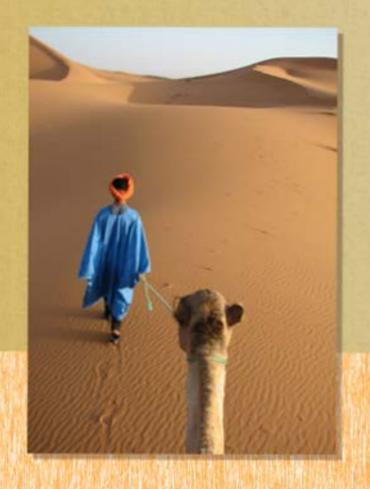
GEOGRAPHY SYLLABUS

Forms 3 - 5 (General)
Secondary Schools



Directorate for Quality and Standards in Education

Department for Curriculum Management and eLearning

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Geography Syllabus Rationale

Rationale

Geography makes both a distinctive and a wider contribution to the curriculum. It is an essential component in preparing young people for life in the twenty-first century. As the pace of change quickens, communications get faster and challenges to the environment multiply, a knowledge and understanding of geography is more vital than ever.

Geographical education is indispensable to the development of responsible and active citizens in the present and future world. Geography can be an informing, enabling and stimulating subject at all levels in education, and contributes to a lifelong enjoyment and understanding of our world. Learners require global geographical awareness in order to ensure effective cooperation on a broad range of economic, political, cultural and environmental issues in a shrinking world.

Geography addresses the major challenges that the global community is facing. The resolution of major issues facing our world requires the full commitment of people of all generations. All of the following issues have strong geographical dimensions at a variety of geographic scales. Hence, the importance of geography for all students:

- extreme natural events
- global warming and climate change
- deforestation
- desertification
- preservation of bio-diversity
- land-use conflicts
- soil erosion
- atmospheric, soil and water pollution
- use of non-renewable resources
- sustainable economic activities
- population dynamics and migration
- urbanisation
- the processes and impacts of tourism
- access to technology

- access to education especially literacy
- global and local processes and patterns giving rise to poverty
- unemployment
- disease
- crime
- gender inequalities
- · ethnic conflicts
- war
- regionalism and nationalism

In the context of these problems and issues facing humanity, the right to education includes the right to high quality geographical education that encourages both a balanced regional and national identity and a commitment to international and global understanding.

Geography's distinctive contribution to the National Minimum Curriculum

The NMC stipulates that geography is a basic subject at secondary school level. The knowledge, understanding, skills and attitudes imparted by the study of geography satisfies many of the *Educational Objectives* that are appraised in the relative section of the NMC. The teaching of Geography facilitates the NMC towards reaching its stated goals of preparing students:

- for the challenges posed by a competitive global economic environment; (NMC, Recognising the Challenges, p.22)
- to move forward with an identity in a global scenario where the concepts of nation and national identity are constantly called into question through the process of globilisation; (NMC, Recognising the Challenges, p.22)
- to be able to understand and tackle the threats posed by contemporary societies to work, relationships, values and environment; (NMC, Recognising the Challenges, p.22)
- for basing their future plans and decisions from a global perspective. An education with a global perspective would allow students to realise that much of what is taking place in our country is conditioned by external events. One ought also to promote the view that the sustainability of life on earth is contingent on our everyday choices. (NMC, Global Perspective, p.27)
- in establishing a *relationship between the different areas of knowledge* by developing the understanding and skills of the subject in an interdisciplinary approach. The greater integration of educational content (NMC, Principle 7, p.34) afforded by geography helps students in this endeavour.

- for the world of work by helping them to develop knowledge and information about: the different sectors of the Maltese economy; the global economy and how this affects the Maltese economy; the changing work environment in an information society; different workplaces and the required skills; the European Union as an economy and labour market. (NMC, Objective 9, pp. 59-60)
- for the world of work by helping them to acquire the following skills: planning, organisation and evaluation; discussion and negotiation skills; ability to choose a career in an informed manner; and proficiency in all aspects of literacy and numeracy. (NMC, Objective 9, pp. 60-61)
- for adequately responding to the tension arising from the confluence of two contemporary cultural trends: the trend of inclusion and the erosion of social barriers; and the strong emphasis on the affirmation of identity and difference; by means of the study of emerging multicultural societies. (NMC, Recognising the Challenges, p.22)

General Aims of Geographical Education

- To develop in young people a knowledge and understanding of the place where they live in, of other people and places, and of how people and places inter-relate and inter-connect; of the significance of location; of human and physical environments; of people-environment relationships; and of causes and consequences of change.
- To develop the skills needed to carry out geographical study e.g. geographical enquiry, mapwork and fieldwork.
- To simulate an interest in and encourage an appreciation of, the world around us.
- To develop an informed concern for the world around us and ability and willingness to take positive action, both locally and globally.
- To acquire an understanding of different communities and cultures throughout the world an awareness of the contrasting opportunities and constraints presented by different environments.
- To foster an appreciation of environments, thereby enhancing a sense of responsibility for the care of the earth.
- To offer a range of skills and techniques in observing, selecting, analysing and presenting data.
- To gain the ability in using a wide range of geographical information in making judgments and reaching decisions.

