Foreword

ESP has become one of the most significant fields in higher institutions, as a matter of fact; English is learnt for many reasons which are due to a large variety of professions which request the use of ESP. The need to use English for specific purposes specialities has many characteristics. One of the reasons for learning English is for science and technology, therefore, ESP can be subdivided into two fundamentals sorts of ESP differentiated according to learners' need. It means that ESP is divided into Academic study or for occupational purposes. As the Susperior School of Applied Sciences comprises different branches of engineering more precisely Electrical Engineering; it is necessary to clarify and shed light on our English lectures. Therefore, we will explain and detail our lectures in the following handout.

The present handout of Electrical Engineering module is composed of five units which are as follows :

Unit One : Introduction to electrical Engineering

Unit Two : Renewable Energies

Unit Three : Heat and Temperature/Electrical

Unit Four : Health and Safety at work

Unit Five : How to write E-mail, CV, Training report

4 th year Programme of English for Electrical Engineering

Unit One/ Introduction

- Your carrer as an Electrical Engineer (reading comprehension text)
- The Engineering profession
- Reading comprehension
- Vocabulary
- Activities

Unit Two/ Renewable Energies

-Renewable energie (reading comprehension text and activities)

- Energy (activities and vocabulary)

-what is energy and where does it come from (reading comprehension text

-Energy for life (reding comprehension)

-Vocabulary

-Activities related to energy

Unit Three/ Heat and Temperature/ Electrical

-Understanding vocabulary related to heat and temperature, Activities

-The transfer of heat energy (reding comprehension text- vocabulary)

-Electrical activities

Unit four /Health and Safety at work

-reading text- Advise-vocabulary

-Activities

-charts, graphs and Diagrams

Unit Five/ E-mail/ CV/ Training Report

-How to write an E-MAIL

-How to write a training report

-How to write a training report/ CV

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UNIT ONE

TEXT ONE/YOUR CAREER AS AN ELECTRICAL ENGINEER

Electrical engineering is a very broad discipline that addresses the design and understanding of devices, circuits, and systems that use electromagnetic waves in electronic or optical signals. This increasingly involves the use of computers, but focuses on the design and analysis of electronic/optical components and the signals that connect them.

The rapid expansion of the high tech industry has provided a wealth of professional opportunities for electrical engineers. Although, showing a chronic shortage of qualified electrical engineers, this is one of the fastest growing specialty areas of engineering. A degree in electrical engineering provides great flexibility and can lead to a wide range of career paths. Electrical engineers are inventors, designers, business owners, consultants, teachers, researchers, scientists, executives, politicians, and astronauts. They are addressing many of the world's most serious environmental and social challenges by developing new processes, more efficient resource use, and enhanced communication. Following the introduction of the Bologna process, which Croatia started implementing in 2005, it has become common for the higher education institutions to split technical studies into two parts. At the end of the first part lasting three years, students would get the bachelor's degree (baccalaureus = prvostupnik, abb. BSc, 180 ECTS) – in the Department of Electrical Engineering students obtain the qualification Bachelor of Electrical Engineering. The second part is an optional two years, so-called specialist study with the master's degree (magistar struke, abb. MSc, 120 ECTS). Electrical engineering is a profession that uses science, technology, and problem-solving skills to design, construct, and maintain products, services, and information systems. Electrical engineering is the historical name for what is now called electrical, electronics, and computer engineering.

Our electrical engineering program (see also the text Compulsory, basic, electives – courses for the first year students) includes more mathematics and science, such as mathematical statistics, analog circuits, elements of automation, electrical measurements, engineering mechanics, electrical machines, electronic circuits,

switching equipment, transformers, linear and nonlinear circuits, fundamentals of telecommunications, programming, electrical power engineering, electrical power networks, electric motor drives, low-voltage installations and lightning, electric power plants, process measurements, protection in switchgear, electronic computers and computer equipment, optical communications, radio communication technique and systems, telecommunication networks, mobile radio communications, control devices and systems, radar systems. Some of these courses are compulsory and some of them are electives.

A Bachelor of Science degree in engineering with a specialty in electrical engineering may also serve as a starting point for careers in many other diverse fields, since the problem-solving skills acquired in an electrical engineering program provide an extraordinarily valuable asset. The same skills will equip you to assume leadership roles in your community and in professional circles outside the workplace. A Bachelor of Science program constitutes the full-time formal education for most engineering graduates and is usually undertaken in one field of engineering, which is sometimes noted in the degree postnominals, as in BE (Aero) or Beng (Elec).

Those of you who will continue studying, those who are interested in advanced design, development and research programs will get a Master's degree (MSc or M.Sc.) and those whose interest is focused on research will pursue a doctoral degree (PhD or Ph.D.). (Electricity and electronics)

Task One : write down reasons why you have chosen this study course

……

……..

Task Two : Talk about your future job/employment then write a short essay about it.

Answer Key : different answers (written and spoken)

TEXT TWO/ THE ENGINEERING PROFESSION

What is engineering ? It offers solutions for real human problems by the development and application of tools, machines, materials, goods, or information in the form of ski lls, knowledge, processes, blueprints, plans, diagrams, models, formulae, tables, engineering designs, specifications, manuals, or instructions. What is the work of an engineer ? An engineer **designs, operates**, or **maintains** certain kinds of equipment, **deals with** the practical application of theoretical findings. Engineers **apply** the principles of science and mathematics to develop economical solutions to technical problems. Their work is the link between social needs and commercial applications.

However, what an engineer did in the past, may seem strange and funny today. You know that in the past engineers did not go to school, don't you ? They just worked for a number of years to be taught certain skills. But, that's ancient history, times have drastically changed.

Today's engineers require at least a **three-** or **five-year university course** in order to graduate at a college or to get a bachelor's degree in engineering and become specialists in their fields. This does not mean that, taking their degree, the education is finished. **Continuing education**, or as it has been called lately **lifelong learning**, is critical for engineers wishing to enhance their value to employers as technology evolves. They have to cover different fields, incorporate their ideas into the real world, listen to the needs, and be familiar with the global economic situation.

Therefore, when engineers start developing a new product, they have to consider many factors. For example, in developing **an industrial robot**, engineers precisely specify the **functional requirements ; design** and **test** the robot's components ; **integrate** the components to produce the final design ; and **evaluate** the design's overall **effectiveness, cost, reliability, and safety**. This process applies to the development of many different products, such as chemicals, computers, gas turbines, helicopters, and toys.

In addition to design and development, many engineers work in testing, production, or maintenance. These engineers **supervise** production in factories, **determine** the causes of component failure, and **test** manufactured products to **maintain quality**. They also

estimate the time and **cost** to complete projects. Some move into **engineering management** or into **sales**. In sales, an engineering background enables them to **discuss technical aspects** and assist in **product planning**, **installation**, and **use**. **Supervisory engineers** are responsible for major components or entire projects.

Engineers use computers extensively to **produce and analyse designs** ; to **simulate** and **test** how a machine, structure, or system operates ; and to **generate** specifications for parts. Many engineers also use computers to **monitor product quality** and **control process efficiency**. The field of nanotechnology, which involves the creation of high-performance materials and components by integrating atoms and molecules, also is introducing entirely new principles to the design process.

Most engineers specialize. Numerous specialties are recognized by professional societies, and the major branches of engineering have numerous subdivisions. Some examples include structural and transportation engineering, which are subdivisions of civil engineering ; and ceramic, metallurgical, and polymer engineering, which are subdivisions of materials engineering. Engineers also may specialize in one industry, such as motor vehicles, or in one type of technology, such as turbines or semiconductor materials.

Task One : FILL IN THE BLANK SPACES WITH THE CORRESPONDING ENGINEERING PROFESSION **:**

1) a person whose job involves designing and building of houses, roads, bridges is a _____ engineer

2) a person who designs and builds machines and systems that use or produce electricity is an _____ engineer

3) a person whose job is to design, build and repair machines is a _____ engineer

4) a person who writes computer programs is a _____ engineer

5) a person who works in a recording or a broadcasting studio and controls the levels and balance of sound is a _____ engineer.

Task Two : discuss with your mates the following points (oral discussion)

1. What is engineering ?
2. What is the work of an engineer ?
3. What is the difference between today's engineers and those in the past ?
4. Why is continuous education an imperative for engineers ?
5. What tasks does a supervisory engineer perform ?
6. What do engineers use computers for ?
7. Where would you like to work ?
8. What would you like to specialize in ?

Key Answer :

Task One :

1-Civil Engineer

2-Electrical Engineer

3-Mechanical Engineer

4-Computer engineer

5-Technical Enginner

Task Two : Oral discussion

UNIT TWO / RENEWABLE ENERGIES

TEXT TEXT 1/- RENEWABLE ENERGIES

Read the following text about renewables.

Renewable energy originates from resources that are practically inexhaustible in relation to human needs. For instance, the sun, as the source of solar and most other forms of renewable energy, will continue to shine for some billions of years. Strictly speaking, however, the term "renewable" is not correct, as energy can neither be consumed nor renewed: according to the law of the conservation of energy, the total energy of a closed system remains constant. Using renewable energy therefore means partly redirecting natural energy flows to make them usable for human purposes.

Fossil fuel reserves like coal, petroleum and natural gas are limited in their future availability. Moreover, their use makes many European countries dependent on imports. They are also associated with significant CO2 emissions and thus contributes to global warming. An increase in the use of renewable energy as a proportion of total energy use is therefore planned in Europe and worldwide.

Renewable energy, also referred to as sustainable energy, saves resources and protects the climate. However, some forms of it are not available for energy generation on a steady basis, but are instead subject to considerable fluctuations depending on the time of day, season and region: the sun does not always shine, nor does the wind always blow. Only renewable biomass and geothermal energy can be used to supply base load power, i.e. to ensure continuous supply.

In the future, renewable energy will contribute significantly to the energy mix. It will be important to combine those forms of renewable energy that fluctuate in availability, like solar and wind power, with resources capable of supplying base load power. So-called "hybrid power plants", which make use of various energy resources, might be a feasible solution. Such power plants may work with solar thermal energy during the

day and with geothermal energy during the night. It may also be possible to combine this with biomass power.

The argument basically goes like this. When the wind isn't blowing and the sun isn't shining, renewables like solar and wind aren't producing electricity. What happens during that time when we need energy? We need something more reliable — something that produces electricity all the time and that we can rely on. That's baseload power, provided by reliable sources such as nuclear and coal fire power plants.

Task One . Word Fields **:** *One word does not fit with the other three. Decide and click on the word.*

1. Inexhaustible, endless, boundless, limited
2. Save, consume, use, deplete
3. Constant, sustained, changing, persistent
4. Gas, petroleum, biomass, oil
5. Resource, reservoir, stockpile, outlay
6. Distribute, contribute, supply, furnish
7. Propotion, size, percentage, part
8. Different, various, diverse, homogenous
9. Diminish, expand, increase, enlarge
10. Sustain, perpetual, remit, prolong

Task Two : complete the following sentences using words from the list

Energy mix- solar- renewable energy- subject- baseload- hybrid- closed- emissions- fossil fuels- biomass- wind

1- CO2 ……..contribute to global warming.
2- In the future, renewable energy will contribute to the country's……..
3- A term sometimes used for sustainable energy is……
4- Some forms of energy such as the wind blowing or the sun shining are……..to high fluctuations.
5- The term…….refers to the constant load needed by a system to cover minimum needs.

