scenario 1

Abdul studies in the university. His father has suffered a recent setback due to the decreasing economic activity, and he can no longer afford to pay his son's tuition. Abdul, however, is ambitious, and refuses to stop attending university because of his father's circumstances. He decides to take out an educational loan to pursue his studies but the bank rejects his proposal since he does not have a stable source of income. He then turns to a friend to borrow the necessary amount to continue his studies and his friend gladly offers.

Scenario 2

Samira just graduated college and started her new job as a consultant in McKinsey and Co. She has a three-year contract with the firm, and she has decided to buy a house. Samira believes her income is high enough to meet the loan repayments and she has already saved the necessary down payment (deposit) for the loan.

Scenario 3

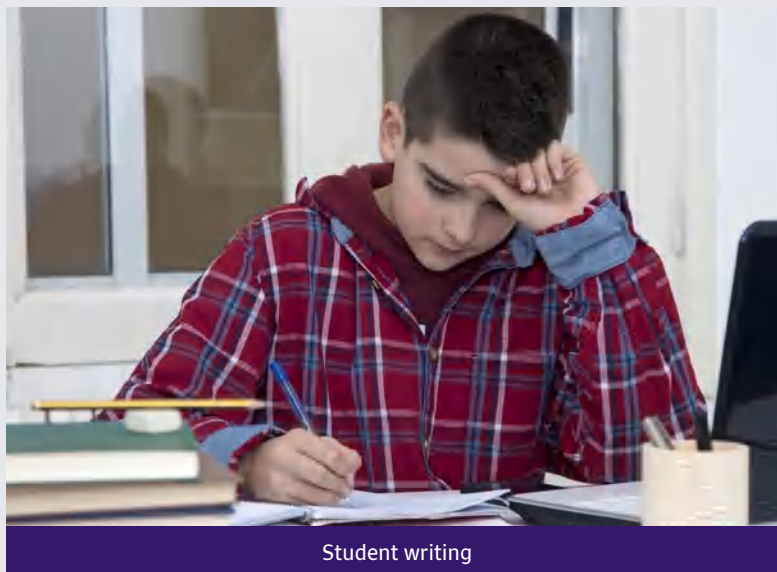
Firas is a freelance photographer, and he copes well with his expenses. He sees a Facebook advertisement that encourages opening a line of credit at Bank X. He is fascinated by the concept of buying now what he should save to buy later, and uses his credit card to buy a new camera, an expensive tripod, and the exclusive phantom flying camera, which cost him a lump sum of \$8,000.

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6 You have now seen how successful entrepreneurs build their startups.

Imagine you have a large sum of money and you want to launch a start-up.

Bİ ÖJ İJANİA Lİ ÖNÖ'ÖJ Aİ ÖNİ İJANİA LÖNİCÖNİ ÖM Lİ ÖJ İ ÖNÖÖA NÖNİANÖANİÖİJİ ÖAJ İNÖİ ANÖ ÖÖNİ İ İ İJİ İJİA
G ÖLÖ A AÖ İNNİJİ AÖİ Öİ LÖİ ÖL ANİA Lİ ÖNÖÖA İNİÖİJİ Öİ ÖNİÖA NÖNİA İ Ö



Student writing

Lesson 5

Becoming an Entrepreneur

Learning Outcomes

- Make informed decisions on how to responsibly budget, save, invest and borrow, which can be evidenced through students being asked to budget responsibly over the course of a week in response to a range of scenarios.
- Develop their entrepreneurial skills through being asked to invest in a 'business' – produce a business plan and take financial decisions based on how the company is coping with economic and global pressures.
- Provide evidence that they have acted responsibly when using money, for example opening a bank account and using a budget that has a combination of necessities and luxuries.

Vocabulary

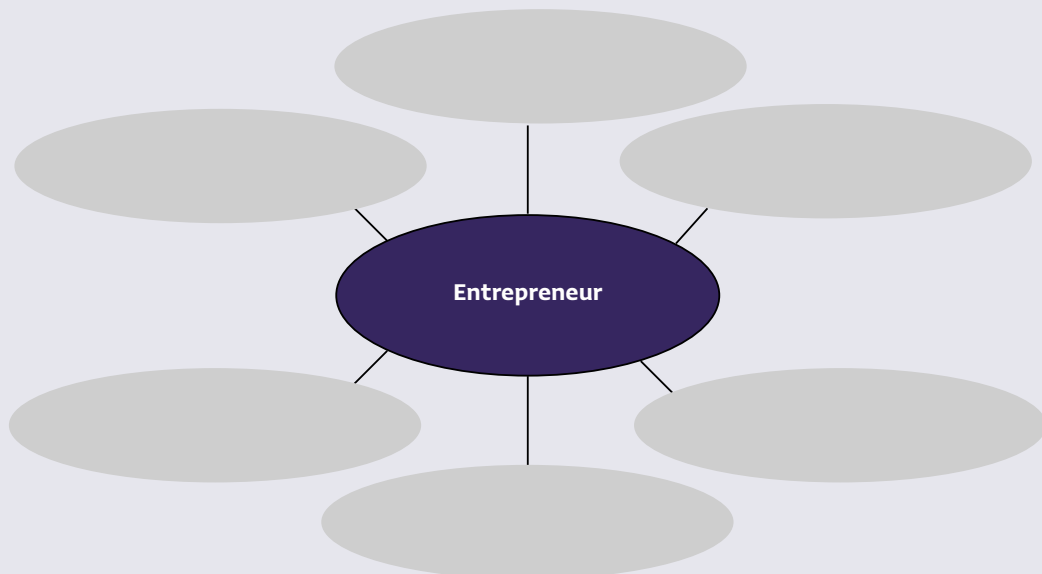
emerging

scalability

1 Add characteristics to the mind map below.

As you know, entrepreneurs have a number of characteristics that make them successful.

Suppose you were going to build your own start-up. What characteristics do you think you would need?



2 Read the article below about Jack Ma and complete the questions that follow.

Alibaba and the retail industry

Ma Yun, also known as Jack Ma, is a Chinese businessman and technology entrepreneur. The multi-billionaire, mostly known for his repeated failures before he achieved success, graduated with a masters in Business Administration from Cheung Kong University. After his graduation, he could not find a job, so he decided to become an English teacher at a local university in China. This led him to start a translation service.

In 1995, Jack Ma discovered that the world was using the internet, but it had not yet reached China. Ma could see that this was an emerging business opportunity in China. He decided to launch a website that listed Chinese products and companies. He called it Chinapage. His websites reached a lot of people and organisations, especially companies that were interested in investing in China.

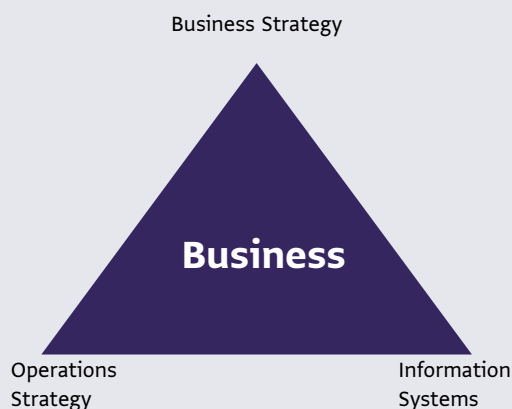
Ma received a lot of partnership offers, but eventually he decided to partner with the Chinese government. The government merger did not pay off, as his new partners limited his innovative ideas and proposals, so Ma decided to sell his share. He created an online retail shop called Alibaba. It received a \$1 billion investment from Yahoo, which believed in his project.

Jack Ma was initially able to launch the company because he convinced a host of his friends and family to invest in his idea, which aimed to reinvent the retail industry. The Chinese government did not believe in this idea when it was proposed at Chinapage, but Ma was determined to achieve his vision. Today, AliBaba is worth over \$200 billion, and it poses a threat to Walmart, the biggest 'bricks and mortar' retailer in the world. This threat stems from the fact that people no longer need to physically go to retail outlets such as Walmart to purchase products. They can just buy them online.

- a. What lessons can we learn from the text?
- b. What characteristics do Jack Ma and Elon Musk share? How are they different?

3 Read the article below about business models and complete the questions that follow.

Start-up companies can choose from many different business models.



The Start-Up

Building a start-up company is very challenging. It requires a particular (and indeed peculiar) blend of creativity, leadership, vision, determination and financial and social responsibility.

Start-ups are companies that are characterised by starting small and having the potential of scalability; in other words, they have the potential to grow and expand.

In order to create a successful start-up, you need three cornerstones in place:

- An innovative business strategy
- A coherent operational strategy to implement the business strategy
- An information technology (or IT) strategy to support the business and operation strategy

This is not a simple process. Think of it as a business triangle that must be in alignment to produce a successful company.

When you decide on a business idea, you should ask yourself several questions. What business are you in? Is it advertising, finance, retail, etc?

After determining the business that you are in, you need to determine what your source of revenue is, and the corresponding operations that would drive this revenue.

You also need to consider the costs of setting up and running your business. Set-up costs are also known as capital costs. The costs of running your business are also known as operating costs. They include wages and utility expenses, such as heating or electricity. Let's take XYZ Co., a fictional company, as an example:

Company	Support	Planning	Manufacture	Distribution	Sale & reordering
XYZ Co.	IT records sales and other relevant data.	Agents look for trends for specific brands. Also, compare to historical seasonal trends.	XYZ Co. uses IT data, previous sales information and trend analysis to predict current and future demand, and manufactures accordingly.	The store manager orders a specific amount of each product line.	The IT system records sales, and the shop monitors the sale of the new displayed products, and the store manager reorders according to changes in inventory.

With your group, come up with an idea for a start-up, using the three cornerstones outlined above.

4 Read the article below about Zaha Hadid and complete the question that follows.

Before you develop your business idea further, learn about another real-life successful entrepreneur.

A Creative Entrepreneur

Zaha Hadid was a British-Iraqi architect and creative entrepreneur. She died in 2016 at the age of 66 and is well remembered for her unprecedented creative architectural designs.

Hadid was the founder of Zaha Hadid Architects and was an ambassador for the Creative Entrepreneurs movement. She gave advice on how to make your business a success. According to her, a creative entrepreneur is a person who is able to set up a business in a creativity field such as architecture, photography, and cinematography.

Hadid is most renowned for her revolutionary designs that brought art to life. She is considered to be a leader of innovation and a role-model in both Britain and the Arab world. In 2015, she became the first woman to win the Royal Gold Medal in recognition for her architectural innovations!

Hadid studied mathematics at AUB (American University of Beirut) and then transferred to the Architectural Association School in London. In 2010, she completed her construction of the Sheikh Zayed Bridge, which extends from the island to the mainland in Abu Dhabi.

Usually architects of monumental buildings are chosen through competitions, and Hadid won many of those. Her winning designs include the Guangzhou Opera House, the National Museum of Arts of the 21st Century in Rome and the London Olympics Aquatic Centre.

Zaha Hadid is also famous for her commanding character and display of leadership through founding her own company and competing in an occupation previously dominated by men. Below are two pictures of her designs: the Sheikh Zayed Bridge in Abu Dhabi and the IFI Building at the American University of Beirut

a. What are the similarities and differences between Zaha Hadid and Jack Ma and Elon Musk?