Distinctive Contribution to the Education of the Individual – The Objectives of Geography

Although the development of knowledge, understanding, skills and attitudes constitutes the holistic processes of education, these aspects may be grouped into three classes of objectives. Through studies in geography, students are encouraged to explore and develop knowledge and understanding, skills, attitudes and values.

In particular they should develop knowledge and understanding of:

- locations and places in order to set national and international events within a geographical framework and to understand basic spatial relationships;
- major bio-physical systems of the Earth (landforms, soils, water bodies, climate, vegetation) in order to understand the interaction within and between ecosystems;
- major socio-economic systems of the Earth (agriculture, settlement, transport, industry, trade, energy, population and others) in order to achieve a sense of place;
- different ways of creating environments according to differing cultural values, religious beliefs, technical, economic and political systems. This helps facilitate understanding of the diversity of peoples and societies on Earth and the cultural richness of humanity;
- the structure and processes of the home region and country as daily action space; and the challenges of, and opportunities for, global interdependence.

Learners are encouraged to develop skills in:

- · cartography where appropriate,
- practising such methods as field observation and mapping, interviewing people and working with qualitative information,
- using and creating geographic data in text, tables, graphs and drawings,
- interpreting secondary resources and using statistics, as well as
- using communication, thinking, practical and social skills to explore geographical topics at a range of scales from local to international.

Learners should explore attitudes and values consistent with:

- their local surroundings and in the variety of environments on the surface of the Earth,
- an appreciation of the beauty of the physical world, on the one hand, and of the different living conditions of people, on the other,
- concern for the global quality and planning for the environment and human habitat for future generations,
- an awareness of the issues of globalisation with reference to the preservation of indigenous cultures,

- understanding the significance of attitudes and values in decision making,
- readiness to use geographical knowledge and skills responsibly in private, professional and public life,
- respect for the rights of all people to equality, and
- dedication to seeking solutions to local, regional, national and international problems on the basis of the Universal Declaration of Human Rights.

Approaches to Teaching and Learning in Geography

Geography is the discipline which seeks to explain the character of places and the distribution of features and events as they occur and change the surface of the earth. Geography is concerned with human – environment interactions in the context of specific places and locations. In addition to its central concern with space and place, it is characterised by a breath of study, a range of methodologies, a willingness to syntheseize work from other disciplines and an interest in the future of people – environment relationships.

Geography often starts with the following questions:

Where is it?

What is it like?

Why is it there?

When did it happen and how does it change?

What impacts does it have?

How should it be managed for the mutual benefit of humanity and the natural environment?

Finding answers to these questions requires investigation of the location, situation, interaction, spatial distribution and differentiation of features. Explanations of current situations come from both historical and contemporary sources. Trends can be identified which indicate possible future developments.

Some of the central concepts of geographical studies are location and distribution, place, people-environment relationships, spatial interaction, and regions.

Geographical enquiry and Fieldwork

- provides opportunities for the first-hand investigation of people in their environment
- awakens students to a diversity of environments and cultures, in their local area and beyond
- teaches students to collect, analyse and present data, sharpening their observation, measuring, recording and evaluation skills.

Classes are expected to be given some experience in the field during excursions.

Working with maps and images

- teaches students to use both maps from the Atlas and those of Ordnance Survey and make simple maps and plans
- enables students to travel confidently
- illuminates current events
- teaches young people to interpret a wide range of visual information namely aerial photographs and satellite images

Information and Communications Technology (ICT)

- provide a range of information sources to enhance geographical understanding
- support the development of a body of geographical knowledge
- provide images of people, places and environments
- · develop their ideas using ICT tools to amend and refine their work and enhance its quality and accuracy
- · exchange and share information, both directly and through electronic media
- · review, modify and evaluate their work, reflecting critically on its quality as it progresses
- contribute to pupils' awareness of the impact of information systems on the changing world
- contribute substantially to the development of a range of ICT capabilities, especially in regards to data handling, use of communication technologies and information sources and modeling
- develop the students' skills in the following ICT toolkit namely word processor; spreadsheet; presentation software e.g. powerpoint; desktop publishing (DTP) software; internet browser/e-mail; electronic atlas; electronic encyclopedia; geographic information system (GIS); automatic datalogging weather station; digital camera.

Working with others; improving own learning and performance; problem solving

Geography offers a context for the development of all three of these key skills e.g.

- fieldwork encourages teamwork
- individual study promotes action planning and self-review
- decision making exercises, which require problem solving skills, are an established approach to geographical education at all levels

Games and Simulations adapted by teacher

The philosophy underlying the use of games and simulations is in close harmony with the nature of activity methods. Role playing and simulation call for -

- powers of analysis and synthesis
- an ability to think ahead from an exciting situation
- anticipating the probable actions of opponents
- foresee the consequences of alternatives
- to evaluate the pros and cons of alternative courses of action one might take.
- The peculiar appeal of simulation games is the radical way in which they alter the learning environment. Pupils move from the audience to the stage.