6- The text states that only……..or geothermal energy can be used to supply the base load.
7- …….power plants make use of various energy forms.
8- According to the laws of energy, in a …….system energy is neither produced nor lost.
9- Neither……..nor……energy is constant enough to provide for the baseload.
10- The main or sole use of……..makes many countries dependent upon the import of energy sources.

Task Three : complete the following table

Infinitive	**Regular/irregular**	**Past**	**Past participle**
To arrise			
To be			
To bear			
To choose			
To contribute			
To cost			
To drive			
To deploy			
To do			
To forecast			
To flow			
To freeze			
To generate			
To include			
To keep			
To know			
To shake			
To shrink			
To spend			
To spoil			
To stand			
To steal			
To think			
To throw			

Task Four : identify the type of energy or resource in the following statements

_____	a. This type of energy is from ancient swamps and is mined to produce the most amount of electricity.
_____	b. This type of resource uses materials that were living (organic material) and changes it by fermentation, conversion of gas and bacterial decay.
_____	c. This type of energy uses photovoltaic cells to produce electricity.
_____	d. This type of energy uses the heated water from the earth's core.
_____	e. This type of energy uses the air in motion from the uneven heating of the earth to heat or produce electricity.
_____ _____	f. This type of energy uses the kinetic energy of the water.
_____	g. This type of energy is a fossil fuel and is refined from crude oil making types of fuel and thousands of products.
_____	h. This type of energy is found by itself, or in petroleum or coal beds.
_____	i. This type of energy involves the nucleus of a atom.

Answer key

Task One : limited/ save/ changing/ biomass/ outlay/ contribute/ size/ homogeneous/ diminish/remit

Task Two : emissions/ energy mix/ renewable energy/ subject/ base load/ biomass/ hybrid/ closed/ solar/wind/ fossil fuels

Task three : revision

Task Four : coal- biomass- solar- geothermal- wind- hydrpower- petroleum- propane- nuclear

TEXT /2 ENERGY

Forms of Energy

The effects of energy can be seen, felt or heard in different ways, depending on the form of energy in question. The main forms are listed below :

• kinetic energy : energy in the form of movement – a type of mechanical energy
• thermal energy : energy in the form of heat
• electrical energy : the energy of an electric current
• sound energy : energy in the form of noise
• light energy : for example, light emitted from the sun or from a light bulb
• chemical energy : energy within substances that can produce a chemical reaction
• nuclear energy : energy from an atomic reaction.

Energy cannot be created or destroyed, only converted from one form to another. For example, in a torch powered by batteries, chemical energy stored in the batteries is converted to electrical energy, and the electrical energy is converted to light energy.

Mechanical energy can be stored as potential energy. An example is a load, lifted by a crane and suspended at a high level. The weight has the potential (in the future) to be released and allowed to fall, becoming kinetic energy. Energy can also be stored when a component is elastically deformed. This is called strain energy. An example is the spring in a watch, which is wound up, then progressively unwinds.

Energy efficiency

Machines often convert an energy source, such as electricity, to another form of useful energy – in other words, energy used for a purpose. For example, a motor converts electrical energy (the energy source) into kinetic energy (useful energy). But it also converts some energy into heat and noise.

As this will be dissipated into the air, and not used, it is waste energy.

A motor : electrical energy ~ useful kinetic energy ~ wasted thermal and sound energy

If a machine converts a high percentage of energy into useful energy, it is efficient. For example, if a motor converts 7 5% of the electrical energy it consumes into kinetic energy, and wastes 25% as thermal and sound energy, it is seventy-five percent

efficient. Improving efficiency – making efficiency gains – is a key focus in engineering.

Work and power

The amount of energy needed to do a task – for example, lifting a load to a certain height by crane – is called work. The amount of energy converted in order to perform tasks – in other words, the amount of work done- is measured in joules **(J).** If a force of one newton is required to keep an object moving, the work required to move that object over a distance of one metre is equal to one joule.

The speed, or rate, at which work is done is called power, and is measured in watts (W). One watt is one joule per second. Power, in watts, is often referred to as wattage. A powerful motor will have a higher wattage than a less powerful one.

Activity One : Make word combinations with *energy* using words from A and B opposite. Then match the combinations with the descriptions (1-8).

1 …..... energy= energy stored within the liquids or solids in a battery
2 …..... energy = mechanical energy in the form of movement
3 …..... energy = potential energy stored in a deformed material
4 …..... energy= energy converted to the form required for a purpose
5 …..... energy= energy converted to a form that cannot be used
6 …..... energy = the form of energy that shines, and can be seen
7 …..... energy= the form of energy that can be heard
8 …..... energy= energy that results in an increase in temperature

Activity Two : Complete the article about electric and diesel-electric locomotives using the words in the box.

Chemical- convert- dissipate- efficiency- efficient- electrical- form- gain- joules- kinetic- power- powered- powerful- source- stored- thermal- useful- waste- wattage- work

An electric locomotive is one that is (1) …..... by an external energy (2) …..... , most often via overhead electric lines. This differs from a diesel-electric locomotive, which has an onboard fuel tank and a diesel-powered generator to provide electricity for its motors. Purely electric power has numerous advantages over diesel-electric power, explaining the choice of electric locomotives for use in high-speed trains.

Firstly, an electric locomotive needs to carry neither a generator nor fuel. Its mass is therefore lower than a diesel-electric equivalent. This results in a significant efficiency

(3) …..... ,as the electric locomotive's smaller mass means less (4) …..... . is done – measured as a total number of (5) …..... – on a given journey. For a comparable rate of acceleration, its motors are also required to provide less (6) …..... . As they use a lower (7) …..... ,this means less (8) …..... .. motors can be used, making them smaller, thus further reducing weight and improving (9) …..... In addition, electric locomotives use only (10) …..... energy.
This means there is no need to (11) …..... energy from one (12) …..... to another on board the train (electricity can be generated more efficiently in power stations). In a diesel-electric unit, the energy conversion process starts with (13) …..... .. energy, which is (14) …..... within the hydro-carbon compounds of diesel. This fuel is
burned to produce (15) …..... energy, and the heat is then converted by the engine into (16) …..... energy, which provides the movement to drive the train. This process is a very long way from being 100% (17) …..... – only a small percentage of the initial chemical energy is converted to the (18) …..... energy that is actually used to drive the train, with a significant percentage being (19) …..... into the air in the form
of heat, constituting (20) …..... energy.

Key Answer :

Activity one : chemical- kinetic -Strain –useful- waste- light- sound- thermal

Activity Two : powered- source- Gain- work- joules- power- wattage- powerful- efficiency- electrical- convert- form- chemical- stored- thermal- kinetic- efficient- useful- dissipated- waste

TEXT/3 WHAT IS ENERGY AND WHERE DOES IT COME FROM

All of our energy comes from the sun, which is our nearest star. The sun sends out huge amounts of energy through its rays every day. We call this energy solar energy or radiant energy. Without the sun, life on earth would not exist, since our planet would be totally frozen. We use this solar energy in many different ways. The sunlight lets us see and warms us. Plants use the light from the sun to grow. They store it as chemical energy. This process is called photosynthesis. The energy is stored in their roots, fruits, and leaves. This energy feeds every living thing on the earth. When humans and animals eat plants, and the food made from plants, we store the energy in our bodies, in our muscles and in our brain cells. We use this energy for everything we do. We use energy when we sing a song, think a thought, tell a joke, climb a ladder, make a pizza, or run a race. Everything needs energy!

Just as humans store energy in their bodies, the earth stores the sun's energy too.

The sun's energy is stored in coal, natural gas, water and wind. Coal, oil, and natural gas are known as fossil fuels. Fossil fuels were formed over millions of years ago when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remains were slowly covered and crushed by layers of rock, mud, sand, and water. The pressure of all those layers caused the plants and animals to break down and change into coal, oil and natural gas.

We use the energy in these fossil fuels to make electricity. We use electricity in many different ways. We light and heat our homes, schools and businesses using electricity, and to run computers, refrigerators, washing machines, and air conditioners. Our cars and planes run on gasoline, which comes from oil. As of the year 2013, most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy. They cannot be used over and over again. This means that one day they will run out!

Luckily, there are some renewable energy sources we can use, that we can keep using. Unlike non-renewable fossil fuels, they will not run out. Three forms of renewable fuels are; solar (coming from the sun) energy, water energy and wind energy. Solar energy can be caught through solar cells and solar panels. People put solar panels on the top of houses to help capture the sun's energy and transform it into

heat and electricity. Water is also used to produce electricity. Dams capture the energy of falling water and turn it into electricity. Wind is a third form of renewable energy. Wind turbines can capture the energy of the moving air and turn it into electricity. All these renewable energy sources are essential for us because they will not run out, so we need to get better and better at using them**.** **(2013 ReadWorks)**

Task One : Answer the following questions from the text

1. Where does all of our energy come from?
A renewable sources
B fossil fuels
C the moon
D the sun

2. How does the author describe renewable energy sources?
A energy sources that will not run out
B energy sources that are too expensive to become popular
C energy sources that are boring and not scientifically interesting
D energy sources that can only be found in limited amounts

3. Most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy, so one day they will run out.
Based on this information, which types of energy sources should humans rely on in the future?
A non-renewable energy sources
B fossil fuels
C renewable energy sources
D chemical energy sources

4. Based on the evidence in the passage, how can the sun best be described?
A crucial for life on earth
B an important mythological object
C a developing black hole
D the biggest star in the universe

5. What is this passage mostly about?
A how long it takes for light from the sun to reach the earth
B the importance of energy for human life and where energy comes from
C different types of non-renewable sources of energy
D how fossil fuels were formed

6. Read the following sentence: "However, fossil fuels are known as **non-renewable** sources of energy. They cannot be used over and over again. This means that one day they will run out."