1. Sheikh Zayed Bridge, Abu Dhabi, United Arab Emirates



2. The Aquatics Centre, London

5 Complete the following activity.

Remember earlier you were asked to imagine that you were investors and you had the opportunity to develop a new start-up. Now you have the chance to take that one step further!

A business plan is a detailed outline for your business. It is a blueprint for turning your idea into a reality. It describes what your product or service is, what market need it meets, who the target market is, how you will finance the business, and how you expect the business to become profitable.

Go back into your 'start-up' groups and flesh out your business idea. Draw up a detailed business plan, outlining how you would bring your product or service to market.



Creating a business plan

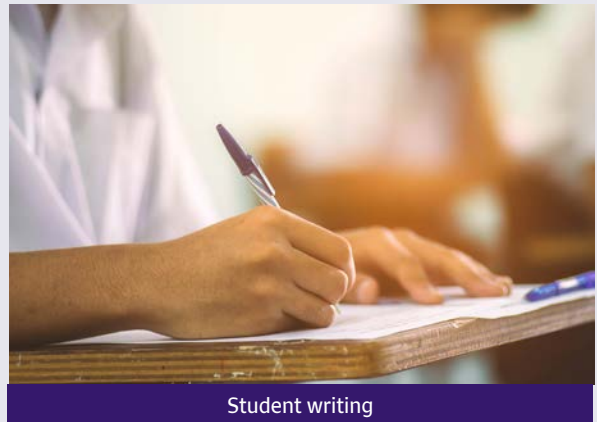
Product/Service	
Market need that it addresses	
Target consumers	
Financing	
Growth schedule	
Expected expenses	
Expected income	

Present your business plan to the rest of the class and express your thoughts on the following question.

- a. What are the important moral values that you should keep in mind when doing business?

6 Complete the activity below.

Now that you've had a chance to imagine all the effort that goes into building a start-up, think of the lessons you've learned. Do you think you have the personality needed to set-up a business? What financial skills do you need to learn? Would you be able to cope with the pressures and challenges? Write a 10-line paragraph about the lessons you've learned from the start-up exercise.



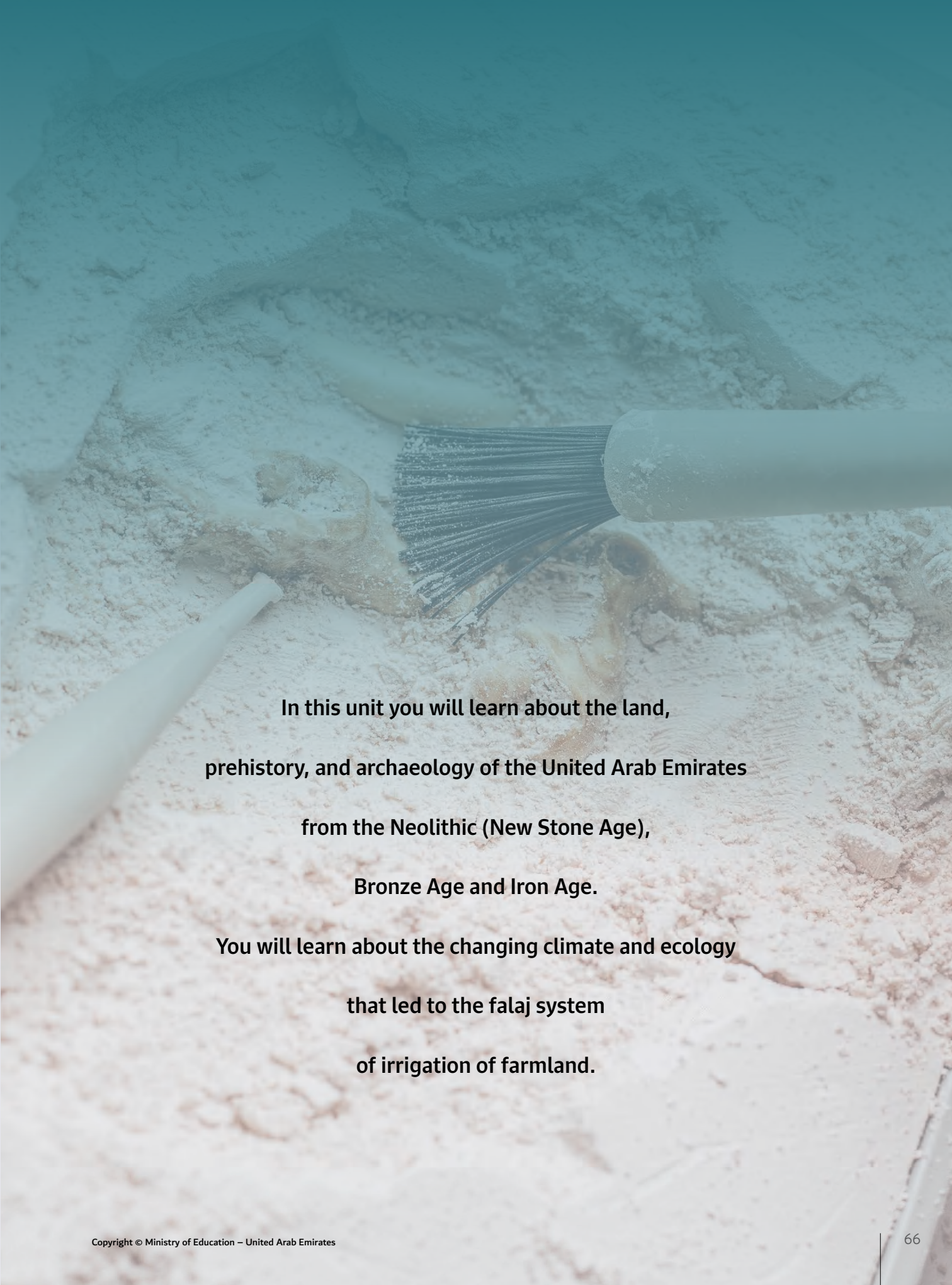
Student writing

Notes:

Unit 3

Exploring UAE History and Heritage

Lesson 1	The UAE Landscape and Jebel Faya
Lesson 2	The Bronze Age and Umm an-Nar
Lesson 3	The Impact of the Falaj during the Iron Age
Lesson 4	Domestication of Camels and Muweilah
Lesson 5	Shipbuilding and Trade: Ed-Dur and the Arabian Gulf

A photograph of an archaeological excavation site. In the center, a small, light-colored bone is being carefully brushed with a black-handled brush. To the left, a white pencil is placed horizontally for scale. The surrounding soil is light brown and sandy. The background is a blurred view of the excavation site.

**In this unit you will learn about the land,
prehistory, and archaeology of the United Arab Emirates
from the Neolithic (New Stone Age),
Bronze Age and Iron Age.
You will learn about the changing climate and ecology
that led to the falaj system
of irrigation of farmland.**

Lesson 1

The UAE Landscape and Jebel Faya

Learning Outcomes:

- identify the path humans took to move from Africa to the Arabian Peninsula
- describe life of ancient Jebel Faya
- explain why we should preserve Jebel Faya as a cultural heritage site
- describe the effect of climate on how people live
- identify how people in Jebel Buhaïs lived in the Neolithic Age
- describe how we can learn about people from the Neolithic Age
- identify elements of trade in the Arabian Peninsula during the Neolithic Age

VNỤ Ỉ bŌÑ rØ

Jebel Faya	climate
Al Hajar Mountains	landscape
Jebel Buhaïs	monsoon
herd	interior
Neolithic Age	Marawah Island

Warm Up: Brainstorm

[illegible]

Easy

Challenging

The Land That Is Now the UAE

The landscape of the land that is now the UAE did not always look as it does today. At one time, more rain fell on the Arabian Peninsula making the climate wetter. There were more plants, and the landscape was much greener.

Evidence shows that the land that makes up the Al Hajar Mountains was once under the sea. The mountains rose to their current height through a process of tectonic plates shifting over millions of years.



Activity 1: Discussion

Read the passage and answer the questions that follow.

Read the passage and answer the questions that follow.

What do you think makes the climate and
landscape of an area change?



Were the changes in the climate and landscape in the past natural
or caused by humans?



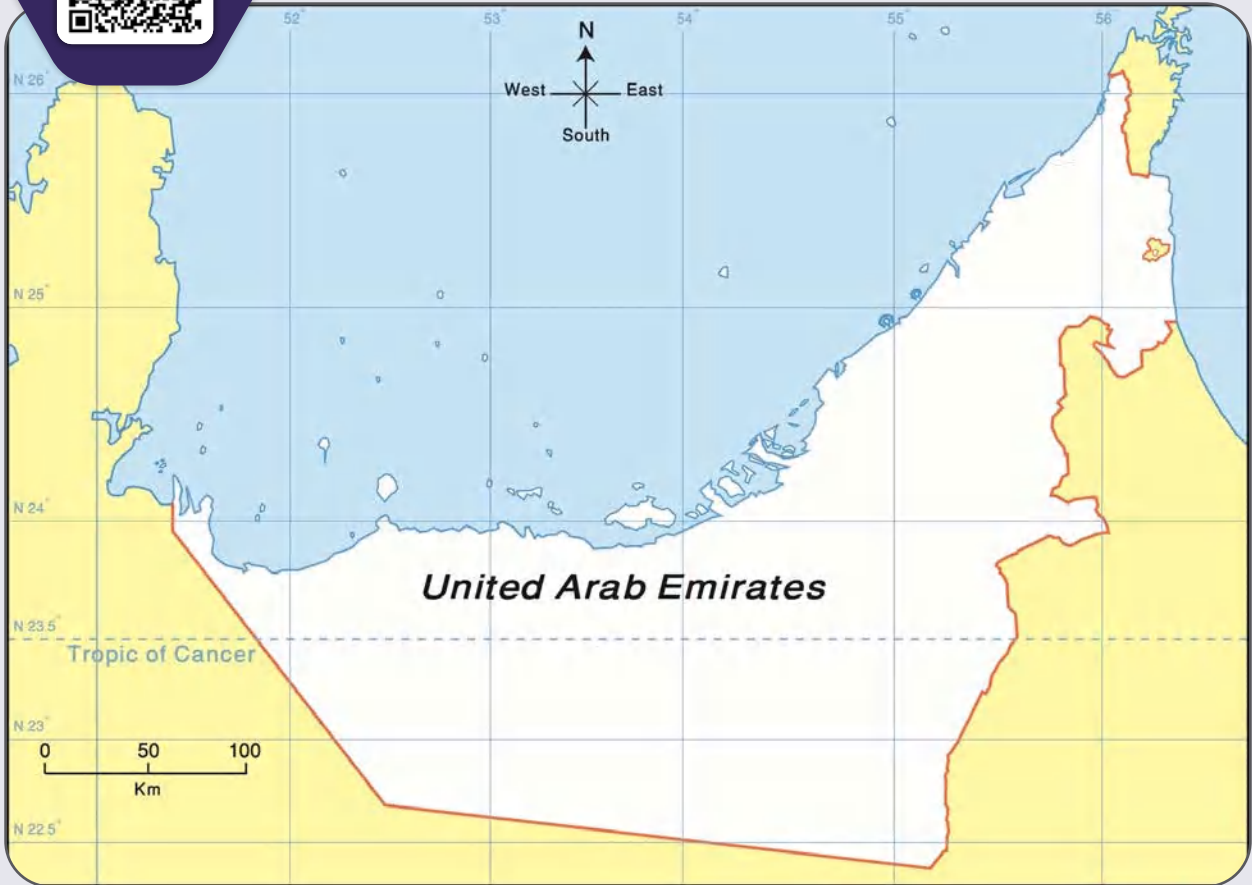
How are humans making changes in the landscape and
climate today?