Use of Resources

The use of quality media, resources and materials both traditional and modern is essential if learners are to gain realistic images of the earth. Ideally geography should be taught in a special room allotted for the purpose which include:

- adequate space for students
- desks with flat surfaces for practical work especially mapwork
- adequate storage facilities for teaching resources e.g. maps, books, charts, apparatus, posters and handouts
- wall maps including Maltese Islands, Mediterranean, Europe and the World
- political-relief globe
- activity globe that can be marked and cleaned
- weather instruments

- computers with internet facilities
- Interactive whiteboard
- DVD player
- Water supply for use in simple experiments and model making

Developing the understanding of geographical vocabulary

Students need to acquire the appropriate geographical vocabulary so that they can fully participate in lessons, fieldwork and other activities. A sound geographical vocabulary is also crucial to the student's grasp of knowledge, understanding, skills and attitudes related to the local and global environment.

Geography teachers contribute towards the school's literacy policy by ensuring that they:

- encourage accuracy in listening, speaking, reading and writing
- provide pupils with clear definitions of the technical language they need to understand their geography
- provide pupils with the support they need to plan and write logical reports and accounts of their work

Geography across the curriculum

Since geography lies astride the humanities and sciences it lends itself to the students holistic development through the thematic approach and even the inter-disciplinary approach. The teacher is encouraged to decide and plan unifying themes for learning together with other teachers of different subjects, especially by participating in whole school projects. In this way geography is linked to other relevant areas, thus making learning more challenging to the student. The inter-disciplinary approach creates possibilities for investigation and research and involves the students in purposeful activities through collaboration and social interaction. This approach also connects the teaching of ideas and skills with the realities of the outside world.

Geography teachers may ask colleagues teaching other subjects to establish an exchange of examples and contexts so that students can gain full comprehension of themes discussed. Here are examples of opportunities that link geography to other subjects:

Languages

- Definition of geographical terms that are commonly used
- Geographical information about the country or countries where the language is spoken
- · Geographical background to current affairs and issues
- The geography of places discussed in literature

Sciences

- Further understanding of common themes such as ecosystems and world biomes, the natural environment, atmospheric processes (weather and climate), tectonic activity;
- Field studies organised jointly with teachers from the Science department
- Sharing of apparatus

Mathematics

- Numeracy gives the opportunity to vary the means of communication.
- The use of numbers can supplement words and so increases the possibility of variety since numbers can be visually represented in so many ways, for example by the use of graphs, histograms, dots or choropleth maps.
- the drawing of maps or diagrams based upon tabulated data.
- With the use of statistical methods certain patterns and relationships can be identified and trends can be indicated.
- the use of quantification techniques can help to make teaching a more varied and stimulating experience
- the teachers of geography may assist mathematics teachers in providing them with data regarding economic, demographic and environmental issues to keep up with current updates

Arts and Craft

- Using a wide variety of materials to teach basic techniques
- Drawing of maps
- The enlargement and reduction of maps

- Drawing of labeled diagrams
- 3-D models of landscapes and infrastructural models
- Constructing of weather and other instruments
- Drawing of charts
- Knowing about the location of places of great artistic and cultural tradition

Religion

- The geographical distribution of the world's great religions
- Basic geographical knowledge of the Holy Land
- Foster an attitude of respect towards the beliefs of other people

History and Social Studies

- Understanding the concept of change through space and time
- Refer to the local environment and community especially in the thematic approach
- Historical environment of Geographical and spatial theorists
- The geographical location and connections of places that are studied in history
- The natural environment that has helped in the economic social and political development of great civilizations
- The influence of geological and atmospherical phenomena in historical events
- Foster an attitude of respect towards the culture of other people
- Understanding the geographical concepts of waste management, world trade, international aid, development, migration, famine, refugees and displaced persons

Physical Education, Music and Drama

- · Knowing about the location of places with great tradition in sport, music and drama
- Role play about environmental and humanitarian issues
- Use of music to create atmosphere linked to country, particular environment or community
- Linking the location of places to participating countries in international sports and song competitions

ICT

- providing and extending access to large quantities of information.
- students investigate, organise, and edit geographical information
- ICT programmes and software help to enhance the learning situation
- Improve presentation techniques in work handed in by students
- Geographical data amd themes lends itself easily to work in ICT
- Able to communicate by means of email, internet, fax, video conferencing and other technologies to exchange information locally and worldwide
- extend their graphical and mapping skills, and their skills in statistical and spatial analysis

Home Economics and Textile Studies

- Enhancement of common themes such as issues of waste management, organic farming, food miles and the use of resources
- Provenance of raw materials used in textile and clothing
- Location of major textile and clothing industries
- Origin of food and beverages
- Problems of nutrition, diseases, and food supply

Business Studies

- Enhancement of common themes such as world economic development and trade
- Different types of employment and their distribution within and among countries
- The impact of economic activity on the physical and human environments
- Spatial distribution of resources, including energy resources, mineral raw materials and food
- Theories of spatial distribution of industry
- Common themes for fieldwork excursions

Strands

The syllabus of geography is divided into six strands: map reading and interpretation; weather and climate; landforms and processes; socio-economic human systems; environmental concerns; and location and places. This division is an essential way of categorizing the outcomes of geographical education in schools. All these aspects are equally important. Although students learn these strands in packages, the inter-relationships between them must be emphasized at all times, since a thorough understanding of each theme is only obtained by reference to all aspects.

Assessment

The learning process involves various methods of assessment:

- Formative so that a student's achievement can be recognised and so further steps planned
- Diagnostic through which learning difficulties can be identified and appropriate measures can be taken
- Summative through recording student's achievements in a systematic way
- Evaluative in enabling the school's work to be assessed.