As used in the passage, what does the word "**non-renewable**" mean?
A coming from water
B wasteful
C going to run out
D easily generated

7. Non-renewable energy sources will eventually run out. _____, renewable energy sources will not run out and we can keep using them.
Choose the answer that best completes the sentence below.
A For example
B Because
C On the other hand
D Therefore

8. Describe how fossil fuels were formed.

_____
_
_____
_
_____
_
_____
_

9. What are the three forms of renewable fuels?

_____
_
_____
_
_____
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_____
_
_____
_

10. Which type of energy should humans be using in the future? Use information from the passage to support your answer.

_____
_
_____
_

Answer key

1. Where does all of our energy come from?
D the sun

2. How does the author describe renewable energy sources?
A energy sources that will not run out

3. Most of the energy we use comes from fossil fuels. However, fossil fuels are known as non-renewable sources of energy, so one day they will run out.
Based on this information, which types of energy sources should humans rely on in the future?
C renewable energy sources

4. Based on the evidence in the passage, how can the sun best be described?
A crucial for life on earth

5. What is this passage mostly about?
B the importance of energy for human life and where energy comes from

6. Read the following sentence: "However, fossil fuels are known as **non-renewable** sources of energy.
They cannot be used over and over again. This means that one day they will run out."
As used in the passage, what does the word "**non-renewable**" mean?
C going to run out

7. Non-renewable energy sources will eventually run out. _____, renewable energy
sources will not run out and we can keep using them.
Choose the answer that best completes the sentence below.
C On the other hand

Suggested answer: Fossil fuels were formed when the remains and fossils of prehistoric plants and animals sank to the bottom of swamps and oceans. These animal and plant remains were slowly covered and crushed by layers of rock, mud, sand, and water. The pressure of all those layers caused the plants and animals to break down and change into coal, oil, and natural gas.

9. What are the three forms of renewable fuels?
Suggested answer: Solar energy, water energy, and wind energy are the three forms of renewable fuels.

10. Which type of energy should humans be using in the future? Use information from the passage to support your answer.

Suggested answer: Answers may vary and should be supported by the passage. Generally students should indicate that humans should be using renewable energy sources because unlike non-renewable energy sources, they will not run out.

TEXT /4- ENERGY FOR LIFE

ENERGY IS THE KEY

We use a lot of energy to live. Whether we're playing, studying or eating, energy makes these activities possible. We also use energy for production-to run machines, for instance. Much of this energy comes from fuels like oil, coal or natural gas. These fuels are used to make the blacktop and basketballs at recess, as well as generate the electricity for the lights all around you. Think of all the energy required to plant, grow, harvest, transport and cook your lunch, and you can start to understand that energy is a key to life!

NATURAL, BUT NOT FOREVER

Fuels like natural gas, oil and coal are important natural resources. They are known as fossil fuels and take millions of years to form. We've used them for hundreds of years, and they've powered everything from planes and trains to cars and computers. Unfortunately, fossil fuels are non-renewable forms of energy. Our power plants burn them faster than nature makes them, and when they are burned, power plants create emissions harmful to the environment.

To use fossil fuels, we first need to get them out of the earth with technologies like oil rigs, coal mines and natural gas wells. The drilling, mining and pumping of these natural resources often requires very large operations. These procedures result in producing the important energy we need, but they need fossil fuels themselves to operate and can often negatively impact the land where these fuels are found.

POWERING THE FUTURE

Fortunately, there are forms of renewable energy out there. They also come from nature and don't harm the environment as much as fossil fuels. Furthermore, they aren't consumed to produce energy, so we can use them again and again. One form of renewable energy is solar energy. Solar energy uses solar panels, which collect sunlight and convert it directly into electricity.

Another form of renewable energy is wind energy. Like an extremely large pinwheel, wind turbines have blades that rotate when the wind blows, and this movement generates electricity. Some solar and wind energy power plants are connected to batteries so they can supply electricity even when the sun isn't shining or the wind isn't blowing. One form of renewable energy that has been around for a very long time is hydropower. Hydropower is energy produced by falling and running water.

Hydropower technologies can be as simple as a watermill on a stream or as complex as a hydroelectricity dam.
Hydropower is a great source of renewable energy: in Washington state (in the USA), for instance, it produces approximately 75% of the entire state's energy!

THE RIGHT PLAN

Using renewable energy is a good way to reduce our dependence on fossil fuels, though renewable energies have some negative impacts on the earth as well. Solar power plants are usually built in deserts where sunshine is reliable and strong, but the desert land that is disrupted for the construction and operation of these power plants is actually rich with plant and animal life.
Wind energy power plants are called wind farms and require a lot of land. Though each turbine only takes up a small area of land, wind farms can easily have hundreds or thousands of turbines. With that many turbines together, their presence can easily affect birds, bats and other wildlife in the area.
Hydropower plants can generate a lot of energy and electricity, but their existence can dramatically alter the environment around them. Many hydropower plants use dams to create the electricity. Fish can be easily blocked by a dam and prevented from swimming to important spawning grounds. Dams can also fail and cause massive flooding. Also, in the event of a drought, the electricity produced could truly be limited to a trickle!
However, by carefully planning the locations of renewable energy power plants, their harmful impact to the planet can be minimized and their renewable and sustainable benefits maximized.

LOOKING FORWARD

Almost everything we do requires some sort of energy. It's important to understand where our energy comes from, how it is produced and what effect each type has on our environment. As technology improves, we can balance the use of non-renewable fossil fuels with renewable energy for a healthier planet.

1 - **Comprehension Questions**

1. What do people use energy for?
A. People use energy to cause massive floods.
B. People use energy to create more oil and coal.
C. People use energy to play, study, and live.
D. People use energy to minimize sustainable benefits from the sun.

2. What does the passage compare and contrast with fossil fuels?
A. The passage compares and contrasts playing, studying, and eating with fossil fuels.
B. The passage compares and contrasts coal mines and natural gas wells with fossil fuels.

C. The passage compares and contrasts Washington State with fossil fuels.
D. The passage compares and contrasts forms of renewable energy with fossil fuels.

3. Humans use energy from several different sources.
What evidence from the passage supports this statement?
A. People use energy to play, study, eat, make basketballs, and generate electricity.
B. People use energy from natural gas, oil, coal, the sun, wind, and water.
C. Wind turbines can affect birds, bats, and other wildlife around them.
D. When a dam that produces hydropower fails, it can cause massive flooding.

4. What is true of all types of energy discussed in the passage?

A. They are all non-renewable.
B. They are all renewable.
C. They all have some negative impacts on the earth.
D. None of them has any negative impacts on the earth.

5. What is this passage mainly about?

A. the importance of energy and where energy comes from
B. watermills, dams, and other forms of hydropower
C. planting, growing, harvesting, transporting, and cooking food
D. the different ways children play and study

6. Read the following sentences: "Fortunately, there are forms of **renewable** energy out there. They also come from nature and don't harm the environment as much as fossil fuels. Furthermore, they aren't consumed to produce energy, so we can use them again and again."
What does the word **renewable** mean?
A. harmful to the environment
B. able to be used more than once
C. produced by falling and running water
D. made in the United States of America

7. Choose the answer that best completes the sentence below.
Wind is a form of renewable energy; _____, oil is not renewable.
A. for example
B. particularly
C. soon
D. on the other hand

8. Where does hydropower come from?

9. What effects does hydropower have on the environment?

10. The passage states that it is "important to understand where our energy comes from, how it is produced and what effect each type has on our environment." Explain why understanding these things is important, using evidence from the passage.

Key answer :

1-What do people use energy for?

C-**People use energy to play, study, and live.**

2. What does the passage compare and contrast with fossil fuels?

D-**The passage compares and contrasts forms of renewable energy with fossil fuels.**

3. Humans use energy from several different sources.

What evidence from the passage supports this statement?

B-**People use energy from natural gas, oil, coal, the sun, wind, and water.**

4. What is true of all types of energy discussed in the passage?

C- **They all have some negative impacts on the earth.**

5. What is this passage mainly about?

A-**the importance of energy and where energy comes from**

6. Read the following sentences: “Fortunately, there are forms of **renewable** energy out there. They also come from nature and don’t harm the environment as much as fossil fuels. Furthermore, they aren’t consumed to produce energy, so we can use them again and again.”

What does the word **renewable** mean?

B-**able to be used more than once**

7. Choose the answer that best completes the sentence below.

Wind is a form of renewable energy; _____, oil is not renewable.

D.on the other hand

8. Where does hydropower come from?
An acceptable basic response is that hydropower comes from water. Students may go into more detail, explaining that hydropower is produced by falling and running water through the use of watermills or dams.

9. What effects does hydropower have on the environment?
Students should respond by naming the effects mentioned in the passage. These include blocking fish from their spawning grounds and massive flooding.

10. The passage states that it is "important to understand where our energy comes from, how it is produced and what effect each type has on our environment." Explain why understanding these things is important, using evidence from the passage.
Answers may vary, as long as they are supported by the passage. For example,students may respond that knowing where our energy comes from may b key tounderstanding how long it will last, as in the case of non-renewable energy. Understanding how energy is produced (especially the amount of energy needed to produce energy) and the different impacts particular types of energy have on the environment can help people make decisions about which types of energy to use.

GLOBAL WARMING

Experts in climatology and other scientists are extremely concerned about the changes to our climate. Admittedly, climate changes have occurred on our planet before. For example: there had been several ice ages or glacial periods.

These changes were different from the modern ones because they occurred gradually and naturally. The current changes aren't the result of natural causes, but of human activity. Furthermore, the changes are occurring alarmingly rapid.

The major problem is perhaps, that the planet is warming up. According to some experts, this warming, known as global warming, has been occurring in the last 10,000 years. The implications for the planet are very serious. Rising global temperatures could give rise to such ecological disasters such as floods and droughts. This could have a harmful effect on agriculture.

This unusual warming of the earth has been caused partly by so- called greenhouse gases, such as carbon dioxide, being emitted into the atmosphere by car engines and modern industrial processes, for example. Such gases, not only add to the pollution of the atmosphere, but also create a greenhouse effect, by which the heat of sun is trapped. This leads to the warming up of the planet.

Politicians are also concerned about climate change and there are now regular meetings on the subject, attended by representatives from many of the world's industrialized countries. In Kyoto, Japan in 1997, it was agreed that the most industrialized countries would try to reduce the volume of greenhouse gas emissions and were given targets for their reductions.

It was also suggested that more forests should be planted to create so- called "sinks" to absorb greenhouse gases. At least part of the problem of rapid climate change has been caused by too drastic deforestation.

Sadly the targets are not being met. Even more sadly, global warnings about climate changes are often still being regarded as scaremongering.

<u>Activity one</u> : Answer these questions

1. What climate changes have taken place before the present time?

……
……

2. What are the main differences between modern climate changes and the ones that occurred in the past?

……
……

3. What were the agreements reached in the summit in Tokyo?

……
……

4. Which suggestions were made and why?

……
……

Express your opinion: Is global warming true or false? Give reasons.

……
……**.....**

UN - We can control Global Warming

A United Nations **committee** on climate change has said we can control global warming. The **panel**, made up of **representatives** from over _____ countries, believes we can _____ the harm *greenhouse gases* do to the **atmosphere**. The panel said that we can keep our Earth safe by changing the way we use _____ around the world. Most important is to _____ more fuel-**efficient** vehicles and household **goods**. For this to happen, individuals need to change their _____ and spending patterns.

The committee _____ that it would cost less than _____ of world economic **output** by 2030. The "big problem" is the damage rising temperatures are doing to the Earth. Increased floods, **droughts**, rising sea levels, more violent and destructive storms and **extinctions** of _____ are just a few things threatening the life of our planet. The report _____ the **urgent** need for introducing a wide

variety of _____ technologies. Harlan Watson, head of the U.S. team, warned: “If we continue to do what we are doing, then we are in _____.”