Activity 2: Movement of Humans to the Arabian Peninsula

Wī Ō hāhī Aīdī Nā Nāwī rāhī Aīōī ŌōNō.A



Mark the approximate location of Jebel Faya on the map.



2. Why do scientists believe that people traveled from Africa through Jebel Faya as well as Egypt?

Activity 2: Concept Check

3. How was the climate different at that time on the Arabian Peninsula compared to today?

4. What was the landscape like in Jebel Faya at that time?

5. Why did people stop coming to Jebel Faya?

6. What evidence is there that humans lived in Jebel Faya?

Jebel Faya and the Movement of Humans from Africa

According to scientists, modern humans emerged around 200,000 years ago in Africa and then spread around the world. Some of the earliest evidence for human movement from Africa to the Middle East was found in Palestine. In caves at Qafzeh and Skhul, scientists discovered human fossils suggesting that humans came from Africa through the Nile Valley and into Palestine between 120,000 and 80,000 years ago.

Recent excavations at Jebel Faya in what is now Sharjah in the United Arab Emirates have produced evidence that humans also travelled from Africa across the Arabian Peninsula. Archaeologists found stone tools in Jebel Faya that are similar to tools found in East Africa. These tools included small hand-axes and tools for cutting up food. Scientists determined that the stone tools were buried between about 130,000 and 95,000 years ago.



How did humans get to Jebel Faya and what happened to them? Travelling from Africa to Arabia today means crossing the Red Sea. However, around 130,000 years ago, the Red Sea was much lower than it is today. This meant that crossing from Africa to Arabia would have been like crossing a small river. We know from discoveries at Jebel Faya that this is one of the routes that humans took into Arabia.

At that time there was more rainfall in Arabia than there is now. The humans arriving in Arabia found grasslands and large numbers of wild animals. They would have been able to hunt the animals with ease.



Activity 3: Concept Check

Answer the questions below using information from the reading.

1. According to the reading, what continent did humans come from?

2. What two ways did humans move out from Africa?

3. What material were the tools made from?

4. What two purposes for the tools were mentioned in the reading?

5. What was the landscape of the Jebel Faya like 130,000 years ago?

Activity 4: Life in Jebel Faya

Wí Q hēh̄j Ad̄j NābNōŋŋŋj b̄j Nā Ōj .AēmpN̄ Ō ōh̄j A KāNōmNā
N̄Kōh̄j A b̄N̄ AŋCh̄N̄N̄mī ŌN̄N̄A N̄mōh̄j Ad̄j N. Ah̄j N̄, AēmpN̄ Ō ōh̄j A
rlghŌj NōmN̄A N̄Kōh̄j A b̄N̄ AŋCh̄AŋŌrAŋwN̄Ad̄j Ĩ Ō.



BMŋG pmN̄ Í N̄N̄CE	HŌH̄N̄ŋŋŋ N̄M	J ŌŋŋKŌŋ I ŌN̄i ŌN̄ŋ
Food		
Fresh Water		
Clothing		
Shelter*		

*Shelter is a place to live that is safe from the weather and enemies**

Activity 5: Discussion

Çmİ gLŊĬ ĆhĬ ČĀNŌAŲ dĀNAĬ bĬ NĀĬ ŐĬ DŅĤĬ ĄĬ ŐÖWĥĬ ČĪkĬŲAwNŌNĤĬNŌAĬ vĬ ĀNĀĬ ĩ rNĀNrdĬ rA
ČNAĭ Ĵ ŐÖNŌrAbĬ ŐŁ AŋOmĬ NĀĬĴ Ĵ dŎ?AHNwAvNŌNĤĬNŌAĬ ĩ rNĀĤĬ m?

Climate Change Starting in 10,000 BCE

From about 36,000 to 10,000 BCE, a thick layer of sand built up at Jebel Faya. This indicates that the climate was very dry. It is believed that few people lived in the UAE region at that time because of the harsh climate.

In about 10,000 BCE, the climate started changing again. The area received much more rain. Scientists believe this is because the Indian Ocean monsoons moved into Arabia. The monsoons brought cooler temperatures and more rainfall. The land became easier to live in.

The increased rainfall changed Arabia's landscape. Grasslands expanded into the interior, and people moved from place to place on a seasonal basis. People started to keep domesticated cattle, sheep, and goats. These animals provided meat, milk, and wool. The animals were kept in herds and were moved around the land during the year depending on the weather and other natural factors. Keeping animals has always been an important part of life in the UAE.



Activity 6: Concept Check

Å ÑŌwĴ rÄĤĴ AqŌĴ ŌŬNÑŌAbĴ NŬwAbĴ ŌĴ dANÑÄĤĴ AĴ Ĭ dĴŊg.

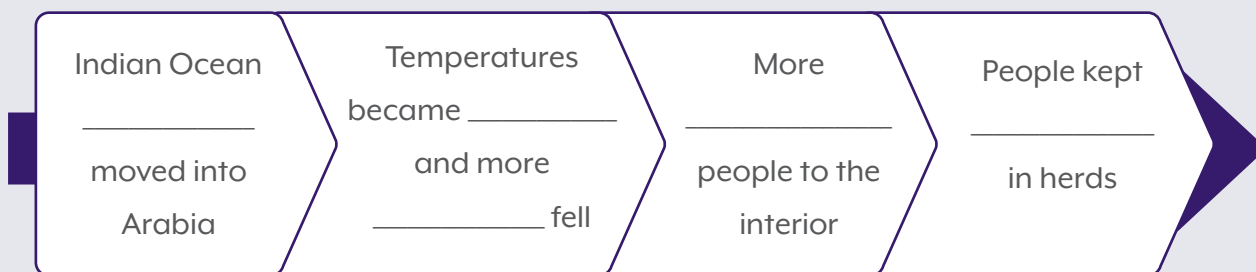
1. What happened to the climate on the Arabian Peninsula during the times listed?

Time Period	Climate
36,000 – 10,000 BCE	
About 10,000 BCE	

2. What brought more rain to the Arabian Peninsula?

Activity 6: Concept Check

3. Fill in the sequence of events that happened in Arabia with words from the reading.



4. How did the weather affect the activities of people?

Jebel Buhais



The people who lived in Arabian Peninsula hunted wild animals, like oryx, gazelle, and camels. They developed stone tool technologies. They chipped away both faces of a stone blade to make fine arrowheads and cutting tools.

The period from about 8000 BCE to 3000 BCE is called the “Neolithic Age” or “New Stone Age.” Stone working was new to the region and was accompanied by big changes in the diet of people. The site of Jebel Buhais in Sharjah is particularly important for understanding this period.

By studying the bones and teeth found in Jebel Buhais, scientists discovered important information about the health and diet of the UAE’s Neolithic people. Women lived on average to 33 and men to 36. Although this might seem young to us today, it was normal during this period. The causes of death varied. Violent attack near or just before death was more common for males, while many females died during childbirth.

The bones and teeth indicated other characteristics of life in the area during the Neolithic Period. Heavy wearing on the teeth brought about by chewing indicates a diet rich in meat. There was no evidence of vitamin or calcium deficiency. Only rare indications of severe starvation were observed in the bones.

Archaeologists found many fireplaces at Jebel Buhais dating between 5000 and 4000 BCE. In these fireplaces, researchers found bones of sheep, goats, cattle, and hunted animals, like camels. In addition, archaeologists found a large cemetery at Jebel Buhais.

Remarkably, the inhabitants of Neolithic Jebel Buhais had access to better food than people who lived in the area in later eras. The people buried at Jebel Buhais rarely suffered from a lack of food. They suffered violence, almost certainly because of clashes with other communities, but they were fit, tall and strong.

Activity 7: Concept Check

Answer the questions below with information from the reading.

1. What two things did people use stone tools for?

2. How did people make a stone blade?

3. What time period is the Neolithic Age?

4. What does “Neolithic Age” mean?

5. What did archaeologists study to learn about humans in Jebel Buhais?

6. Fill in the table with information from the reading?

	Males	Females
Life Expectancy		
Common Reason for Dying		

7. What animals did people cook in their fireplaces?

Activity 8: Think and Discuss

In groups, discuss in which ways the life in Jebel Buhais was good and in which it was difficult.

**How was life
good?**

**How was life
difficult?**

Activity 9: Video



Watch the videos about life on Marawah Island.
Then, answer the questions.

Video 1

1. How old are the bones?

2. Why do scientists study the bones?

Activity 9: Concept Check

3. What did Captain Al Nuaimi of the Forensic Department of the Abu Dhabi Police Department **find** out about the bones of the person from Marawah?

4. How did Captain Al Nuaimi know that these were the bones of a young male?

5. Could the researchers tell the general health of the person?



Video 2

1. What was the original use of the building?

2. What is special about this house?

3. What is the shape of the home?

Activity 9: Concept Check

4. Where is the fireplace? How do the scientists know the area was a fireplace?

5. What were the outdoor pens for?

6. How is the area on Marawah the first sign of a new kind of society?

Activity 10:

In groups, discuss the different ways that the researchers and police could learn about someone from so long ago.

Evidence of Trade

Another important discovery made on the island of Marawah is a pot from the 'Ubaid period in Mesopotamia. The 'Ubaid period lasted from before 5300 BCE to around 4,000 BCE. The Marawah pot dates to before 5,000 BCE, or over 7,000 years ago, showing that trade was already occurring at the beginning of this period. After 5000 BCE, trade with 'Ubaid Mesopotamia became more common.

Excavations in the UAE revealed very early evidence of pearling. At sites in Abu Dhabi, Umm al-Qaiwain, and Sharjah, there is evidence that people were diving for pearls and using them as jewellery over 7,000 years ago.

We have very little evidence for the organization of pearling at this time, but there can be little doubt that it required people to have special knowledge of where to find pearls and how to reach them. They would collect the shells and then extract the pearl, if there was one. Then, they could use the remaining shell (known as Mother of Pearl) to make decorative items like beads. In this way, the Neolithic period in Arabia marked the beginning of an industry that was to define the UAE for thousands of years to come.



Activity 11: Concept Check

À NŌwĴ rĀĥĴ AqŌĴ ŌĀNŌbĴ NwŌŌNgAŊKŊrmĴ ŌNŊKŊNmĀĥĴ AĴ Ĭ dĴNg.