Obviously the assessment used must be appropriate to the objective which is being tested. There must be, first of all, a clear purpose in assessment, for example knowing which objectives a student has accomplished. It is also important to note that the kind of objective being assessed will have an effect on the type of assessment exercise constructed. Assessment exercises must be valid, that is, must be such that they really assess what they are supposed to assess.

Assessment Methods in Geography				
Type of Assessment	Principal Methods			
Objective tests	 True/false type Completion tests Matching Multiple choice tests Short answers 			
Essays	Timed essaysResource-based essays			
Structured questions	Data response questions - the student has a clearer idea of what is required of him/her. In such questions, stimulus material, providing information to the student has to be analysed and interpreted.			
Enquiries	 Using primary sources: usually involving fieldwork Using secondary sources: a teacher planned enquiry-based exercise. 			
Oral assessment	 Presentation: pupil prepares and presents a verbal report to an audience Discussion work: students interact within a group. 			
Self-assessment	ChecklistsEvaluation sheets focusing on key words.			
Classroom observations	 Teacher records comments on each individual student Interviews with students or small groups especially in regards to investigative projects. 			

Homework and Field Reports in Geography

Homework in geography serves a number of useful, interrelated purposes. It:

- Promotes independent learning skills, as students extend classroom work and apply skills to areas of personal interest
- Provides opportunities for work that takes too long to be accommodated during normal lesson time
- Enables pupils to use resources such as Information Technology and reference materials that may not be available in the classroom
- Creates opportunities for the development and application of skills, knowledge and values introduced in the classroom
- Creates opportunities for teachers to make formative assessments of pupils' work and progress and to evaluate the effectiveness of their own teaching
- Encourages research creativity and initiative
- Promotes the co-operation of parents and other adults

Good homework practice entails that:

- homework will be set frequently and regularly, as appropriate to the Form and nature of the activities
- a variety of activities will be set
- homework will be differentiated to provide meaningful and accessible activities for pupils
- homework will be clearly relevant to the schemes of work and integral to the teaching of the subject
- marking will be carried out in a way that provides positive and formative support to pupils, and will clearly indicate both areas of success and areas for improvement

Geography in the school curriculum provides an essential foundation of knowledge, understanding and skills for life-long learning, and equips those students who wish to become specialist geographers with the skills and understanding they will need. Above all, geography is relevant, stimulating and interesting for all students of all ages.

GEOGRAPHY GENERAL SYLLABUS AND LEARNING OUTCOMES

Form 3

Directorate for Quality and Standards in Education
Department for Curriculum Management and eLearning

Edward Gilson Rita De Battista Anton Quintano

GEOGRAPHY GENERAL SYLLABUS Form 3 Secondary

GEOGRAPHY GENERAL SYLLABUS - FORM 3

3.1 Map Reading and Interpretation	3.2 Weather and Climate	3.3 Landforms and Processes	3.4 Socio-Economic Human Systems	3.5 Environmental Concerns	3.6 Location and Places
3.1.1	3.2.1	3.3.1	3.4.1	3.5.1	3.6.1
Find the actual distances on maps using scale	The study of Meteorology	The main features of physical geography	The main features of Human geography	The main features of environmental geography	The location of places
3.1.2	3.2.2	3.3.2	3.4.2	3.5.2	3.6.2
The maps symbols commonly used on Ordnance Survey maps	The main features of the weather	The rain water as run- off	The description of places	The effects and causes of a flood	The world's most important rivers
3.1.3	3.2.3	3.3.3	3.4.3	3.5.3	3.6.3
The four figure grid references	The symbols used for weather forecasts	The rate of infiltration and types of surfaces	The definition and functions of a settlement	The ways by which the risk of flooding can be reduced	The main features of latitudes
3.1.4	3.2.4	3.3.4	3.4.4	3.5.4	3.6.4
The six figure grid reference	The main factors causing Microclimate	The factors influencing water flow	The advantages of the sites chosen for the early settlement	The environmental problems created by the Aswan Dam	The main features of longitudes

3.1.5	3.2.5	3.3.5	3.4.5	3.5.5	3.6.5
The use of spot heights and layer colouring to show height on maps	The water cycle leading to rainfall	The main features of a river basin	The types of settlement patterns	Views of different people living in Egypt regarding the Aswan Dam	The use of an atlas
3.1.6	3.2.6	3.3.6	3.4.6	3.5.6	3.6.6
The use of contour lines to show different physical features	The three types of rainfall	The water cycle in more detail	The factors affecting villages over time	Pollution hazards to the water table	The location of the Amazon Basin
3.1.7	3.2.7	3.3.7	3.4.7	3.5.7	3.6.7
Description of routes followed on given OS maps	The main features of anticyclones	The sources of fresh water in Malta and elsewhere	The ring pattern within urban areas	The Reverse Osmosis and the Sewage Treatment Plants	The position of Bangladesh, India, Nepal, the Himalayas, the Rivers Ganges and Brahmaputra
3.1.8	3.2.8	3.3.8	3.4.8	3.5.8	3.6.8
The key for the 1:50 000 Second Series of OS maps	The features of a mid-latitude depression	Case study of the River Nile – the benefits and problems	The effects caused by urban growth	The benefits and problems regarding settlement growth	Places where severe floods have occurred
	3.2.9	3.3.9	3.4.9	3.5.9	3.6.9
	The weather associated with depressions	The main details about the Aswan Dam	The changes in land use of towns	Waste management involving the 3 Rs	Locate Egypt, the River Nile, Lake Nasser and the Aswan Dam