1) Vocabulary

1. Committee	a. the mixture of gases that surrounds the Earth
2. Panel	b. someone who has been chosen to speak, vote, or make decisions
3. Representative	c. the money, goods or work made
4. Greenhouse gas	d. a group of people chosen to do a job, make decisions etc
5. Atmosphere	e. things that are made to be sold, products
6. Efficient	f. very important and needing to be dealt with immediately
7. Goods	g. a gas, such as carbon dioxide, that traps heat above the Earth
8. Output	h. a group of experts who answer questions about a topic
9. Drought	i. when a particular type of animal or plant stops existing
10. Extinction	j. to work well without wasting time, money, or energy
11. Urgent	k. dry weather, not enough water for plants and animals to live

2) Questions

1. What is this article about?
2. What is global warming? What are some of the causes?
3. What did the UN committee decide? Why is their decision important?
4. What is the “big problem”?
5. What did Harlan Watson say about global warming?
6. What do you think about global warming

Key answer

UN - We can control Global Warming

A United Nations **committee** on climate change has said we can control global warming. The **panel**, made up of **representatives** from over **120** countries, believes we can **limit** the harm *greenhouse gases* do to the **atmosphere**. The panel said that we can keep our Earth safe by changing the way we use **energy** around the world. Most important is to **introduce** more fuel-**efficient** vehicles and household **goods**. For this to happen, individuals need to change their **lifestyles** and spending patterns.

The committee **calculated** that it would cost less than **three percent** of world economic **output** by 2030. The "big problem" is the damage rising temperatures are doing to the Earth. Increased floods, **droughts**, rising sea levels, more violent and destructive storms and **extinctions** of **species** are just a few things threatening the life of our planet. The report **stressed** the **urgent** need for introducing a wide variety of **clean** technologies. Harlan Watson, head of the U.S. team, warned: "If we continue to do what we are doing, then we are in **deep trouble**."

1) Vocabulary

1. Committee	D	a. the mixture of gases that surrounds the Earth
2. Panel	H	b. someone who has been chosen to speak, vote, or make decisions
3. Representative	B	c. the money, goods or work made
4. Greenhouse gas	G	d. a group of people chosen to do a job, make decisions etc
5. Atmosphere	A	e. things that are made to be sold, products
6. Efficient	J	f. very important and needing to be dealt with immediately
7. Goods	E	g. a gas, such as carbon dioxide, that traps heat above the Earth
8. Output	C	h. a group of experts who answer questions about a topic

9. Drought K i. when a particular type of animal or plant stops existing

10. Extinction I j. to work well without wasting time, money, or energy

11. Urgent F k. dry weather, not enough water for plants and animals to live

Activity Three: Climate change vocabulary 1. Match the words from the texts to the definitions below.

Climate change/ Carbon dioxide/ atmosphere/ greenhouse effect/ rise/ global warming/ emissions/ electrical appliances/ greenhouse gases/ ecosystems/ extinction/

1. The process in which gases in the atmosphere trap the sun's heat.
2. The types of gases that trap the sun's warmth in the atmosphere.
3. A greenhouse gas with the chemical name CO2.
4. A change in the earth's climate over a period of time.
5. When the average temperature on Earth is getting hotter.
6. A verb or noun which is a synonym of increase.
7. The scientific word for 'air'.
8. Greenhouse gases caused by human activity.
9. A system of plants and animals living together.
10. When a type of plant or animal disappears completely.
11. Televisions, fridges and other electrical goods.

Key answer

1. The process in which gases in the atmosphere trap the sun's heat. **Greenhouse effect**
2. The types of gases that trap the sun's warmth in the atmosphere. **Greenhouse gases**
3. A greenhouse gas with the chemical name CO2. **Carbon dioxide**
4. A change in the earth's climate over a period of time. **Climate change**
5. When the average temperature on Earth is getting hotter. **Global warming**
6. A verb or noun which is a synonym of increase. **Rise**
7. The scientific word for 'air'. **atmosphere**
8. Greenhouse gases caused by human activity**. Emissions**
9. A system of plants and animals living together. **Ecosystem**
10. When a type of plant or animal disappears completely. **Extinction**
11. Televisions, fridges and other electrical goods. **Electrical appliances**

UNIT THREE

1/ HEAT AND TEMPERATURE

Changes of temperature and state

The two extracts below are from a basic technical training course for the customer service staff of a manufacturer of heating boilers.

***Exctract one* :**

As you know, **temperature** is measued in **degree celsius**, but **heat** is energy. So it is measued in joules. To calculate the amount of enegy needed to raise the temperature of a substance, you need to know the mass of the substance being heated, and also its **specific heat capacity** , in other words, the amount of energy, in joules, required to raise the temperature of one kilogram of the substance by one degree celsius**.**

.

Exctract Two :

What happens when substances change **state** ? Heat energy is needed to make a solid melt and become a liquid, it's also needed to turn liquid into **vapour**. It takes energy to make a liquid boil, so that it evaporates or vaporised and becomes a gas. That's because **melting** and evaporation are **endothermic** processes. That means they take in heat energy, they need to absorb heat from a heat source, such as a flame. And it is the opposite when when a substance cools. As a gas **condenses,** to become a liquid, or as a liquid solidifies to become a solid, the process is **exothermic,** heat is emitted. The amount of energy absorbed or emitte while a substance changes state. In joules per kilogram, is called **latent heat**. During melting it is called **latent heat of fusion,** and during vaporising it is called latent heat of vaporisation.

Activity One : complete the paragraph below with the suitable words

To help understand heat transfer, homes provide everyday examples. The (1)……..in homes often have electric (2)……heaters. These heat the air and make it (3)……., so that it moves in a circle- first rising, then cooling and sinking before
rising again. This is called (4)……, where warm gas or liquid moves around and (5) …….. heat, (6)…… it to the rest of the gas or liquid.
Alternatively, the heating system in a home may circulate hot water through (7)…… The radiators An electric convector heater act as (8)…..…… - devices that transfer heat -in this case, from the hot water inside to the cooler air outside. This happens by (9)…….- heat transfer through solid material. After the heat has been (10)……..through the metal of the radiator, the heat is dissipated by convection.
The third way that heat is transferred is by (11) ……... This is heat that travels as (12)……. An example is the heat from the sun. So the radiators that circulate water have a misleading name, as they don't really function by radiation.

Key answer :

To help understand heat transfer, homes provide everyday examples. The **heating systems** in homes often have electric **convector** heaters. These heat the air and make it **circulate**, so that it moves in a circle- first rising, then cooling and sinking before rising again. This is called **convection**, where warm gas or liquid moves around and **dissipates** heat**, transferring** it to the rest of the gas or liquid.
Alternatively, the heating system in a home may circulate hot water through r**adiators.** The radiators An electric convector heater act as **heat exchangers** - devices that transfer heat -in this case, from the hot water inside to the cooler air outside. This happens by **conduction**- heat transfer through solid material. After the heat has been **conducted** through the metal of the radiator, the heat is dissipated by convection.
The third way that heat is transferred is by **radiation**. This is heat that travels as **electromagnetic waves**. An example is the heat from the sun. So the radiators that circulate water have a misleading name, as they don't really function by radiation.

TEXT/2 THE TRANSFER OF HEAT ENERGY

The heat source for our planet is the sun. Energy from the sun is transferred through space and through the earth's atmosphere to the earth's surface. Since this energy warms the earth's surface and atmosphere, some of it is or becomes heat energy. There are three ways heat is transferred into and through the atmosphere:

· Radiation
· Conduction
· Convection

Radiation

If you have stood in front of a fireplace or near a campfire, you have felt the heat transfer known as radiation. The side of your body nearest the fire warms, while your other side remains unaffected by the heat. Although you are surrounded by air, the air has nothing to do with this transfer of heat. Heat lamps, that keep food warm, work in the same way. Radiation is the transfer of heat energy through space by electromagnetic radiation.

Most of the electromagnetic radiation that comes to the earth from the sun is invisible. Only a small portion comes as visible light. Light is made of waves of different frequencies. The frequency is the number of instances that a repeated event occurs, over a set time. In electromagnetic radiation, its frequency is the number of electromagnetic waves moving past a point each second.

Our brains interpret these different frequencies into colors, including red, orange, yellow, green, blue, indigo, and violet. When the eye views all these different colors at the same time, it is interpreted as white. Waves from the sun which we cannot see are infrared, which have lower frequencies than red, and ultraviolet, which have higher frequencies than violet light. It is infrared radiation that produce the warm feeling on our bodies.

Most of the solar radiation is absorbed by the atmosphere and much of what reaches the earth's surface is radiated back into the atmosphere to become heat energy. Dark colored objects, such as asphalt, absorb radiant energy faster that light colored objects. However, they also radiate their energy faster than lighter colored objects.

Conduction

Conduction is the transfer of heat energy from one substance to another or within a substance. Have you ever left a metal spoon in a pot of soup being heated on a stove? After a short time the handle of the spoon will become hot.

This is due to transfer of heat energy from molecule to molecule or from atom to atom. Also, when objects are welded together, the metal becomes hot (the orange-red glow)

by the transfer of heat from an arc. This is called conduction and is a very effective method of heat transfer in metals. However, air conducts heat poorly.

Convection

Convection is the transfer of heat energy in a fluid. This type of heating is most commonly seen in the kitchen when you see liquid boiling.
Air in the atmosphere acts as a fluid. The sun's radiation strikes the ground, thus warming the rocks. As the rock's temperature rises due to conduction, heat energy is released into the atmosphere, forming a bubble of air which is warmer than the surrounding air. This bubble of air rises into the atmosphere. As it rises, the bubble cools with the heat contained in the bubble moving into the atmosphere.
As the hot air mass rises, the air is replaced by the surrounding cooler, more dense air, what we feel as wind. These movements of air masses can be small in a certain region, such as local cumulus clouds, or large cycles in the troposphere, covering large sections of the earth. Convection currents are responsible for many weather patterns in the troposphere. (**U.S. National Oceanic and Atmospheric Administration:National Weather Service)**

Task One : Answer the following questions from the text

1. What is Earth's heat source?
A. heat lamps
B. dark colored objects
C. the sun
D. metal objects

2. What does the text list and describe?
A. ways hot air is transferred into and through Earth's atmosphere
B. ways heat is transferred into and through Earth's atmosphere
C. ways radiation is transferred into and through Earth's atmosphere
D. ways visible light is transferred into and through Earth's atmosphere

3. Read this sentence from the text.
"Most of the solar radiation is absorbed by the atmosphere and much of what reaches the earth's surface is radiated back into the atmosphere to become heat energy."
What can you conclude about heat energy?
A. Most of the sun's energy is used to make heat energy.
B. A small amount of the sun's energy is used to make heat energy.
C. All of the sun's energy is used to make heat energy.
D. None of the sun's energy is used to make heat energy.