1. How do we know that the people who lived on Marawah traded with Mesopotamia?

2. What skills must people have to be successful at pearling?

Activity 12: Reflection

Thj rj ~~Aj~~ rj ~~Anj~~ Nj ~~Ar~~ ~~ÖÖ~~ ~~Ar~~ ~~L~~ ~~Ng~~ ~~h~~ ~~Ä~~ j ~~N~~ ~~Ch~~ ~~Ä~~ g ~~A~~ ~~N~~ ~~h~~ ~~Ä~~ rj b ~~lj~~ ~~N~~ ~~Ä~~ ~~j~~ ~~N~~ ~~Ö~~ ~~Ö~~ ~~N~~ ~~Ä~~ ~~Ar~~ ~~N~~ ~~Ö~~ ~~p~~ ~~Ö~~ ~~Ä~~ ~~rj~~ ~~v~~ ~~lj~~ ~~w~~ ~~h~~ ~~Ä~~ ~~j~~ ~~Ö~~ ~~Ö~~ ~~N~~ ~~Ä~~ ~~N~~ ~~Ä~~ ~~h~~ ~~Ä~~ ~~r~~ ~~Ö~~ ~~Ö~~ ~~N~~ ~~Ä~~ ~~h~~ ~~Ö~~ ~~Ä~~ ~~rj~~ ~~i~~ ~~Ö~~ ~~Ä~~ ~~h~~ ~~Ä~~ ~~r~~ ~~Ö~~ ~~Ö~~ ~~N~~ ~~Ä~~ ~~j~~ ~~Ö~~ ~~Ä~~ ~~j~~ ~~N~~ ~~Ä~~ ~~N~~ ~~j~~ ~~N~~ ~~Ä~~ ~~N~~ ~~Ö~~ ~~Ä~~ ~~Ö~~ ~~Ä~~ ~~N~~ ~~Ä~~ ~~j~~ ~~x~~ ~~i~~ ~~m~~ ~~p~~ ~~N~~ ~~j~~ .

English	Spanish
Tools	People used stone to make arrowheads for hunting and cutting tools
Shelter	
Preparing Food	
Way Society Lived	
Trade	
Pearling	

Lesson 2

The Bronze Age and Umm an-Nar

Learning Outcomes:

- identify the Umm an-Nar Culture and what made it unique in terms of how it treated people and its economic development
- identify the key elements of the Bronze Age
- describe how equality can be improved between people

VN₁ ĩ bŌÑ rØ

domesticate

Umm an-Nar

channel

copper

crops

bronze

pastoral

Bronze Age

nomad

Activity 1: Video

Wĩ Q̃ hÄh̃ Aıd̃ Nǎ Nđǎ Nõw̃ rÄh̃ AıÖ̃ ÖǞÑÖ̃.



1. What happened to the climate around 4,000 BCE?

2. About how many years later does the climate dry up?

3. About when did the Bronze Age begin?

4. What material is “forgotten” now?

Activity 1: Concept Check

4. What have people learned to do?

5. What was the message of society around 2,500 BCE?

6. Why was the structure an improvement in construction techniques?



Challenges of a Drying Climate

Around 5,000 BCE people of the UAE had a good diet and were generally healthy. However, after 4,000 BCE, the climate became drier. Evidence from skeletons showed that life became very tough as the climate became drier. People were struggling to have enough to eat, and diseases became more common.

The Indian Ocean monsoon began to move south to its current position. This meant that the area received less rain. The climate started to become similar to today's climate in the UAE. After less rain came, the number of people living in the area declined. People could live inland only part of the year, after rains fell and grasslands grew for a short time.

Even with less rain, people of the ancient UAE did start growing crops. The earliest evidence we have of growing crops in the UAE area is from Hilli in Al Ain, in about 3,000 BCE. The people there grew a variety of crops.

One of the most important crops was the date palm. It provided food in addition to materials for building and basket-making. People also grew wheat and barley. To grow crops, people had to obtain fresh water, as there wasn't enough fresh water from rain. The people dug wells to bring fresh water from under the ground to the surface. Then, people poured the water into channels that would move it to the fields. As time went on, people in the UAE developed increasingly more efficient ways of obtaining water.

Although agriculture was established in the ancient UAE around 3,000 BCE, people still gathered food in traditional ways. They gathered wild plants and fruit. People also hunted animals, such as oryx, gazelles, and wild camels. People living in villages on the coast and islands developed efficient ways of catching large fish.

The pastoral nomads who moved with their sheep and goats across the landscape during the winter and summer continued their lifestyle, probably trading with new villages like Hili. By 3,000 BCE, donkeys were used for transporting goods along the coast and around the edges of the mountains. However, getting across the sand dunes from Al Ain region to either the Abu Dhabi or Dubai regions was still difficult until people domesticated the camel.

Activity 2: Concept Check

À ÑõwĴ rÄĥĴ AĴŌĴ ŌÄĴÑŌÄĴ ÑwAvĴĥAĴÑĴrmĴ ŌĴÑÄĴrNmÄĴ AĴ Ĵ dĴÑg.

1. Compare the health of people from 5000 BCE with people from 4000 BCE.

**People from
5,000 BCE**

**People
from
4,000 BCE**

2. What is the probable cause for the change in people's health?

3. How did the change in climate change where people lived?

4. Name 3 ways in which people obtained food:

5. How did people obtain fresh water?

6. Why was it still difficult to travel from Al Ain across the desert?



Activity 3: Video

Wl Q hChj AIdj NĀ bNŌŌG mmĀ N-Ê Ĩ rAEŌNŌrj Ā NĀ NŌwĭ rChj A
qŌj ŌŌNŌŌĀj Nw.Ā

1. Where was the first circular tomb found?

- ## 2. Why did archaeologists call these peoples the Umm an-Nar Culture?

- ### 3. What was different about these tombs compared to most tombs?

4. What was buried with the people?

5. What materials were the items made of?

6. How did the tombs send the message that everyone is equal?

Umm an-Nar and the Bronze Age

The society in the UAE area around 2,500 BCE is often called the “Umm an-Nar Culture.” Archaeologists first learned about this society on the island of Umm an-Nar, near Abu Dhabi. The Umm an-Nar Culture was quite unique, especially for its time. For one, as the video mentions, there was more of a sense of equality between people. This was very different from how people treated each other in areas like Mesopotamia or Egypt at that time.

In about 3,000 BCE, the Bronze Age began with the Umm an-Nar society playing a prominent role in the Bronze Age. During the Bronze Age (about 3,000 – 1,200 BCE), people used bronze more and more instead of using stone for tools and weapons. Bronze is a mixture of copper and other metals. The al-Hajar mountain range contains massive amounts of copper, which people learned to mine and turn into pure copper.

Mesopotamia, the strongest empire in the area at that time, needed copper to make weapons and agricultural tools. Since there is no copper in Mesopotamia, people came to the Umm an-Nar society to trade for it. Records from Mesopotamia show that area that is now the UAE and Oman was called the “Magan” society.



Locations of Circular Tombs Found



Records from Mesopotamia showed that it traded a lot with the Umm an-Nar people. One text from just after the Umm an-Nar period records a single shipment of over 18 tonnes (18,000 kg) of copper.

When merchants came to the UAE to trade for copper, they brought beautiful ceramic vessels, ivory combs, and decorated beads. Examples of those were found in the Umm an-Nar tombs.

The Umm an-Nar culture flourished for at least 500 years, from about 2500 – 2000 BCE. In many ways, the Umm an-Nar culture established some of the basic patterns of life, such as trade and agriculture, which still exist in the UAE today. Moreover, the Umm an-Nar culture gave an example of people in society being treated more equally than in other cultures at the same time.

Activity 4: Concept Check

Å ÑŌwĴ rÄĥĴ AqŌĴ ŌÄŦÑŌbĴ ÑwAvLĥAŦÑŦmİ ŬŦÑÄŦNmÄĥĴ AĴ İ dİŦg.

1. In what two ways was the Umm an-Nar Culture unique?

2. What is bronze?

3. What is bronze used for?

4. How were the Umm an-Nar people able to benefit economically from bronze?

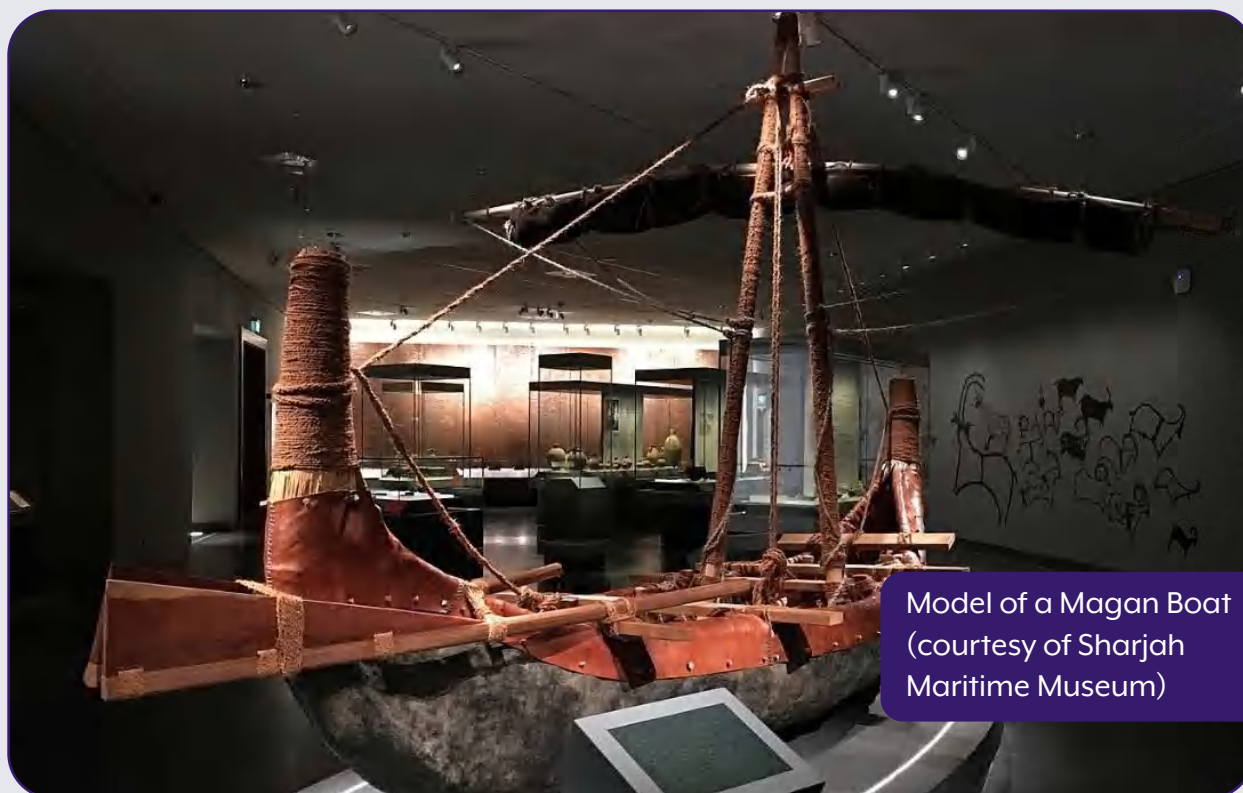
5. With whom did the Umm an-Nar trade copper?