3.3.10 The advantages of the Aswan Dam	3.4.10 The effects caused on people by the closure of London's docks	3.5.10 Waste as a resource	
3.3.11 The three types of rock	3.4.11 The settlement hierarchy	3.5.11 Land fill engineering and incineration	
3.3.12 The five types of sedimentary rock found in Malta	3.4.12 The shopping hierarchy	3.5.12 The negative aspects of the recent developments in transport	
3.3.13 The uses of the various types of rocks found in Malta.	3.4.13 The Central Business District	3.5.13 The causes of traffic in urban areas	
3.3.14 The weathering processes	3.4.14 The reasons why shops and offices are moving to our-of-town sites	3.5.14 The solutions for improving traffic flow in urban areas	

	3.4.15	3.5.15	
	The different types of transport and their main features	The factors influencing the construction of a bypass	
	3.4.16 The factors influencing the route to take	3.5.16 The reasons why people were in favour of the construction of the Euro Tunnel	
	3.4.17 The main aspects of a network	3.5.17 The reasons why other people were against the construction of the Euro Tunnel	
	3.4.18 The different transport networks of South-east England and that of Wales		
	3.4.19 The advantages of the recent developments in transport		

Details regarding the Euro Tunnel	3.4.)
Euro Tunnei	De ^a Eur	ils regarding the Tunnel

Geography General
Form 3 Secondary
Learning Outcomes

	3.1.1	Find the actual distances on maps using scale	 Become familiar with the 3 types of scale, namely, linear scale, written scale e.g. 2cm represents 1km and representative fraction e.g. 1:50 000. Use scale to measure straight line and non-direct distances on maps.
no	3.1.2	The maps symbols commonly used on Ordnance Survey maps	Become familiar with Survey Map Symbols used in both 1:50 000 maps and the 1:25 000 maps.
Map Reading and Interpretation	3.1.3	The four figure grid references	 Locate places and symbols using the four figure grid references. Give the four figure grid references for given places and symbols on map.
	3.1.4	The six figure grid references	 Locate places and symbols using the six figure grid references. Give the six figure grid references for given places and symbols on map.
	3.1.5	The use of spot heights and layer colouring to show height on maps	 Be familiar with the various techniques as spot heights, layer colouring and contours to indicate height on a map. Know the meaning of the following: triangulation pillar and contour interval.
	3.1.6	The use of contour lines to show different physical features	 The use of contour lines to calculate the height of places on maps. Use of contours to obtain information about the steepness of slopes and the direction the land is sloping. Distinguish between the contour shapes for the following features valley, flat valley floor, valley with stream, valley without stream, round cone shaped hill and hill top.

	3.1.7	Description of routes followed on given OS maps	 List the aspects that have to be covered when writing a description of a particular area. Describe particular places on a given map by referring to the various symbols and shape of contour lines. Describe particular routes taken using OS maps.
	3.1.8	The key for the 1:50 000 Second Series of OS maps	Consolidate the use of the symbols and abbreviations included in the key for the 1:50000 Second Series of OS Maps.
	3.2.1	The study of Meteorology	 Understand what is the study of meteorology. Distinguish between the terms weather and climate.
Weather and Climate	3.2.2	The main features of the weather	 Know the different weather features namely temperature, precipitation, wind speed and cloud type. Distinguish between the various weather instruments used and the measures used for these main weather features. Be able to make simple sketches of the four main cloud types cirrus, stratus, cumulus and cumulonimbus.
	3.2.3	The symbols used for weather forecasts	 Understand how cloud cover is measured in eights (octas). Know how the amount of cloud cover is drawn on a weather map. Be familiar with common weather symbols and drawings used for the main weather features namely rain, snow, hail, wind, visibility, temperature, wind direction and wind strength.
	3.2.4	The main factors causing Microclimate	 Know the meaning of the term Microclimate. Understand how local features as physical features, shelter, buildings, surface and aspect can affect temperature and wind

	3.2.5	The water cycle leading to	Consolidate the process of the water cycle leading to rainfall.
		rainfall	 Know the meaning of the terms cloud droplets, evaporation, condensation, and precipitation.
			Know that different locations in South America as the Atacama Desert rarely has rain whilst rain falls frequently over the Amazon rain forest.
			Know that Seathwaite in the Lake District is the wettest place in England whilst Newcastle has only a limited amount of rainfall.
	3.2.6	The three types of rainfall	Distinguish between the three types of rainfall namely, relief or orographic, convectional and frontal rainfall.
(I)			Be able to draw simple labelled diagrams of the three types of rainfall.
Weather and Climate	3.2.7	The main features of anticyclones	Understand why weather forecasts are important for various different categories of workers.
			 Demonstrate the main features of an anticyclone including pressure, movement and weather conditions.
ner			Describe the weather conditions of a summer anticyclone.
			Describe the weather condition of a winter anticyclone.
\Rightarrow			Comprehend a weather chart showing an anticyclone area.
	3.2.8	The features of a mid-latitude depression	Be aware of the typical sequence of weather during the passage of a mid- latitude depression including air pressure, wind direction, rainfall and temperature.
			Understand the meaning and sequence of the warm front, warm sector and cold front.
			Identify the above fronts and sector on a weather chart.
			Interpret the pattern of isobars on a simple weather chart.
			To forecast the weather for a particular locality shown on the weather chart that shows a mid-latitude depression.