4. Read these sentences from the text.
Convection is the transfer of heat energy in a fluid. . . . Air in the atmosphere acts as a fluid. The sun's radiation strikes the ground, thus warming the rocks. As the rock's temperature rises due to conduction, heat energy is released into the atmosphere, forming a bubble of air which is warmer than the surrounding air. This bubble of air rises into the atmosphere.
What inference can you make about radiation, conduction, and convection?
A. Radiation, conduction, and convection work together to transfer heat energy in Earth's atmosphere.
B. Radiation, conduction, and convection are not important in transferring heat energy in Earth's atmosphere.
C. Radiation, conduction, and convection transfer heat energy from Earth's atmosphere to the sun.
D. Radiation, conduction, and convection work together to transfer heat energy in the sun.

5. What is the main idea of this text?
A. The source of heat for Earth is the sun, and some of the sun's energy is used to make heat energy.
B. White light is when the eye views all the different light frequencies at the same time.
C. The transfer of heat energy from one substance to another or within a substance is called conduction.
D. Heat energy is transferred into and through Earth's atmosphere by radiation, conduction, and convection.

Answer Key

1. What is Earth's heat source?

   C-**The sun**

2. What does the text list and describe?

   B- **ways heat is transferred into and through Earth's atmosphere**

3. Read this sentence from the text.

"Most of the solar radiation is absorbed by the atmosphere and much of what reaches the earth's surface is radiated back into the atmosphere to become heat energy."

What can you conclude about heat energy?

B- A **small amount of the sun's energy is used to make heat energy.**

4. Read these sentences from the text.

Convection is the transfer of heat energy in a fluid. . . .

Air in the atmosphere acts as a fluid. The sun's radiation strikes the ground, thus warming the rocks. As the rock's temperature rises due to conduction, heat energy is released into the atmosphere, forming a bubble of air which is warmer than the surrounding air. This bubble of air rises into the atmosphere.

What inference can you make about radiation, conduction, and convection?

A. Radiation, conduction, and convection work together to transfer heat energy in Earth's atmosphere.

5. What is the main idea of this text?

D-.**Heat energy is transferred into and through Earth's atmosphere by radiation, conduction, and convection.**

TEXT /3 -ELECTRICAL

Electrical engineering deals with the practical application of the theory of electricity to the construction and manufacture of systems, devices and assemblies that use electric power and signals.

Electrical engineering can be divided into four main branches:

- Electric power and machinery
- Communications and control
- Electronics
- Computers

Electrical applications are used in many industrial areas including:

electric power and machinery	superconductors	lasers
electronie circuits	solid-state electronies	radar
control systems	medical imaging systems	consumer electronic
computer design	Robotics	Fibre optics

In recent years, the electronic computer has emerged as the largest application of electrical engineering. However, another very large field is concerned with electric light and power and their applications. Specialities within the field include the design, manufacture, and use of turbines, generators, transmission lines, transformers, motors, lighting systems, and appliances.

Electrical problems can be avoided by always using the right *devices* and taking appropriate measures for *electrical protection.*

Electrical problems :

Ground fault- overcurrent- overload- short circuit

Electrical protection :

Dustproof- rainproof- raintight- watertight- weatherproof- explosionproof

Electrical devices :

Branch circuit- breaker- cable- circuit- feeder- fixture- fuse- ground- junction (electrical box)- panelboard- service panel- switch- switchboard

THE FOLLOWING TABLE SHOWS THE **Standard Electrical Units**

Electrical Parameter	Measuring Unit	Symbol	Description
Voltage		V or E	Unit of Electrical Potential **V = I × R**
Current		I or i	Unit of Electrical Current **I = V ÷ R**
Resistance		R or Ω	Unit of DC Resistance **R = V ÷ I**
Conductance		G or ʊ	Reciprocal of Resistance **G = 1 ÷ R**
Capacitance		C	Unit of Capacitance **C = Q ÷ V**
Charge		Q	Unit of Electrical Charge **Q = C × V**
Inductance		L or H	Unit of Inductance $\mathbf{V_L = -L(di/dt)}$

Power		W	Unit of Power $\mathbf{P = V \times I}$ or $\mathbf{I^2 \times R}$
Impedance		Z	Unit of AC Resistance $\mathbf{Z^2 = R^2 + X^2}$
Frequency		Hz	Unit of Frequency $\boldsymbol{f} \mathbf{= 1 \div T}$

Task One : Express each of these ideas as a compound.

1 a board consisting of a number of panels

2 material that does nat allow water to get into it

3 material that doesn't allow rain to get into it

4 a board consisting of a number of electrical switches

S conductors which are perfect, conducting a current without a battery

6 material that will nat be damaged in an explosion

7current which is greater than the load for which the system or mechanism was intended

8 material that does nat allow dust to get into it

Task Two : What is being described? Find a word or phrase from the text above.

1 It produces a narrow beam of light and can be used to read barcades in a supermarket, play compact discs, etc.

2 A word to describe any piece of equipment made for a specific purpose.

3 A pulse of light, current or sound that is used to convey information.

4 A device that uses electromagnetic waves to calculate the distance of an object.

5 Glass fibres that are used for data transmission.

6 The study of how robots are made and used.

7 A circuit where the current has a choice of paths.

8 A situation where the electrical current takes an easier path than the one intended.

9 A piece of equipment that stops an electrical current if it becomes dangerous.

10 A connection paint where several cables are connected

Task Three : Complete the text below with words from the page opposite.

In power stations, high pressure steam, gas, water or wind is used to drive…… which turn huge …… Large power stations generate electricity at 25,000 volts. This is then stepped up to 275,000 or 400,000 volts using …… before being fed into a network of …….. known as the Grid. Electrical …… is then carried across the country by overhead ……..…… …… . The Grid voltage is reduced by stepping down at substations before it is used in homes and factories. Some industrial plants take electrical energy from the Grid system at 33,000 or 11,000 volts, but for use in homes and offices it is stepped down to a lower level.

In the home, supply from the mains ……passes through a main ……. and then to a fuse box. The fuse box is a distribution paint for the electricity supply to the house. Most houses have two or three ring main ……. ……. connecting electric sockets. There are also two or three circuits and separate circuits for ……. a such as cookers and hot water heaters.

Key Answer

Task One :

1 panelboard- 2 watertight- 3 rainproof- 4 switchboard- 5 superconductors- 6- explosionproof- 7 overIoad- 8 dustproof

Task Two :

1laser	6 Robotics
2 device	7branch circuit
3 signal	8short circuit
4 radar	9 breaker
5 fibre optics	10 junction (electrical) box

Task Three

A turbines	g transformers
b generators	h cable
e transformers	i fuse

d cables
e power
f transmission lines
j circuits
k lighting
l appliances

UNIT/4 HEALTH AND SAFETY AT WORK

A- The average person finds it difficult to assess risks. For this reason, work practices need to be regulated. Examples of dangerous activities are:

- ✓ Welding or grinding without goggles
- ✓ Working on a construction site work without a hard hat
- ✓ Working in noisy factories, cabs, on airport tarmacs and with outdoor machinery without ear protection
- ✓ Working in chemical areas without protective clothing
- ✓ Smoking near hazardous substances

Without regulation some employees will take risks.

Health and safety is a part of employment (labour) law. It covers general matters such as:

- ✓ occupational health
- ✓ accident prevention regulations
- ✓ special regulations for hazardous occupations such as mining and building
- ✓ provisions for risks such as poisons, dangerous machinery, dust, noise, vibration, and radiation
- ✓ the full range of dangers arising from modern industrial processes, for example the widespread use of chemicals.

B- The key concerns for health and safety are to assess the *risks and hazards* by identifying and quantifying the *effects* so that appropriate *protective measures* can be taken.

Risks and hazards

Combustion- contamination- drains-dust- explosion- flammable- friction- fumes- fumigation- gas- harmful- shock- spraying- toxic- vapour

Effects

Adverse effects- birth defects- burn- cancer- dizziness- drowsiness- genetic damage- impair fertility- irreversible effect- vomiting

Protective measure

Avoid contact with- dispose of – dry- handle- keep- precautionary- protect- reycle- rinse- seal- tightly- wash- well-ventilated

Task One : Choose the correct word in each sentence.

1 Store containers in a well-ventilated/good-ventilated place

2 Wipe up any spillages immediately and wash/rinse with soapy water.

3 Process coolíng water can be returned/recycled.

4 This chemical is toxic/intoxicating if swallowed.

5 Leftover chemicals should be disproved/disposed of safely.

6 Please wear protective gloves when fingering/handling this material.

7 Remember that asbestos fibres can cause cancer/coma.

8 Pregnant women should not take this medicine as it may cause birth defects/effects.

9 Increased levels of radiation may lead to compared/impaired fertility.

10 Do not empty chemical paint products into the drains/grains.

11 Protect/ Avoid contact with skin and eyes.

12 Do not use with other products as it may release dangerous fumes/fumigation.

Task Two : Complete the following sentences with a form of the word in brackets.

1 When working in this area, please wear…….. clothing (protect).

2 Don't pour used chemicals into the drains as they will cause…….....(contaminate).

3 Heating this líquid may cause an…… (explode).

4 These chemicals must be kept in a locked cupboard because they are…….(harm)

5 While they repair the roof, we will close this department as a -……..measure (precaution).

6…….. health is one part of Health and Safety (occupation).

7 Working in a noisy factory without ear protectors is a……activity (danger)

8 Petrol and oil are …….chemicals (flame).

9 Make sure the containers are ……..closed (tight).

10 Make sure you are wearing breathing equipment before starting ……(fume).

Task Three : The manager in charge of health and safety is explaining things to some new employees. Complete what he says by filling the blanks with the correct word from the box.

Noise- protection- drowsiness- dust- accidents- smoke- poisonous- fumes- risks- burns- goggles

Manager : new government regulations mean that we are all required to be more aware of (a)……..in the workplace. As your employer, we will provide you with the necessary safety equipment. You must wear (b)……..to protect you eyes when working on this machinery. You should aldo wear (c)…….because the (d)…….from the machines is high enough to cause damageto you hearing. And of course, there is a lot of (e) …….in the air, so pleasewear masksto stop you breathing it in. But, you too are responsible for your safety and for preventing (f)……happening.

Employee : are we looking at the fire risks ?

Manager : yes, of course. Remember that it is very dangerous to (g) …….near the chemical stores. In fact, we have a no smoking policy throughout the company. Chemicals themselves are, of course, (h)…….so they should never enter you mouth. They could cause (i)…….if you get them on your skin. If you leave them without a lid, (j)……may escape and cause headaches, (k)…….or dizziness.