6. What did they receive in return?

7. What patterns of life that still exist today were established during the time of the Umm an-Nar?

Activity 5: Concept Check

RJ l NrdÖK Nmmj ÖNpNÖ mlj Añ kJ Añ KJ rJ Nj j ÖNñj ABñj ÖÖNñj Mj gñ N",A
whlj hAnÖÖKj Nñj mJ Añmñj Æ mmAñ-Ê j rñj l Ö. Wj Ö hñj Añj NA
ÖNñj j rñj AñwAñj Añj Npñj Añj dñ Añj Öj Añj Ö. A



Model of a Magan Boat
(courtesy of Sharjah
Maritime Museum)

1. How do the researchers know that the hardened chunks of bitumen (a form of crude oil) are part of a boat?

2. How did people from the Stone Age use bitumen to make boats?

3. What power did the Stone Age boat builders take advantage of?

4. What were the hulls made of?

5. How did the wooden frame allow the Magan boats to be used for the copper trade?

6. What position did the Umm an-Nar have in trade that the UAE still has today?

Activity 6: Think and Discuss

Thị trấn và xã hội là những đơn vị cơ bản của xã hội. Mỗi đơn vị này đều có những vai trò và trách nhiệm riêng. Hãy suy nghĩ và thảo luận về những điều mà xã hội và mỗi cá nhân chúng ta có thể làm để cải thiện xã hội.

**What can our
society do?**

**What can
each of us do
ourselves?**

Activity 7: Reflection

RJ KŨ I ÖNÑANwAÄNI L ÜÖN-NmÄHNOÖI NdÖNKU İ rÖAGNAİ NÖ İ I hÖÖNnmj ÇiNğEndi Ø.WrLÖ A
İ Äİ ri grı phayLNgÖNÖrApLNİN.N.Ä ÖJ Äxi mpN ÖN-NmÄHLÖN ÖÖNNArNChj rENÖrJ J ÖNÖOppNrÖA
ØNÖrApLNİN.NÖ.

Lesson 3

The Impact of the Falaj during the Iron Age

Learning Outcomes:

- identify how a falaj works and its importance to a community
- describe the housing and food of the UAE area during the Iron Age
- explain why we need to recognize and preserve world heritage sites, like the Al Ain Oasis

VN₁ ĩ bŌÑ rØ

Iron Age

falaj (pl. aflaj)

iron

oasis (pl. oases)

mudbrick



Activity 1: Reflection

Wĩ Ğ hĀhĭ Ałdĭ NĀ NĉdĀ NŌwĭ rĀhĭ AqŌĭ ŌĞNŌĬĀĭ NŲw.A

1. How old is the invention that the video discusses?

2. How did people get fresh water during the Stone Age, around 5500 BCE?

3. What happened around 4000 BCE?

4. How do people get fresh water during the Bronze Age, around 3000 BCE?

Activity 1: Reflection

5. What is the problem with this technology?

6. About what year was the solution to this problem found?

7. What is a falaj?

8. How did the aflaj affect farming (“aflaj” is the plural form of “falaj”)?

9. Where is the source of fresh water for the falaj?

10. Why did aflaj allow people to settle in one area instead of moving to find water?

11. Why do you think that the whole community had to help, as the video says?

The Falaj System



After 4,000 BCE, the UAE area slowly received less and less rain. This meant that the level of water underground probably dropped. Thus, getting fresh water became more and more difficult.

It is not surprising that people in the UAE seem to have been the first to make a falaj. The people had been living in this dry region for thousands of years now. They knew where water was located underground and how the water level changed when rainfall occurred. During the Umm an-Nar period, they dug wells and were able to draw water to the surface with simple pulley devices.

Around 1,000 BCE, there was another slight reduction in rainfall in the UAE. Thus, the level of water under the ground probably dropped and became even more difficult to reach. At the coastal town of Muweilah in the Sharjah region, people used new types of wells that tapped the fresh water that lay above salty water. Even these sources would have eventually been affected by declining rainfall. The inland springs would have dried up, too. In this situation, people needed water from deeper underground and a system to transport it to the surface.

The falaj system was the solution. A falaj is an underground channel that carries fresh water from sources in the mountains and springs to where it is needed. The falaj had a big impact on human life in the region. Around 1,000 BCE, new villages and towns grew in the UAE interior, especially around the Al Ain area and on the edges of the Al Hajar Mountains. Archaeologists discovered many buildings at sites like Hili. These were probably all part of a single ancient town. Towns on the interior, like Hili were possible because of the falaj system. The falaj also provided water for many of the oases that developed.

The falaj system was to remain one of the most remarkable features of agriculture and village life throughout the UAE. Its impact lasts to the present day.



Model of a Falaj



Activity 2: Concept Check

À ÑŌwĴ rÄĤĴ ÄqŌĴ ŌŬŊŊŌŬĴ ŊŊwAvlĤhÄŊŊŊrmĬ ŬŊŊÄŊŊmÄĤĴ ÄĴ Ĭ dĬŊg.

1. What did people in Sharjah do to get fresh water?

2. Why were wells and springs not enough to get fresh water?

3. How did having aflaj impact human life in the region around 1000 BCE?

Activity 2: Concept Check

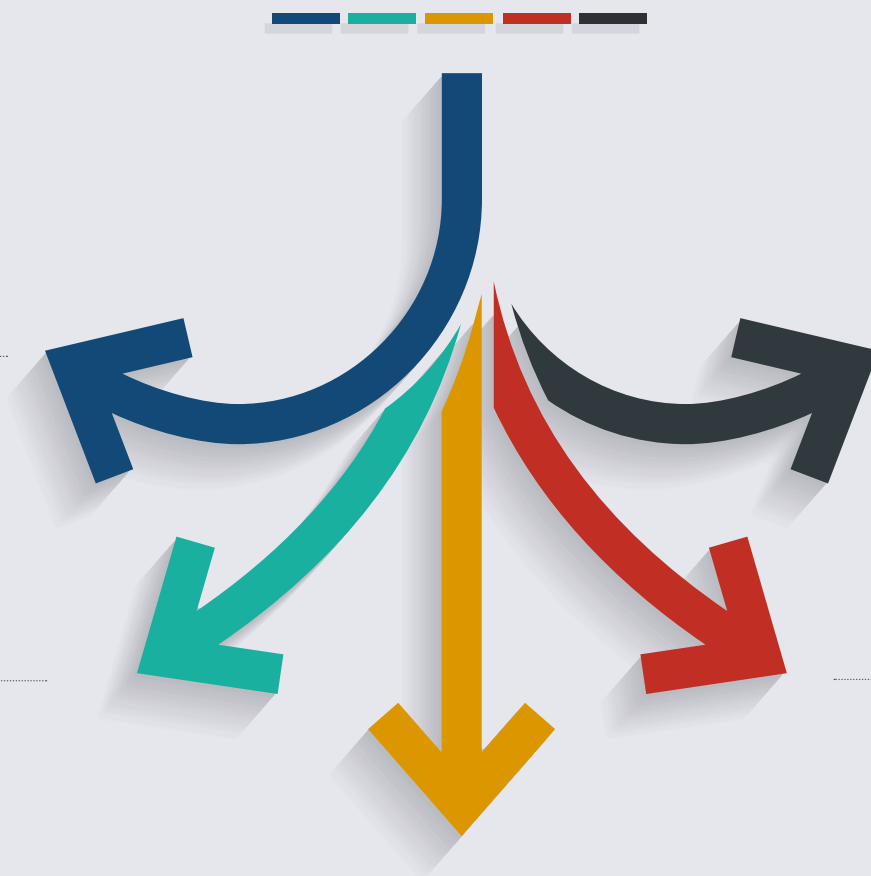
4. How are the aflaj and oases related?

5. How do you think the falaj being under ground saved water?

Activity 3: Discussion

AĖ ŃŲŅŲĉĤĤŊkAĤĤĤŊgŌAĭ dĴ AĤAŊŊ? AĖ ŃŲŅŲĉĤĤŊkAĤĤĤŊgŌAĭ dĴ ĤNmAŌŌ Ĵ NAhĤ hANmĴ ŌA
K-NmAŊŊ? Mĭ ŐbĴ ANNKĥĴ mĔPAINĥĴ QŮŮ rŊĴ ŐrAŊĤĴ rĔŊŲŲ Ĵ ŌĔNAŊdAŲŌŌANwANmmNŊA
İ rĴ ÄĤĴ ŌĴ AŬ mŌANANŌrAwNrŊHÄNdĭ Ő?

THINGS MADE FROM IRON



The Iron Age

The Iron Age was the third historical and cultural stage in what is sometimes called the 'three-age' period: Stone Age (Up to about 3,000 BCE), Bronze Age (about 3,000 – 1,200 BCE), and Iron Age (about 1,200 – 100 BCE). As the name indicates, the Iron Age was characterized by the discovery and use of iron.

The Iron Age was recognized at different times in different parts of the world because the presence of iron and the technologies to utilize iron appeared at different times in different parts of the world. In some parts of the world, iron replaced bronze for making tools and weapons because iron was more durable than bronze. However, in other parts of the world, like the UAE area, people continued to use bronze more than iron because they had easier access to copper and the technology to convert copper into bronze.

During the Iron Age, around 1,000 BCE, houses in the UAE area were made more and more of mudbrick. The construction of mudbrick houses relied upon knowledge of which materials to use in the mudbricks and how to design buildings so that they would last. Some of the buildings were still standing when archaeologists discovered them 3,000 years later. The mudbrick houses that existed in al-Ain, Fujairah, Dubai or Sharjah 100 years ago are, in many ways, the result of this initial mastery of construction.

During the Iron Age in the UAE area, food was mostly the same as it had been earlier. People ate sheep, goats, and cattle, and they hunted wild animals like gazelles and oryx. They obtained milk from domesticated animals. They continued to catch fish and collect shellfish along the coast. The use of the falaj changed the crops that could be grown. There is evidence that sesame was cultivated, and this could be used for making oil or flour. The herb basil and other plants were grown and cultivated in the small gardens made possible with the falaj.



Activity 4: Concept Check

Å Ñõwĵ rÄĥĴ AqÔĴ ÖÖŦÑÖAbĴ ÑŦwAbĴ ÔĴ dÄŦÑÄŦŦŦŦŦŦŦŦmĴ ÖŦŦŦÄŦŦÄĥĴ AĴ Ĭ dĴŦg.