	3.2.9	The weather associated with depressions passing over Britain	Relate the information regarding depressions to Bristol indicating the weather changes occurring as the depression passes over Britain.
	3.3.1	The main features of physical geography	 Understand that physical geography is the study of the natural features of the earth. List the various aspects studied under physical geography.
	3.3.2	The rain water as run-off	Explain what happens to the rain water once it reaches the ground.
	3.3.3	The rate of infiltration and types of surfaces	 Know the difference between porous, permeable and impermeable rocks. Aware that rocks contain areas of weakness such as bedding planes and joints along which water flows. Understand how different surfaces affect water flow.
Landforms and Processes	3.3.4	The factors influencing water flow	List the various factors affecting water flow namely rock type, type of surface, steepness of slope.
	3.3.5	The main features of a river basin	 Know the meaning of the term river basin. Recognise the main features of a drainage basin mainly source, tributary, channel, watershed, mouth and main river.
	3.3.6	The water cycle in more detail	 Relate the water cycle to water stored and water transferred. List the places where water is stored. Know that water can be moved in different forms. Apply the above terms to a flow chart. Label diagrams or flow charts of the hydrological cycle.
	3.3.7	The sources of fresh water in Malta and elsewhere	 Illustrate and describe the two aquifers in the layers of the Maltese rocks namely the sea level aquifer and the perched aquifer. Differentiate between water obtained from the aquifers and water obtained from the sea by means of the Reverse Osmosis Plants.

			 Explain briefly how salty water is changed into pure drinking water. List the different sources of water in Britain. Know why water is transferred from one area to another in Britain. Use of desalination in Saudi Arabia and California. Know of other sources of water namely through the construction of dams, from deep underground artesian wells and by digging deep wells financed by overseas aid.
Cesses	3.3.8	Case study of the River Nile – the benefits and problems	 Brief information about the River Nile. Understand the importance of the River Nile. Know about the two old ways of watering the land namely the shaduf and the saquia. Understand how distance from the river affected agriculture. The problems caused by the River Nile.
nd Pro	3.3.9	The main details about the Aswan Dam	Brief information about the Aswan Dam
Landforms and Processes	3.3.10	The advantages of the Aswan Dam	 List the various advantages of the Aswan Dam. Know which categories of people benefited from the building of the Aswan Dam.
	3.3.11	The three types of rock	 Classify the three different types of rock, namely: Igneous, Sedimentary and Metamorphic. Understand the formation of Igneous, Sedimentary and Metamorphic rocks. Name examples of rock types, e.g. Igneous (Basalt and Granite), Sedimentary (Limestone and Clay), Metamorphic (Marble and Slate).

and Processes	3.3.12	The five types of sedimentary rock found in Malta	 Identify the 5 main layers of rocks of the Maltese Islands, namely: Upper Coralline Limestone, Greensand, Globigerina Limestone, Lower Coralline Limestone. Know the terms of the five layers of rocks in Maltese. Understand how these layers were formed millions of years ago under the sea. Know the basic properties of the five strata of rock in Malta, including permeability, resistance and colour.
rms ar	3.3.13	The uses of the various types of rocks found in Malta.	Explore the use of each type of rock of the Maltese Islands.
Landforms	3.3.14	The weathering processes	 Understand the meaning of the term weathering. Distinguish between the 3 types of weathering: physical, chemical and biological. Understand the process of rock disintegration by means of: freeze-thaw weathering or frost shattering, exfoliation and limestone solution.
	3.4.1	The main features of Human Geography	 Understand that human geography is the study of where and how people live. List the various aspects studied under human geography
	3.4.2	The description of places	 Know the details to be included when describing a place. Be able to draw a simple labelled field sketch to describe a particular place.
	3.4.3	The definition and functions of a settlement	 Understand what a settlement is. Recognise the major function of certain settlements including market town, industrial, port, tourist resort, residential, capital - administrative, and religious.

Socio-Economic Human Systems	3.4.4	The advantages of the sites chosen for the early settlements	 Know the meaning of settlement site. Analyse the locational factors affecting the development of early settlement namely protection, plenty of water, not too much water, building materials, shelter, supply of wood and flat land.
	3.4.5	The types of settlement patterns	 Recognise the different patterns (shapes) of settlement including; dispersed, nucleated and linear. Know the reasons for the development of the three types of settlement shapes.
	3.4.6	The factors affecting villages over time	 List the changes that have occurred on the villages over time. Analyse how these changes are affecting different categories of people.
	3.4.7	The ring pattern within urban areas	 Distinguish between the different land uses within the urban ring model. Know the meaning of the terms CBD, inner city, inner suburbs and outer suburbs, terraced housing, semi-detached houses and council estates.
	3.4.8	The effects caused by urban growth	 List the reasons for urban growth. Analyse the benefits of living in a large town or city. Recognise the problems faced by the people living in large towns and cities.
	3.4.9	The changes in land use of towns	Aware that the function of a settlement can change over time.
	3.4.10	The effects caused on people by the closure of the London's docks	Be able to make a brief chronological order of the developments that have affected London's Docklands from the early 1900s to the present times.