Key Answer :

Task One :

1Store containers in a **well-ventilated**/good-ventilated place
2 Wipe up any spillages immediately and **wash**/rinse with soapy water.
3 Process coolíng water can be returned/**recycled.**
4 This chemical is **toxic**/intoxicating if swallowed.
5 Leftover chemicals should be disproved/**disposed** of safely.
6 Please wear protective gloves when fingering/**handling** this material.
7 Remember that asbestos fibres can cause **cancer**/coma.
8 Pregnant women should not take this medicine as it may cause birth **defects/**effects.
9 Increased levels of radiation may lead to compared/**impaired** fertility.
10 Do not empty chemical paint products into the **drains**/grains.
11 Protect/ **Avoid** contact with skin and eyes.
12 Do not use with other products as it may release dangerous fumes/**fumigation**

Task Two :

1When working in this area, please wear……**protective**…….. clothing (protect).
2 Don't pour used chemicals into the drains as they will cause…**contamination**..(Contaminate).
3 Heating this líquid may cause an……**explosion**…… (Explode).
4 These chemicals must be kept in a locked cupboard because they are…**harmful**..(harm)
5 While they repair the roof, we will close this department as a -…**precautionary**..measure (precaution).
6……**Occupational**…….. health is one part of Health and Safety (occupation).
7 Working in a noisy factory without ear protectors is a……**dangerous**…activity (danger)
8 Petrol and oil are ……**flammable…**….chemicals (flame).
9 Make sure the containers are …**tightly..**closed (tight).
10 Make sure you are wearing breathing equipment before starting …**fumigation….**(fume).

Task Three :

Manager : new government regulations mean that we are all required to be more aware of (a)…**risks**……..in the workplace. As your employer, we will provide you with the necessary safety equipment. You must wear (b)……**goggles**……..to protect you eyes when working on this machinery. You should aldo wear (c)…**protection**…….because the (d)……**noise**…….from the machines is high enough to cause damageto you hearing. And of course, there is a lot of (e) **dust**…….in the air, so pleasewear masksto stop you breathing it in. But, you too are responsible for your safety and for preventing (f)……**accidents**……happening.

Employee : are we looking at the fire risks ?

Manager : yes, of course. Remember that it is very dangerous to (g) …**smoke…**…….near the chemical stores. In fact, we have a no smoking policy throughout the company. Chemicals themselves are, of course, (h)…**poisonous….**….so they should never enter you mouth. They could cause (i)……**burns**…….if you get them on your skin. If you leave them without a lid, (j)…**fumes**……may escape and cause headaches, (k)……**drowsines**….or dizziness.

2-Charts, Graphs and Diagrams

1. Describing the Speed of a Change :

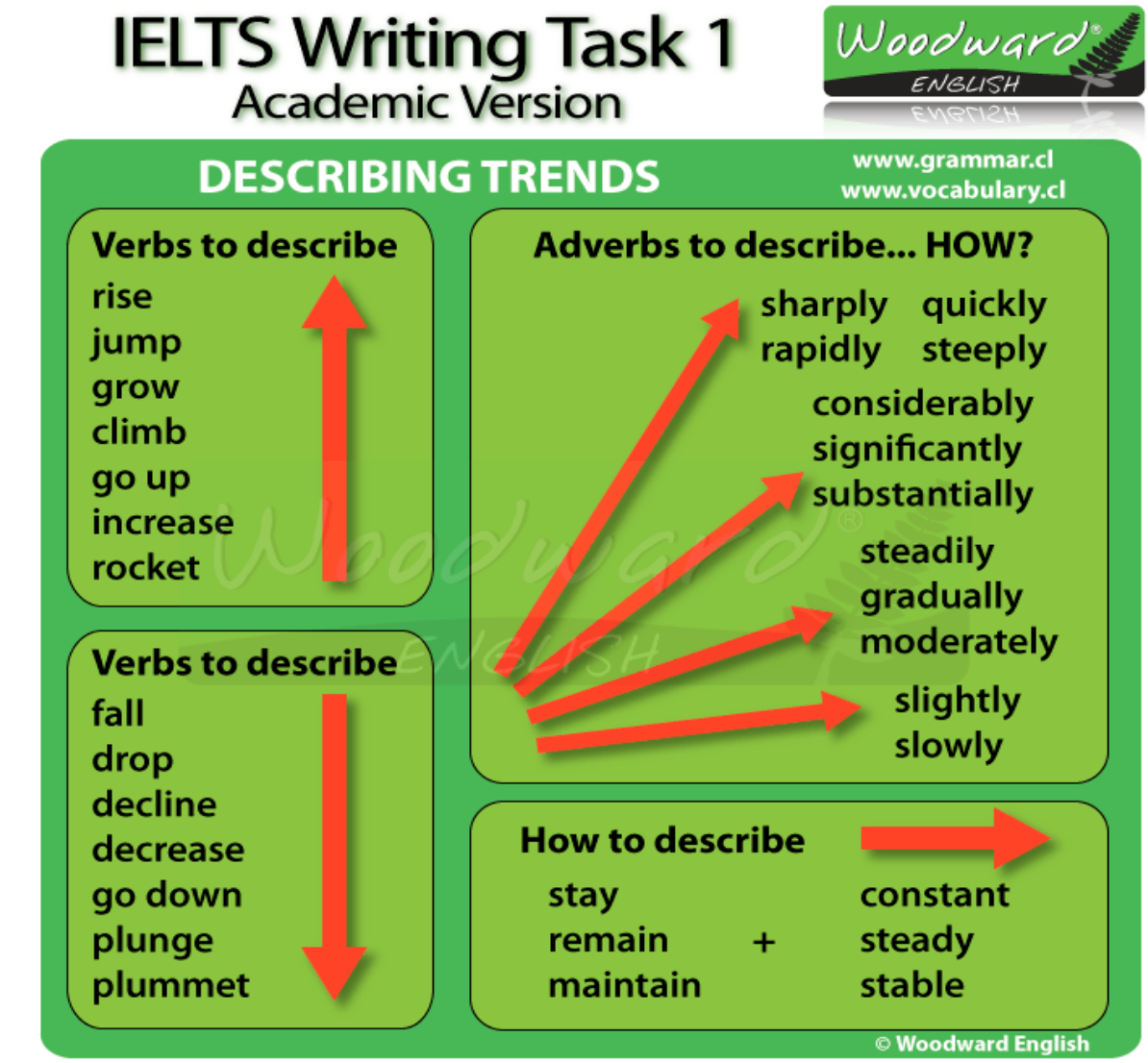
Adjectives	Adverbs
rapid	rapidly
quick	quickly
swift	swiftly
sudden	suddenly
steady	steadily
gradual	gradually
slow	slowly

2. Explaining diagrams :

• Sales rose slightly in the final quarter.
• Profits fell a little last year.
• Demand increased gently
• Turnover decreased steadily
• Turnover dropped suddenly
• Turnover decreased quickly.
• Demand increased rapidly.
• Profits fell dramatically.
• At the beginning of this year sales stagnated.
• In the middle of August profits slumped.
• At the end of last year demand peaked.
• In the first quarter of 2008 sales plummeted.
• In the second quarter of 2007 sales flattened out.
• In the third quarter of 2007 sales leveled off.
• In the last quarter of 2007 sales remained steady.

3. Expressing the Movement of a Line

Verbs	**Nouns**	**Adjectives**	**Adverbs**
rise (to)	a rise	dramatic	dramatically
increase (to)	an increase	sharp	sharply
go up to		huge	hugely
grow (to)	growth	steep	steeply
climb (to)	a climb	substantial	substantially
boom	a boom	considerable	considerably
peak (at)	(reach) a peak (at)	significant	significantly
fall (to)	a fall (of)	marked	markedly
decline (to)	a decline (of)	moderate	moderately
decrease (to)	a decrease (of)	slight	slightly
dip (to)	a dip (of)	small	
drop (to)	a drop (of)	minimal	minimally
go down (to)			
reduce (to)	a reduction (of)		
a slump			
level out	a leveling out		
no change	no change		
remain stable (at)			
remain steady (at)			
stay (at)			
stay constant (at)			
maintain the same level			



Task One : Place the words in the right column

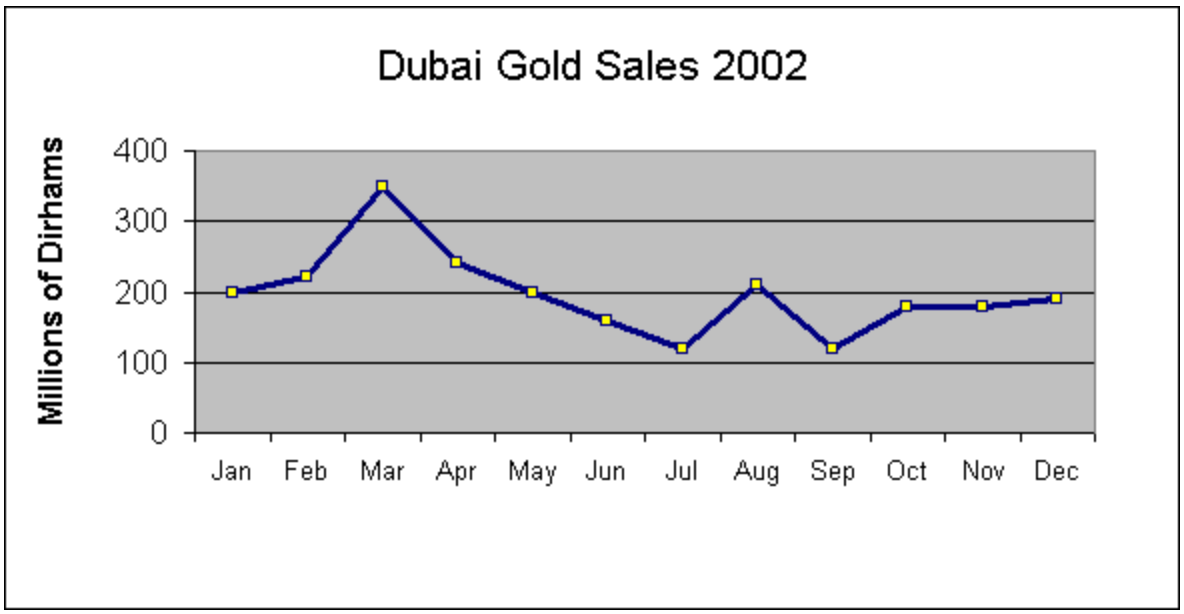
Be constant	climb	collapse	cut
Expansion	extension	fall	go down
Growth	improvement	level off	push down
Reduction	rise	shoot up	soar
Stability	stagnation	stand at	stay at

	↗	↘	→
Verbs	Expansion	Fall	Be constant
Verbs	Climb	Go down	
Verbs			
Verbs			
Verbs			

Task Two :complete the table

↗	↘	→	↗	↘	→
increase	Decrease	Maintain	Increase	Decrease	Stay at
Raise	Drop	Keep	Rise	Drop	Reach a peak
Step up	Cut		Grow	Decline	Remain stable
Expand	Go down		Expand	Fall	
Improve			Improve		