1. What are the approximate times for each age in the UAE area?

Age	Approximate Dates
Stone Age	
Bronze Age	
Iron Age	

Activity 4: Concept Check

2. Why did people prefer to use iron instead of bronze?

3. Why didn't the Iron Age start at the same time all over the world?

4. What material did people start to use to make houses?

5. Why can we say that this material is very durable?

6. What crops could people grow after the introduction of the falaj, according to the reading?

Activity 5: Discussion

What are the properties of the following materials?
Copper, Bronze, Iron, Steel

Copper

Bronze

Iron

Steel

Activity 6: Discussion

Thj Å NÅ LNÅ Ī ŌLŌÅ ŌÅ ŌlgNĪ Ō dAŌÅ Ē Ċ Ē ĄĒ Å Thj Å NĪŌ dĒ Ī ŌNŊŌÅ dŌ Ī ŌNŊĪ NĒ Ī Ī NŌKĪ ÅNdA
 ÅĖŌŌŌrĪ NĒ rgĪ NĪŌĒ ŌNŊ) ÅŌÅ W/NrNĪ ĪJ rĪŌ gĪ Å LŌ .MĪ kĪ Å NĪŌNĪ Ī ŌNŊŌÅ hŌŌŌÅ mpNrĒ NŌA
 ŌĪ ŌWĪ ÅĪ Ī NgNĪŌĪ Å NdAprĪ ŌĪ rvĪ Å LŌŌNrĪ Ī NŌLŌ ŌÅKĪ ÅĪ Å NÅ LNÅ Ē Ī ŌLŌ?

Activity 7: Writing

Tĩ kĭ ǂNŌrAđ Ĩ ŌArNmA ĩ ǂylŌŌA ĀNdAvrlŌ Āhĭ mǎ ŌǎA ĩ rĩ grĩ phǎĩ ǂNgavhŌw ĀĬ Ĩ dǎNA
prĭ Ōĭ rvĭ AvNrŪhĭ rĭŌ ġĭ AŌLŌ ŌANkĭ Āhĭ AAŊM ĤNǎ ĩ ŌLŌ.

Lesson 4

Domestication of Camels and Muweilah

Learning Outcomes:

- describe the effect that the dromedary camel had on the society living at the time
- identify the importance of the city of Muweilah in the history of the UAE
- offer ways that people can settle disagreements
- describe the society at Mleiha
- identify how the Mleiha culture was in contact with Arabia
- explain how to help those less financially fortunate

VNỤ Ỉ bŌÑ rØ

Muweilah

dromedary camel

artefact

Mleiha

prominence crossroads

currency

symbolism

inscription

Activity 1: Concept Check



Wĩ Q̄ hAñĴ AvldĴ NĀ bNŌŌñĴ AtrNmĴ dĩ rŌA Ĩ mĴ NŌ,AvhĴ hAvĴ rĴ A
dNmĴ ŌŌĴ Ĩ Ōĩ dAñAñĴ Ā Ā Ā Ā rĴ Ĩ .AñĴ N,Ā NŌwĴ rAñĴ AqŌĴ ŌŌNŌŌbĴ NŌwĴ

1. According to the video, when did the impact of the dromedary camel on the UAE area start?

2. Before this time, how did people use camels? What did they use from the camels?

3. What did researchers discover at Tell Abraq that suggested that people started to domesticate camels?

4. When did people start to domesticate animals?

Activity 1: Concept Check

5. Why were domesticated dromedary camels usually smaller than wild dromedary camels?

6. What did domesticated dromedary camels provide to people?

7. How long can a camel travel after getting some water?

8. Fill in the blanks: The camel is “the _____ of the _____.”

9. What appeared across the UAE region because of the use of the camel?

10. What does a study of the gene pool of wild dromedary camels suggest?



The Domestication of the Camel

For about 10,000 years, people in the UAE area shared the land with large herds of wild camels. At first, people hunted the wild camels. The people used camel meat for food and they used camel hide to make clothes.

Researchers are not exactly sure when camels were first domesticated. However, we know that domesticated camels were present in the UAE by 1,000 BCE. We do not know if these camels were domesticated in the UAE or were brought from other places in Arabia. However, some of the earliest evidence for the presence of domesticated camels in the world is found in the UAE.

Once the domesticated camel appeared in the UAE area, lives changed forever. The camel supplied much needed milk. Previously, people consumed milk from cattle, sheep, and goats. Camels, however, provided much greater quantities of milk than either sheep or goats. Camels provided milk during long trips through the desert.

Most important, camels allowed people to travel long distances through the desert. For thousands of years before the domesticated camel, people focused on living in the interior oases like Al Ain, in the mountains, or on the coast, like Umm an-Nar Island. They did not travel from place to place much because they could not travel through the hot, dry desert. However, with the domesticated **dromedary camel**, people could travel through the desert.

Domestication of the camel permitted people to transport goods across the entire country in a manner that was previously not possible. This ability to travel long distances and transport good created a more connected economy and led to an expansion of towns and villages in the deserts.



Activity 2: Concept Check

À ÑŌwĴ rÄĤĴ AĴŌĴ ŌŌÑÑŌAbĴ ÑwÄŌŌĴÑgAÑĴÑrmĴ ŌÑÑÄŴÑmÄĤĴ ÄĴ Ĭ dĴÑg.

1. How did people first use camels?

- They domesticated camels.
- They killed camels for their meat and hides.
- They got milk from camels.

2. By what date are researchers sure that domesticated camels existed in the UAE?

3. How important was it that people domesticated the dromedary camel?

4. How did the camel's ability to travel through the desert affect the economy of the UAE area?

Activity 3: Discussion

دليل الآبار الفلجية والجمال المنزلي من الحضارة التي ظهرت في المنطقة
حول 1,000 قبل الميلاد. كيف كان لكل منهما تأثير كبير على سكان المنطقة؟

1. The falaj and the domesticated dromedary camel both were part of life that emerged in the UAE area around 1,000 BC. How did they each make a large impact on the people of the area?

The Falaj

The Domesticated Camel

2. In about 1,000 BCE, the falaj and the dromedary camel changed life in the UAE region. Choose a recent invention that you think has changed life for people today. Explain why you think it is important and how it has changed people's lives.



Muweilah

With the expansion of overland trade, new towns arose. One such town is now known by the name of Muweilah. Muweilah is located in modern-day Sharjah, near Sharjah Airport. Excavation here revealed a large settlement dating from about 1,000 to 700 BCE.

Muweilah grew rapidly as trade between the coast and the desert increased. Initially, people lived in campsites. Later, mudbrick buildings were built.

After 900 BCE, the people of the town dug a massive ditch and built walls for protection. Perhaps they feared an attack. Their fears were well founded. About 200 years later, the town was attacked and burned to the ground. Although most people seem to have escaped, some died as the walls of the town collapsed around them. Why it was attacked remains a mystery. It might have been an invasion by a foreign army or simply the result of conflict between two local towns. It is clear, however, that Muweilah was very wealthy when it was destroyed.

The destruction of Muweilah preserved many amazing **artefacts** for archaeologists



House at Muweilah (courtesy of Sharjah Archaeology Museum)



Lid of Incense Burner with a Figure of a Bull in Muweilah (courtesy of Sharjah Archaeology Museum)

to find thousands of years later. Included amongst the finds from Muweilah were some spectacular and unusual objects.

One example is the lid of a large incense burner with a figurine of a bull. The incense burner was placed on the ground. As the incense burned, the smoke travelled through the holes and into the room. Other incense burners contain figurines of camels, showing how important this animal was to the inhabitants of Muweilah. The use of incense became increasingly common during the Iron Age and began a tradition that is still an important part of the UAE culture.

Muweilah is just one example of the many desert villages and towns that grew after the camel was domesticated. Others have been discovered in the middle of the desert throughout the UAE and Oman. The people living in these places traded goods across the UAE and into the rest of Arabia. At this time people of the UAE began to trade with areas of Yemen and Oman for frankincense and other aromatics. Eventually, the overland camel-borne trade extended across the Middle East, and cities such as Palmyra in Syria emerged along desert trade routes. This marked the beginning of a new stage in the history of the UAE.

Ā ÑŌwĴ rĀĤĴ AqŌĴ ŌĀÑŌĀĴ ÑŷwAvĴĤAÑĶŶrmĴ ŌÑŶAĶŶNmĀĤĴ AĴ Ĭ dĴŶg.

Activity 4: Concept Check

1. Where was Muweilah located?

2. About what time was it an active city?

3. Why did the city grow rapidly?

4. About when was the city attacked?

5. What was the artefact in the picture? What was it used for?

6. Because of the domesticated camel, who did people of the UAE area trade with?

Wİ Ğ hÄĤ AııĤ NÄ bNÖÖMÖwĤ LŇ hĂ NđĂ NÖwĤ rÄĤ AıÖĤ ÖÖNŇÖAbĤ NŇw.A



Activity 5: Video

1. What was the building probably used for?

2. What does the researcher believe that the building was used for?

3. How is this like a majlis of today?

4. What trade are the settlements competing for at this time?

5. What happened around 700 BCE?

6. What happened to other towns with halls like in Muweilah? Why?

Thj Aĩ Ōĩ Ĭ rĭ hĭ rA Nũ vĭ Ōhĩ ŌNj pŌrpNŌj ANrēh Añ Ĵ ŌNgAĩ NAĩ ŌANrA NpN ŌNA Nmĵ ŌNA

Activity 6: Discussion

Ĭ grĬ Ĭ mĬ NĬŌNĬAĬĬpŌŌ Ō. WhĬ ŌNĬNdNĬNĬ Ĭ Ĭ ŌAxlŌŌŌndĬ ŌNĬAĬ NĬdNĬ AĬĬpŌŌ ŌAĬ ŌwĬ Ĭ NĬAĬ NpNĬ ? A
WhĬ ŌArĬ AĬKĬ Ĭ ŌyĬ AĬ ŌŌNĬAĬ NĬdNĬNgAĬĬpŌŌ ŌAĬ ŌwĬ Ĭ NĬAĬ NpNĬ ? AĬĬĬ ŌŌŌhĬ ŌĬ AŌĬ ŌĬNĬNŌŌA
grNŌpŌ.



Activity 7: Video about Mleiha

WĪ Ǫ hǎĭj Aġġġ Nǎ bNŌŌMŊ ħĭ Ǻ NǫǺ NŌwġ rǎġġ AġŌġ ŌŌġNŌŌ.A

1. How did Mleiha's location help give power?

2. Name the areas that the sea ports traded with.

3. How could Mleiha's leaders benefit from these trade routes?



4. What evidence is there that Mleiha had power over the trade routes?

5. How do coins suggest the role of women in Mleiha?

Mleiha



The ancient village of Mleiha is part of inland Sharjah. Mleiha existed for thousands of years before, but its rise to **prominence** was approximately 0 – 300 BCE. Mleiha became a **crossroads** for trade routes at the time. Its full size is still not completely known, but archaeological remains cover an area of at least 2.5 x 2 kilometres. Mleiha's size and organisation were without parallel in the ancient UAE. Unlike modern cities, the buildings were spread out over a large area. Most consisted of simple residential structures, probably occupied by farmers.

One of the most important discoveries about Mleiha is the existence and use of coins. This was a first for the area – coins had not been used in ancient UAE prior to this period. The use of coins by Mleiha is evidence that Mleiha had significant power in the area.

If people must use a government's **currency** in order to buy things like food and clothing, then that government has more power over the people in the area. In addition to giving buying power, coins provide valuable information about the culture, leadership, and important **symbolism** of the historical periods in which they were produced. For example, coins often give the image and name of the leader of the area. Along with describing the leaders, coins often provide important information about the interaction between different groups of people throughout history.