			Analyse how the recent changes made by the LDDC (London Dockland Development Corporation) has affected positively or negatively different categories of people.
Socio-Economic Human Systems	3.4.11	The settlement hierarchy	 Recognise the hierarchy of settlement (hamlet, village, small town, large town, city, conurbation) and range of services provided. Understand the concepts that the larger the settlement the further away it is from another large settlement; the larger the settlement the fewer there are of them and that the larger the settlement the more services it will have.
	3.4.12	The shopping hierarchy	 Recognise the various types of shopping areas organised in a pyramid symbolising the shopping hierarchy. Understand the meaning of the related terms low order goods, convenience goods, high order goods, specialist and comparison goods.
	3.4.13	The Central Business District	 Define the main characteristics of the CBD namely its centrality, accessibility, high density of services and traffic and high land value. Understand why due to competition for key sites the price of the land rises. Recognise how space and money is saved by the construction of tall blocks in the centres of large cities.
	3.4.14	The reasons why shops and offices are moving to our-of-town sites	 Analyse the reasons why shops and offices are moving to out-of-town sites. Know the meaning of hypermarkets, business and science parks Be able to comment on a given advert.
	3.4.15	The different types of transport and their main features	 List the different means of transport. Define the advantages and disadvantages related to the main means of transport.

			Understand the meaning of freight, cargo.
Socio-Economic Human Systems	3.4.16	The factors influencing the route to take	 Analyse why routes are not all constructed in a straight direction. Know the meaning of detours, by-pass, and diversion. Compare the route created by the railway built across the Nullabar Plain in Australia with the road over the Andes Mountains in Peru.
	3.4.17	The main aspects of a network	 Understand the meaning of a network. Know the meaning of a high density network, a low density network and link.
	3.4.18	The different transport networks of South-east England and that of Wales	 Analyse why a high density network developed in South-east England. Understand why South Wales has a denser network than the rest of the Wales
	3.4.19	The advantages of the recent developments in transport	 Define the recent developments in transport. Analyse the benefits derived from these developments.
	3.4.20	Details regarding the Euro Tunnel	Give details about the Euro Tunnel.
	3.5.1	The main features of environmental geography	 Understand that environmental geography is the combination of the physical and human environment. List the aspects studied under environmental geography.
	3.5.2	The effects and causes of a flood	 Give the natural causes leading to flooding. Give the human causes leading to flooding. Refer to particular examples of flooding from across the world.

3.5.3	The ways by which the risk of flooding can be reduced	Analyse why flooding controls depend on several factors. Cive some ways how the risk of flooding again he reduced.
		Give some ways how the risk of flooding can be reduced.
		 Understand how flooding risk is related to the growth of urban areas, deforestation and the wealth of a country.
3.5.4	The environmental problems created by the Aswan Dam	Define the environmental problems that have been created with the construction of the Aswan Dam.
3.5.5	Views of different people living in Egypt regarding the Aswan Dam	Analyse how groups of people living in Egypt have been negatively affected by the Aswan Dam.
		Be able to write a short report or letter of protest in the name of anyone of these groups that have been negatively affected by the Aswan Dam.
3.5.6	Pollution hazards to the water table	 Name the various hazards that can pollute or destroy the water table namely through illegal boreholes, vandalism, infiltration of nitrates from the use of fertilisers and by pumping too much water.
3.5.7	The Reverse Osmosis and the Sewage Treatment Plants	Define the advantages of obtaining water through reverse osmosis instead of by distillation.
		 Explain how sewage treatment plants can help to lessen the problem of sea pollution.
3.5.8	The problems regarding settlement growth	Define the problems resulting from urban growth.
3.5.9	Waste management involving the 3 Rs	Know the meaning of Reduce, Reuse and Recycle.
		Give particular examples for each.
		 Comment on how waste management can be successfully carried out at home, at school or in a factory.
3.5.10	Waste as a resource	Give examples of how children can utilise discarded items to create other objects.
	3.5.4 3.5.5 3.5.6 3.5.7 3.5.8	3.5.4 The environmental problems created by the Aswan Dam 3.5.5 Views of different people living in Egypt regarding the Aswan Dam 3.5.6 Pollution hazards to the water table 3.5.7 The Reverse Osmosis and the Sewage Treatment Plants 3.5.8 The problems regarding settlement growth 3.5.9 Waste management involving the 3 Rs

			Through research work find the new products made from waste metal, plastic, paper, glass and wood.
Environmental Concerns	3.5.11	Land fill engineering and incineration	 Briefly give the various steps taken in the process of land fill engineering. Name the advantages of such a process when compared with the dumping of waste as was being done at Maghtab. Give the positive and negative aspects of incineration of waste.
	3.5.12	The negative aspects of the recent developments in transport	 Define the main problems caused by the recent developments in transport. Classify which of these problems fall under environmental pollution.
	3.5.13	The causes of traffic in urban areas	Explain the causes leading to the problem of traffic in urban areas.
	3.5.14	The solutions for improving traffic flow in urban areas	 Suggest how traffic problems can be solved or at least improved. Give ways by which private transport can be discouraged. Give ways by which public transport can be encouraged. Know the meaning of park and ride schemes, off-street parking and bypasses.
	3.5.15	The factors influencing the construction of a by-pass	 Analyse the reasons why the construction of a by-pass takes so long. Name the environmental aspects that have to be considered before building the by-pass. Give the social aspects that have to be considered before building the by-pass.
	3.5.16	The reasons why people were in favour of the construction of the Euro Tunnel	 Understand that the people of Britain and France were divided over the building of the Euro Tunnel. Define the reasons why parts of the population were in favour of the construction of the Euro Tunnel.