Task Three : fill in the correct word

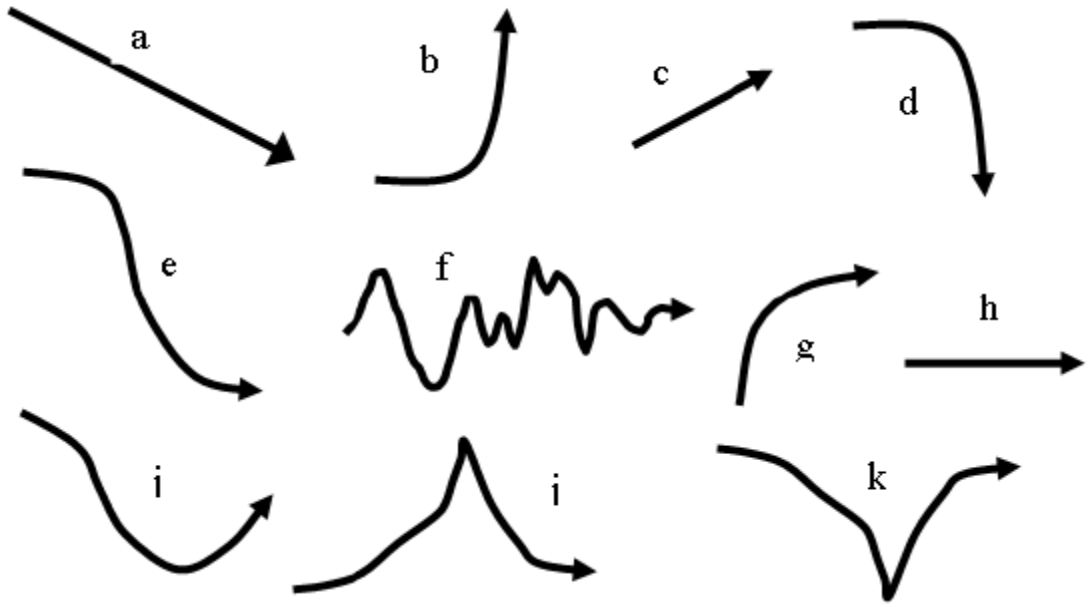


a low point - declined - doubled – drop- from- increased slightly –
Recovered remained- rising sharply – sudden- to - were

In January, gold sales _____ about 200 million dirhams per month. In February they _____ to Dhs 220 million, _____ to a peak of 350 million dirhams in March. Over the next four months, sales _____ steadily, reaching _____ of 120 million dirhams in July.

In August, there was a _____ increase. Sales almost _____, rising _____ Dhs 120 million in July to Dhs 210 million in August. This was followed by a [?] in September to Dhs 120 million.
From September to October, sales _____ from Dhs 120 million to Dhs 180 million. In October and November, sales _____steady, and there was a small increase in December _____ 190 million dirhams.

Task Four : match between trends and expressions

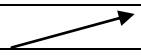
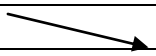


1. The market is showing some signs of growth. _____
2. The market is extremely volatile. _____
3. The pound slipped back against the dollar. _____
4. The Swiss franc is staging a recovery. _____
5. The yen lost ground slightly. _____
6. There's been a dramatic downturn in the market. _____
7. There's been an upsurge of interest in gold. _____
8. The share price bottomed out at 11 cents. _____
9. Gold peaked at €300 an ounce. _____
10. Profits will level off at around €10,000. _____
11. Sales hit an all-time low. _____
12. There hasn't been much movement in the price of tin _____

Answer key

Task one Place the words in the right column

Be constant	climb	collapse	cut
Expansion	extension	fall	go down
Growth	improvement	level off	push down
Reduction	rise	shoot up	soar
Stability	stagnation	stand at	stay at

			
Verbs	Expansion	Fall	Be constant
Verbs	Climb	Go down	stagnation
Verbs	Growth	reduction	Stay at
Verbs	Improvement	Push down	Stand at
Verbs	Rise	collapse	stability

Task three : complete the paragraph

In January, gold sales _____were_____ about 200 million dirhams per month. In February they __incresed slightly_____ to Dhs 220 million, ___rising sharply_____ to a peak of 350 million dirhams in March. Over the next four months, sales __drop_____ steadily, reaching ____a low point_____ of 120 million dirhams in July.

In August, there was a ___sudden_____ increase. Sales almost ____doubled_____, rising ___from_____ Dhs 120 million in July to Dhs 210 million in August. This was followed by a decline…….in September to Dhs 120 million.

From September to October, sales __recovered_____ from Dhs 120 million to Dhs 180 million. In October and November, sales ___remained_____steady, and there was a small increase in December __to_____ 190 million dirhams.

UNIT FIVE

1-HOW TO WRITE A TRAINING REPORT

Title

Training Report

1. **Introduction (**brief introduction about the subject) international exhibition of renewable energies

2. **Objectif/ purpose of the report**

This report will provide an overview of both the quality and impact of SSCB multi agency training that was delivered between 01.04.2015 and 31.03.2016, and will address attendance, partnership engagement, course feedback and the impact that the training has had on practice.

3. **Context**

- ✓ shemes/graphs/tables/Bar graph/figures
- ✓ application of knowledge on practice
- ✓ impact of training on practice

4. Conclusion

Basic Structure of a Report

Title page

(The report name/department and university)

The title of the report

The authors' names, and ID numbers

The date of submission

The Summary

Provides a brief overview of the substance of the report :

States the topic of the report

- outlines the most important findings of your investigation
- states the key conclusions

Summary (example)

This report presents a design for a bridge to be constructed on the Calder Freeway crossing Slaty Creek in the Shire of Macedon Ranges. Two designs for the bridge were devised and then compared by considering the cost, construction and maintenance of each bridge. Design 1 is a super T beam bridge while Design 2 is a simple composite I girder bridge. It is concluded that Design 1 is the better design. This design is cheaper, easier to construct, more durable and easier to maintain.

Table of Contents (The table of contents sets out the sections and subsections and their corresponding page numbers.

Introduction

The introduction provides the background information needed for the rest of your report to be understood. It includes:

- A clear statement of the purpose of the investigation
- The background of the topic of your report

• A brief outline of the structure of the report if appropriate (this would not be necessary in a short report).

Introduction (example)

> The greenhouse effect is a natural phenomenon that keeps the earth's surface warm. Greenhouse gases trap heat from solar radiation, analogous to the way glass panes trap heat in a greenhouse. Due to increasing greenhouse gas emissions from human activities, the greenhouse effect has been significantly augmented, causing a rise in the earth's surface temperature. The temperature rise had led to climate change, causing frequent natural disasters. This has generated increasing awareness of the importance of reducing greenhouse gas emissions through international and domestic initiatives. The aims of this project are to examine the Kyoto Protocol and the effect, it would have on participating countries. Another aim is to investigate actions already taken by three industrialized countries, namely Australia, the United States, and Canada.

The body of the Report/ Context

• presents the information from your research, both real world and theoretical

• organises information logically under appropriate headings

• conveys information in the most effective way for communication:

- uses figures and tables
- can use bulleted or numbered lists

Incorporating Figures and Tables:

• Refer to each figure and table in the text of the report.

Example:

The communication channels in the organization are shown in Diagram 1.

• Give all figures a title.

Example:

Table 1 Existing communication channels

• The title of a table goes above the table while the title of a figure goes below the figure.

• Figures must be correctly referenced if necessary. Give the source of the diagram or the data if you have taken them from published sources.

The Conclusion

Relates directly back to the aims of the investigation. The Conclusions section provides an effective ending to your report. This section

- states whether you have achieved the aims of your investigation
- gives a brief summary of the key information in your report
- restates the major findings of your investigation.

Example

Two designs for the bridge to be constructed on the Calder Freeway across Slaty Creek have been presented and discussed in this report. Design 1 is a super-T beam bridge and Design 2 is a simple composite I girder bridge. Both designs incorporate round piers on piled foundations, which are used because the soil conditions are unknown and possibly unstable. Design 2 has some advantages because it is made of steel and thus has longer spans and fewer piers. However, Design 1 is clearly the better design. This design requires minimal formwork in the construction of its concrete deck, it is relatively easy to erect and it maintains stability during transportation and construction. In addition, it is cheaper to build and more durable.

2-HOW TO WRITE AN E-MAIL

With the explosion of information technology, we use more and more e-mails. E-mail is extremely convenient, with the click of a mouse, an e-mail can be sent to a colleague in the next office or a business partner at the other side of the world. Although you are probably more used to sending quite private e-mails to your friends, you will also have to learn to write formal e-mails to your existing or potential business partners – you need to remember that you have to be polite and follow almost the same rules as for formal letters.

Look at this example of a formal e-mail:

From: milena.strovs@guest.arnes.si

To: Gab. de Relações Internacionais [mailto:gri2@iscap.ipp.pt]

Subject: International week in Porto

Dear Ms Carneiro,

Thank you very much for your formal invitation.

I have completed the registry form and I am returning it to you.

If there's anything else, please do not hesitate to contact me.

Yours sincerely,

Milena Strovs-Gagic

Here is another example of e-mail

Sample Email Job Application Letter

To ……..

Object: assistant director position (Name)

Dear Manager,

It was with much interest that I read your job position on April 8th for an Assistant Communications Director. Your description of the work responsibilities of Assistant Director closely matches my experience, and so I am excited to submit my resume to you for your consideration.

In my position as an Assistant Communications Director for ABC Company, I wrote articles for the company website, managed the editing and posting of contributing articles, managed their social media presence.

My resume is attached. If I can provide you with any further information on my background and qualifications, please let me know.

I look forward to hearing from you.

Thank you for your consideration.

JohnDoe
Address
Email
HomePhone
Cell Phone

Activity One complet e this e-mail about Job Offer Thank You Email

To: GeoffreyDonald@gmail.com

Subject: Thanking you for the job offer of Assistant Supervisor.

……..Mr. Donald,

With all ……, I would like to …….. and your company for the …… letter that I have just received for the job position of the assistant supervisor in your prestigious and reputed company. It is a matter of great pride for me to become a …….. and I promise you that in no way will you be …… or ……with my …….

I wish to take this opportunity to assure you that I shall be dedicated towards my ……. and ……. and will try my best to meet deadlines and utilise my ……and ……. for the betterment of the company. The job offer letter comes as a surprise to me as I am sure that there were many other deserving candidates present for the interview.

Thanking you once again

Key Answer : Job Offer Thank You Email

To: GeoffreyDonald@gmail.com

Subject: Thanking you for the job offer of Assistant Supervisor.

Respected Mr. Donald,

With all due respect, I would like to thank you and your company for the job offer letter that I have just received for the job position of the assistant supervisor in your prestigious and reputed company. It is a matter of great pride for me to become a part of your dynamic team and I promise you that in no way will you be disappointed or unsatisfied with my services.

I wish to take this opportunity to assure you that I shall be dedicated towards my duties and responsibilities and will try my best to meet deadlines and utilise my skills and qualifications for the betterment of the company. The job offer letter comes as a surprise to me as I am sure that there were many other deserving candidates present for the interview.