Activity 8: Concept Check

Á ÑŌwĴ rÄĥĴ AqŌĴ ÖŬÑÑŌAbĴ ÑwAwLŬhAÑKÑrmİ ÖÑÑÄKrNmÄĥĴ AĴ İ dLÑg.

1. Where is Mleiha?

2. Approximately when was Mleiha at the peak of its power?

3. What is the physical description of Mleiha?

4. What was used for the first time in Mleiha?

5. Why is the use of coins a sign of the power of the rulers?

6. What other information do we learn from the coins?

Activity 9: Discussion

Hĩ vLNgAÖA wNNA ÖrrJ Nl ÖAİ vJ ÄhJ gNvJ rNmJ NÖNKA NÄ rJ İ AnNrJ PNwJ r. MNÑJ ÖAlyJ ÖA
LNdlydÖİ NÖANwJ rANvJ ANAÖNl Lj Ö. ANwAİ NÄ ÖÖANrÖNİ Ö ANÖpÖÄNdANmmÖNlÖJ ÖA A
KLÑİ Nl Lj NÖAÖOppNrÖ dÄhrNÖghAmpNrNvJ dAKLÑİ Nl Lj NAmİ Nİ gJ mJ NÖÄ NdAİJ İp?

Mleiha and Arabia

Another important discovery about Mleiha is that it had significant contact with the rest of Arabia. For example, the tombs during the Mleiha period resemble tombs in other areas of Arabia, including Syria, Saudi Arabia, and the famous tombs at Petra in Jordan.

Several important **inscriptions** from Mleiha reveal contact with the rest of Arabia. One is written using the South Arabian alphabet common in what is now modern-day Yemen. The inscription reads ‘nafs wa qabr Dhariyyat fata l’muluk’, which can be translated as,



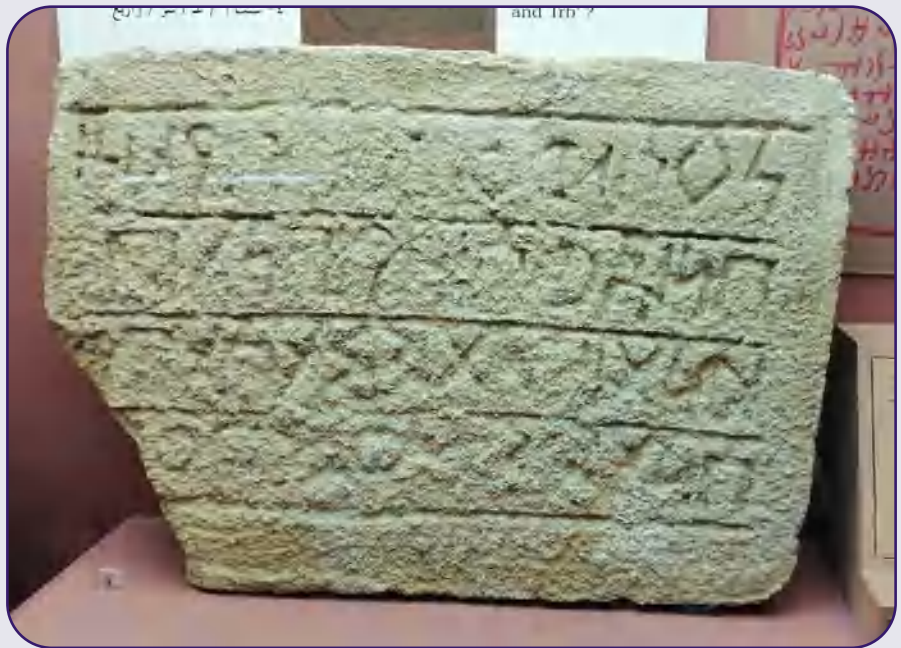
‘tower and grave of Dhariyyat, servant of the kings.’ The term ‘nafs’ is probably derived from the Aramaic language and indicates that this area of Arabia had been influenced by several adjoining regions.

The use of the South Arabian alphabet in these and other inscriptions is an important point in the UAE’s history. First, it shows the contact that the UAE area people had with the rest of Arabia. Second, it is the first examples of using writing by the UAE area people of that time. Prior to this, writing was virtually absent from ancient UAE.

A few examples of South Arabian alphabet are known from earlier contexts. A three-letter inscription from Muweilah, which dates to around 800 BCE, is especially important. It was only after 300 BCE, however, that South Arabian and Aramaic became more common in the UAE. Even then, writing was never widespread. It was used in special contexts, like on tombs or elaborately decorated metal bowls.

Most people did not read or write. However, they did share powerful stories and songs about their history and identity. Songs and poetry have long been an important part of the UAE culture.

Songs sung by fishermen and by pearl divers tell of the importance of the sea and its resources. Poetry, recited from the heart rather than read from a page, is also important. Dance and song, like the “*Ayala*” practiced today, reinforce the national identity and celebrate important events.



Activity 10: Concept Check

Ā ÑŌwĴ rĀĥĴ AqŌĴ ŌĀÑÑŌĀbĴ ÑŵAwĴĤAÑĴÑrmĴ ŌÑÑĀĴrÑmĀĥĴ AĴ Ĵ dĴÑg.

1. What two findings suggest that Mleiha had contact with the rest of Arabia?

2. _____

3. What alphabet is used in some of the inscriptions that have been found?

4. _____

5. What is the date of the earliest inscriptions found? When did the South Arabian alphabet and Aramaic become widely used in Mleiha?

ĠvÑŌP	G MÑ
South Arabian alphabet first used	
South Arabian alphabet and Aramaic widely used	

6. Before writing, how did people of the ancient UAE communicate important messages?

Activity 11: Discussion

WrlÖNgArlÖÖAmj rgj dANhJ A A C Ä rJ i AÖrlNgÄhJ MN lhi AJ rLNd.ANwAmpNrÖ NÖÖÖNRAA
J NmmÖNlÖÖNAJ NpÖÖAJ NpN Ä i rNÖNAJ i dÄNdArLÖ ?Whi ÖhNÖNÄAANvJ rNmJ NÖNKhJ A
J NmmÖNlÖÖANÖNAi kJ ÖÖrJ ÄhJ ÖpJ NpN Ä i NÄ i rNÖNAJ i dÄNdArLÖ ?Whi ÖhNÖNÄA mNÜ ÖA
i NdÄNdlyldÖi NÖANÖNAi kJ ÖÖrJ ÄhJ ÖhJ ÖÄ i rNÖNAJ i dÄNdArLÖ ?ÄLÖl ÖÖÖhJ ÖJ ÄÖJ ÖÖNÖÖA
wLchANÖhJ rAÖÖÖdJ NÖÖ.

Activity 12: Expressing Culture

Ä NÄNmmÖNlQJ ÖAİ vJ ÄI ÖÖÄNÄxprJ ÖÖÄnJ LrAdJ NÖÖÖÄhrNöghÄnJ ÄrCÖ:AÄNJ ÖÖ,Arl KÖ,A
pJ rLrNmLNgÄrCÖ,ÄQ .ÄJ ÖJ rlBj ÄÑÄrCÖ,NrmÄ,NmÄNNChJ rÄÖNÖÖrJ .ÄLNdÄÄLJ CÖrJ ÄrÄldJ NÄKA
LÖÄ hNwÄhJ QÄLJ CÖrJ ÄrÄldJ NÄNÄChJ rÄCÖdJ NÖÖ.AhJ N,ÄJ ÖJ rlBj ÄhJ ÄrCÖ,NrmÄNdAhJ ÖPÄ
ÖÖmbNÖJ ÖÄJ İNw:A

Lesson 5

Shipbuilding and Trade: Ed-Dur and the Arabian Gulf

Learning Outcomes:

- identify the scale to which Ed-Dur and Dibba were centres of the UAE area
- describe the effects of travel on the spread of diseases

VNỊ Ĩ bŌÑ rØ

settlement

Ed-Dur

harbour

lagoon

tuberculosis

Dibba

Ed-Dur

The ancient settlement of Ed-Dur was in what is now Umm al-Quwain. Ed-Dur was near a large lagoon that opened to the Arabian Gulf. In the past, this lagoon was open to the sea and provided a natural harbour for ships. Thus, like Mleiha, Ed-Dur was another centre of trade. The main part of the town probably lay a little away from the coast, perhaps for fear of piracy. People lived in and around Ed-Dur for thousands of years. Beginning around 100 CE, the population began to increase. People lived in houses made from locally available stone.

The people at Ed-Dur became wealthy from trade across the Indian Ocean and Arabian Gulf. Ships from Yemen and India provided spices and incense unavailable in the UAE. Traders from Persia and Mesopotamia brought highly decorated pottery and metal goods.

In some ways, this trade was similar to that which had existed during the Bronze Age. A large amount of material came from the Mediterranean. This included jars from the island of Rhodes as well as Greek and Roman pottery. Trade was carried out by local sailors and merchants who sailed the seas for generations.

Sailors and merchants would have made a good profit. As a result, the inhabitants of Ed-Dur had access to bronze and ceramic goods from the very heart of the Roman Empire. These included ladles, strainers, and bowls that were used for special occasions. The many coins from Ed-Dur reflect their increasing use for exchange and commerce across a vast distance. Locally minted coins were traded for coins from afar, including the Roman Empire.



Activity 1: Concept Check

À ÑŌwĴ rÄĤĴ AĴŌĴ ŌÄŸŸŸŌÄĴ ŸŸwAvĴŌhÄŸŸŸŸrmĴ ŌŸŸŸÄŸŸŸmÄĤĴ ÄĴ Ĵ dĴŸg.

1. In what present-day Emirate is Ed-Dur?

2. What kind of area was Ed-Dur?

3. What was probably the reason why Ed-Dur was not right on the coast?

4. When did the population of Ed-Dur begin to increase?

5. What kind of goods came from each area below?

Area	Goods
Yemen and India	
Persia and Mesopotamia	
The Mediterranean	

6. How did trade affect the population of Ed-Dur economically?

Exports

Imports

Dibba

Dibba, which is in present-day Fujairah, was famous as a hub for international trade in the early Islamic period (approximately the 600s CE). Recent excavations by the Sharjah Archaeology Authority revealed (early Islamic period approximately) stunning new evidence that Dibba's importance as a trading centre stretches back at least 2,000 years. The archaeologists excavated a large tomb containing decorated ceramics from Persia and Mesopotamia and glass vessels from Rome.

The skeletons in this tomb provide a great deal of information on the lives and deaths of the people of Dibba. Careful analysis of the bones from Dibba indicates that very serious diseases affected some of the people buried in the tomb.

Two skeletons, one from the tomb itself and one of a poorer person buried nearby, show that **tuberculosis** may have been present in the population.

Tuberculosis is a common disease in which the lungs are infected with bacteria that causes coughing, internal bleeding, and fevers. Most people who had tuberculosis died because no treatment was available to fight the bacteria. The disease is spread primarily from the coughing and sneezing of people living close to each other.

A trading ship would be an ideal environment for tuberculosis to spread, which may explain its presence in Dibba. The busy port would likely have been home to merchants from Iraq, south Asia, Egypt, and Yemen. The merchants may have travelled to other places such as Palestine, Greece, Italy, and perhaps as far as Spain. Tuberculosis can live in the body for many years, so it could spread very quickly across the entire known world at this time. The long-distance trade that brought luxury goods to Dibba could have brought disease as well.



Activity 3: Concept Check

À ÑÕwî rÄhî Aqõî ÕÄÑÑÕAbî ÑwAwLÖhAÑKÑrmİ ÄÑÑÄKÑNmÄhî Aî İ dLÑg.

1. Why do archaeologists think that Dibba was a trade centre for at least 2000 years?

2. What did researchers learn by studying skeletons in tombs in Dibba?

3. What are the symptoms of tuberculosis?

4. What happens to most people with tuberculosis if they don't receive treatment?

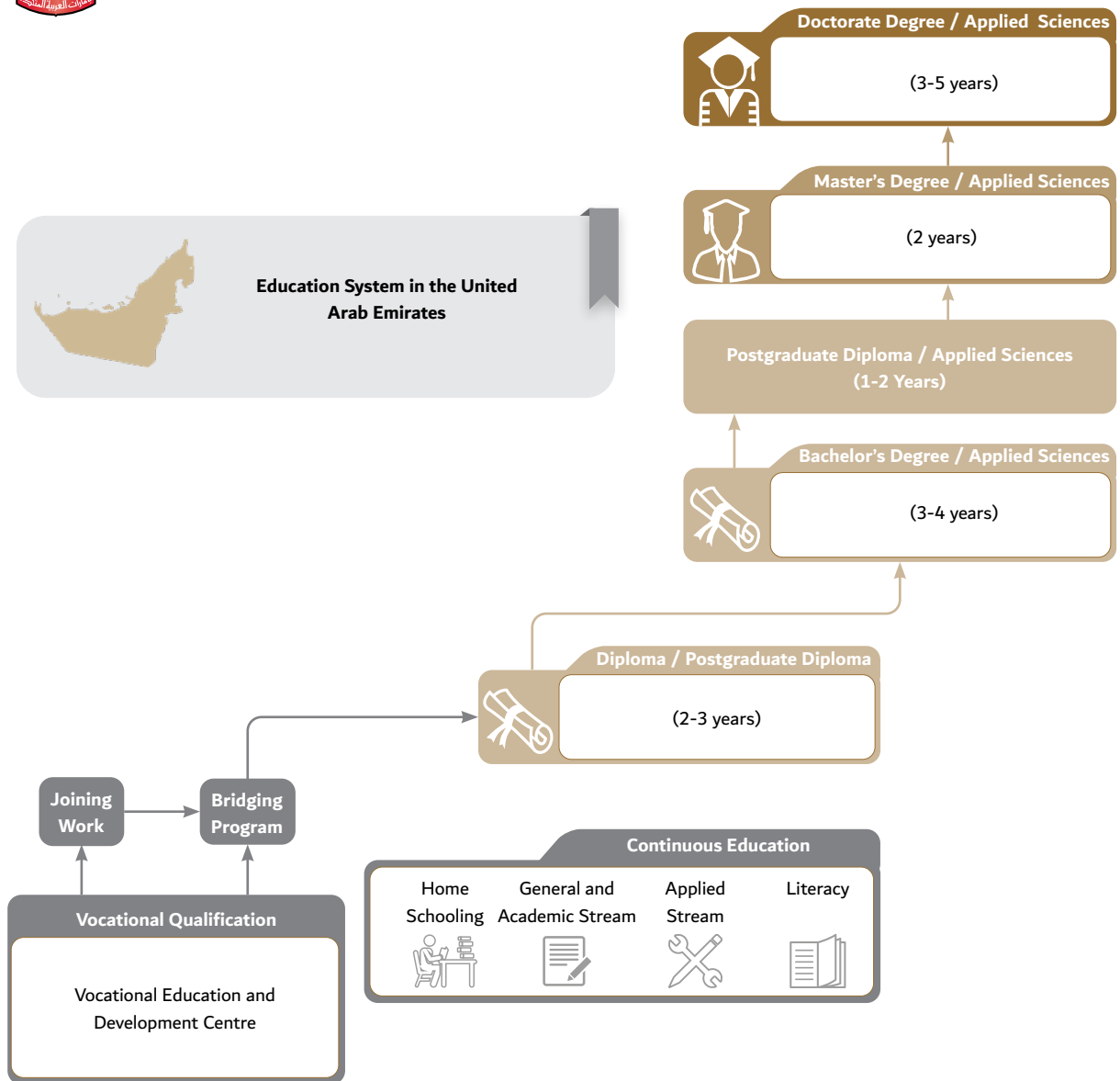
5. How is tuberculosis spread from one person to another?

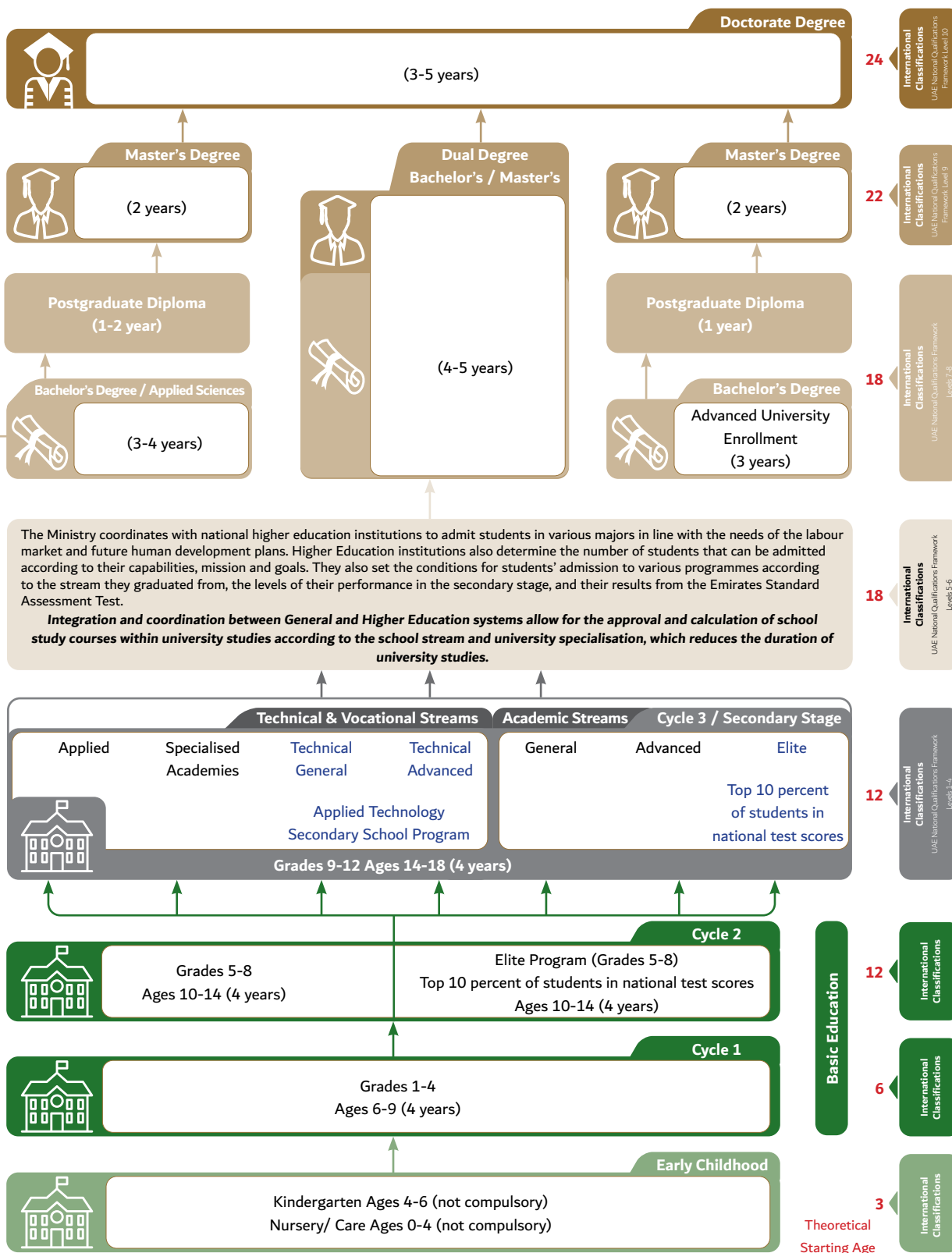
6. Why would a trading ship be ideal to spread tuberculosis?

COVID-19



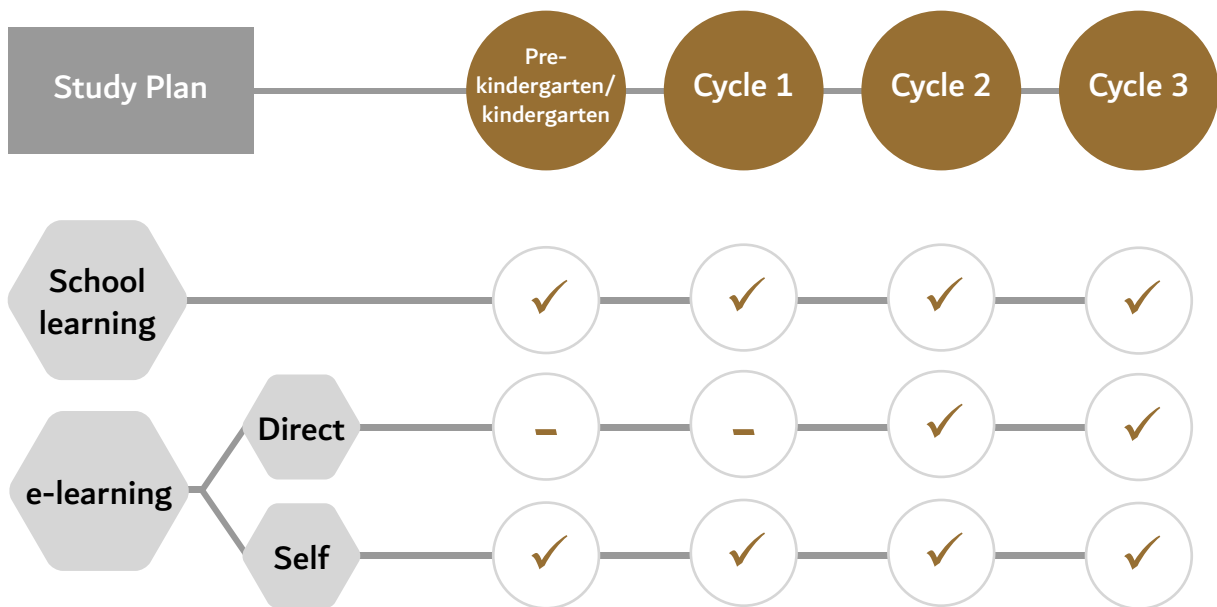
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