Thanking you once again

Mr……

3-HOW TO WRITE A CV

A curriculum vitae, commonly referred to as CV, is a longer (two or more pages), more detailed synopsis than a resume. Your CV should be clear, concise, complete, and up-to-date with current employment and educational information.

-Personal details and contact information. Most CVs start with contact information and personal data but take care to avoid superfluous details, such as religious affiliation, children's names and so on.

-Education and qualifications. Take care to include the names of institutions and dates attended in reverse order; Ph.D., Masters, Undergraduate.

-Work experience/employment history. The most widely accepted style of employment record is the chronological curriculum vitae. Your career history is presented in reverse date order starting with most recent. Achievements and responsibilities are listed for each role. More emphasis/information should be put on more recent jobs.

-Skills. Include computer skills, foreign language skills, and any other recent training that is relevant to the role applied for.

Task1/Listening : listen to the audio about writing a CV then complete the transcript

Transcript: Writing a CV

Interviewer: Learn English Professionals is talking to John Woodrow, who works in the Human Resources department of a large UK-based company. John, tell us about your work...

John: I work on recruitment, especially – so I'm the person who reads the hundreds of CVs we get sent each year!

Interviewer: Do you accept CVs as part of your recruitment process?

John: When we advertise for a particular post, we send out our own application form, which is tailored to our company, and we can use it to make sure we find exactly what we're looking for...

Interviewer: So a CV is useless?

John: No! Not at all – we're happy to accept CVs from people even when we're not recruiting.

That way we can build up a database of possible candidates, and as our company is always changing – we're very flexible in our needs right now (laughs) – it's good to know what kind

of people are out there. We do keep everything on file, and will get back to people who look promising.

Interviewer: So we should be sending you our CVs?

John: Yes, absolutely, yes!

Interviewer: What …….. can you give us on writing a CV?

John: Keep it ……., keep it ……., keep it …….. Anything longer than three pages will automatically go into the bin. Just tell us what we …….. Make sure it's …… – and that there are no …… on it! And no fancy fonts...or photographs. We don't need to know what people look like, just what they've done, and what they're …… of...

Interviewer: So we're going to look at a couple of CVs now...

John: Yes – these are a couple that arrived just this morning, so let's take a look...(sound of paper unfolding)...ok, I can see straight away that we have a good one and a bad one here...

Interviewer: (laughs) How can you tell so soon?

John: Well, as I just said, this one here is...how many...one, two, three, four pages long, it's written in tiny type, I can hardly read it...and, wait, yes, there's a photograph attached to the front!

Interviewer: Too much information?

John: Yes...just leafing through it, I can see he's written about where he went to primary school – that's just ……...

Interviewer: What kind of educational background should be included?

John: Perhaps your high school, but it's mostly further education we're interested in, …… or ……, then any professional …… you may have, as well as …….. of course...

Interviewer: That's important?

John: Oh yes – placements or internships all count!

Interviewer: What about personal information?

John: A bit is necessary...but look, this guy has written he was a member of the stamp collecting society in secondary school...! Not interested...

Interviewer: What about the other CV?

John: Ok, again, I can see right away this looks more promising...only two and a half pages,

lots of space on the page, …… to read, ……. Hmmm, a couple of impressive looking references, that's good. And, yes, they've included language skills – very important...

Interviewer: What …… are you looking for?

John: Well, ……, obviously – as we're a UK-based company and English is still the language of global business, and then, well, anything really – …… is useful, Russian, Mandarin …….. too...

Interviewer: Ok, we'll get studying! Thanks John! **(learnenglishbritish council.org)**

Task Two : Comprehension task

True or false/ Decide if the following statements are true or false.

1. Part of John Woodrow's job is deciding which new people his company will employ.
2. Woodrow reads hundreds of CVs every month.
3. His company does not accept CVs.
4. Woodrow's company keeps lists of potential employees on a computer.
5. Woodrow will ignore a CV which is too long.
6. He thinks the first CV he looks at is too short.
7. One problem with the first CV is that it includes irrelevant information.
8. Woodrow suggests that placements are not important when describing your experience.
9. The second CV has too much space on it.
10. The second CV includes information about the languages the person can speak.
11. Woodrow is only interested in people who can speak Spanish.

Task Three : Listen to the audio again and complete the text by writing the missing words into the gaps below.

1. John, _____ about your work.
2. It's good to know what _____ people are out there.
3. What advice _____ give us on writing a CV?
4. Anything longer _____ pages will automatically go into the bin.
5. Make sure it's clearly written and _____ no spelling mistakes in it.
6. We don't need _____ what people look like.
7. We're _____ a couple of CVs now.

Task Four : Match the words and phrases in the table to their definitions.

recruitment	CV	database	Relevant	
candidate	Post	Reference	Flexible	

Definitions

a. A person who is competing to get a job

b. A document that describes your qualifications and working history to support a job application

c. Able to change or be changed easily according to the situation

d. The process of finding people to work for a company or become a new member of an organization

e. A computer system that stores lots or information

f. Connected with what is happening or being discussed

g. A person who knows you can say why you are suitable for a job

h. A job in a company or organization

key answer

Task one : complete the dialogue

Transcript: Writing a CV

Interviewer: Learn English Professionals is talking to John Woodrow, who works in the Human Resources department of a large UK-based company. John, tell us about your work...

John: I work on recruitment, especially – so I'm the person who reads the hundreds of CVs we get sent each year!

Interviewer: Do you accept CVs as part of your recruitment process?

John: When we advertise for a particular post, we send out our own application form, which is tailored to our company, and we can use it to make sure we find exactly what we're looking for...

Interviewer: So a CV is useless?

John: No! Not at all – we're happy to accept CVs from people even when we're not recruiting.

That way we can build up a database of possible candidates, and as our company is always changing – we're very flexible in our needs right now (laughs) – it's good to know what kind

of people are out there. We do keep everything on file, and will get back to people who look promising.

Interviewer: So we should be sending you our CVs?

John: Yes, absolutely, yes!

Interviewer: What advice can you give us on writing a CV?

John: Keep it short, keep it simple, keep it relevant. Anything longer than three pages will automatically go into the bin. Just tell us what we need to know. Make sure it's clearly written – and that there are no spelling mistakes on it! And no fancy fonts...or photographs. We don't need to know what people look like, just what they've done, and what they're capable of...

Interviewer: So we're going to look at a couple of CVs now...

John: Yes – these are a couple that arrived just this morning, so let's take a look...(sound of paper unfolding)...ok, I can see straight away that we have a good one and a bad one here...

Interviewer: (laughs) How can you tell so soon?

John: Well, as I just said, this one here is...how many...one, two, three, four pages long, it's written in tiny type, I can hardly read it...and, wait, yes, there's a photograph attached to the front!

Interviewer: Too much information?

John: Yes...just leafing through it, I can see he's written about where he went to primary school – that's just not relevant...

Interviewer: What kind of educational background should be included?

John: Perhaps your high school, but it's mostly further education we're interested in, university or college, then any professional qualifications you may have, as well as work experience of course...

Interviewer: That's important?

John: Oh yes – placements or internships all count!

Interviewer: What about personal information?

John: A bit is necessary...but look, this guy has written he was a member of the stamp collecting society in secondary school...! Not interested...

Interviewer: What about the other CV?

John: Ok, again, I can see right away this looks more promising...only two and a half pages, lots of space on the page, easy to read, well-organised. Hmmm, a couple of impressive looking references, that's good. And, yes, they've included language skills – very important...

Interviewer: What languages are you looking for?

John: Well, English, obviously – as we're a UK-based company and English is still the language of global business, and then, well, anything really – Spanish is useful, Russian, Mandarin Chinese too...

Interviewer: Ok, we'll get studying! Thanks John!

Task two : true- false-false- true-true- false- true- false- false- true- false

Task Three : tell us- kind of- can you- than three- that there are –to know- going to look at

Task four : Definitions

a. A person who is competing to get a job= candidate

b. A document that describes your qualifications and working history to support a job application=CV

c. Able to change or be changed easily according to the situation=flexible

d. The process of finding people to work for a company or become a new member of an organization=recruitment

e. A computer system that stores lots or information=database

f. Connected with what is happening or being discussed=relevant

g. A person who knows you can say why you are suitable for a job=reference

h. A job in a company or organization=post

Here are some Examples of CV

ALISON CONNELLY
15 SCOUSER DRIVE, LIVERPOOL, MERSYSIDE, LV3 5GT
01606 222244

PERSONAL PROFILE

I am a second year Business Management student at the University of Birmingham. I have developed excellent analytical and leadership skills through my degree, as well as key customer service and communication skills through my part time job at The French Shop. My determination and dedication is highlighted by my achievement of a black belt karate. I am now looking to further develop and use my skills in a year in industry placement, specifically in marketing.

EDUCATION

BSC BUSINESS MANAGEMENT | FIRST YEAR AVERAGE: 68%

SEPTEMBER 2016 - PRESENT

- 1st Year: Principles of Marketing (72%), HR (65%), Analytical Techniques (68%),
- 2nd Year: International Marketing, Consumer Behaviour, Organisational Management.

NUNS MONK SCHOOL, WELWYN, HERTFORDSHIRE AL9 6NN

2012 - 2016

- A level Business Studies, Economics, General studies, Photography (AAAA)
- GCSE Maths, English, Science (AAB), 8 additional GCSEs grade C or above

WORK EXPERIENCE

THE FRENCH SHOP |SALES ASSISTANT/CASHIER

SEPT 2016 - PRESENT

- Serving customers and dealing with their requests.
- Cash handling on the checkout and in the cashing up of tills.
- Dealing with customer queries, customer complaints, and refunds on the Customer Service Desk.

PIES R'US. |BAKERY PRODUCTION/SALES ASSISTANT

SEPT 2000 - 2016

- Stock replenishment and packing pies.
- Conducting quality tests.
- Have to work efficiently and within a team to avoid a back log of stock.
- Serving customers and dealing with their enquiries, orders and requests.

ADDITIONAL SKILLS AND INTERESTS

- Linguistics- can speak confidently in French and Spanish.
- Special Needs Assistant - I have had training during my secondary education, working with children aged between 10-13 years old with learning difficulties.
- Trained for 7 years in karate, qualified as a black belt.
- Sign Language - basic level of sign language.

Students Presentations

During the whole year, students were asked to prepare an oral presentation in the field of Electrical Engineering. Here are some interesing titltes ;

- ✓ Energy storage
- ✓ Wind turbine
- ✓ Electricity
- ✓ Health and safety at work
- ✓ Renewable energy
- ✓ Nuclear waste
- ✓ Hybrid vehicles
- ✓ Smarts machines
- ✓ Artificial intelligence

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3-Electricity and Electronics, MARIJA KRZNARIĆ, 2009

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6-https://europass.cedefop.europa.eu

7-http:// readworks.org

8-http://thelanguagemenu.com

9-http://learnenglish.britishcouncil.org