	3.5.17	The reasons why other people were against the construction of the Euro Tunnel	Define the reasons why parts of the population were against the construction of the Euro Tunnel.
	3.6.1	The location of places	 Explain why it is important to know where places are. List the people that need maps to locate places.
	3.6.2	The world's most important rivers	 Know the position and locate on a world map the following rivers: Amazon, Colorado, Danube, Ganges, Murray-Darling, Mississippi, Nile, Rhine, St. Lawrence, Volga, Yangtse, Zambese and Zaire (Congo).
			 Be able to relate each river to its continent and to a country through which it passes.
	3.6.3	The main features of latitudes	List the main features of latitudes.
Location and Places			 Draw a diagram showing the main lines of latitude namely the Equator, Tropic of Cancer, Tropic of Capricorn, Arctic Circle, Antarctic Circle, North Pole and South Pole.
D			Relate these main lines of latitude to their measure in degrees and minutes.
dD	3.6.4	The main features of longitudes	List the main features of longitudes.
ation			 Be able to draw a diagram indicating the lines of longitude showing the Greenwich or Prime Meridian or the International Date Line.
Loc			 Relate the important lines of longitude to their measure in degrees and minutes.
	3.6.5	The use of an atlas	Be able to use the index of an atlas to find the exact location of places.
	3.6.6	The location of the Amazon Basin	 Know the position and locate the Amazon Basin on a map of South America.
	3.6.7	The position of Bangladesh,	Know the position and locate on a world map Bangladesh, India and Nepal
		India, Nepal, the Himalayas, the Rivers Ganges and Brahmaputra	 Know the position and locate on a map of Asia the Himalayas and the Rivers Ganges and Brahmaputra.

3.6.8	Places where severe floods have occurred	•	Know the position and locate on a world map the following places, where severe floods have occurred, namely the USA, United Kingdom, Italy, Hawaii, Russia, China, Bangladesh, India, Pacific Islands and Australia.
3.6.9	Locate Egypt, the River Nile, Lake Nasser and the Aswan Dam	•	Know the position and locate on a map of North Africa: Egypt the River Nile, Lake Nasser and the Aswan Dam.

GEOGRAPHY GENERAL SYLLABUS AND LEARNING OUTCOMES Form 4

Directorate for Quality and Standards in Education
Department for Gurriculum Management and eLearning

Edward Gilson Rita De Battista Anton Quintano

GEOGRAPHY GENERAL SYLLABUS Form 4 Secondary

GEOGRAPHY GENERAL SYLLABUS - FORM 4

4.1 Map Reading and Interpretation	4.2 Weather and Climate	4.3 Landforms and Processes	4.4 Socio-Economic Human Systems	4.5 Environmental Concerns	4.6 Location and Places
		4.3.1 Weathering and erosion. Four types of weathering including freeze-thaw, onionskin, biological and chemical.	4.4.1 Economic activities, primary industry, raw materials, natural resources, mining and quarrying.	4.5.1 Rivers as a source of water for people and industry. Pollution of rivers by sewage, industry and ships. Ways of reducing or eliminating pollution of rivers.	4.6.1 Industrial Estates in the Maltese Islands.
		4.3.2 The four agents of erosion including, sea, ice, wind and rivers.	Physical factors affecting farming including climate, relief and soil. Human factors affecting farming including size of farm, technology and market. 3 types of farming, pastoral, arable and mixed. Subsistence farming especially in monsoon lands, and problems of drought. Commercial farming on irrigated land, especially market gardening in California.	4.5.2 Sea as a source of sand, gravel, power station coolant, fish, coal, oil, gas and transport. Reduction of CO ₂ . Pollution of seas by sewage, chemicals, litter, oil, radioactive wastes and fish-farming. Ways of reducing or eliminating pollution of seas. Case studies of the North and Mediterranean Seas.	4.6.2 Major oil producing countries or regions and major oil consuming countries or regions.

4.3.3 Features of a river in its upper valley.	4.4.3 Extensive and intensive farming. Capital and labour in agriculture. Case study of intensive farm and extensive farm in the UK. An example of crop rotation on an intensive farm in the UK and Malta. Aspects of agriculture including chemical and biological pest control, rubble walls in Malta. Definition and advantages of organic farming.	Environmental damage caused by spoil tips and quarries. Attempts at improving the unsightly areas of spoil tips and quarries. Pollution and negative impacts of quarrying in Malta. Measures being taken to lessen these effects.	4.6.3 The 10 largest cities in the developing world.
4.3.4 Waterfalls, cause and development. Plunge pool and development of a gorge.	4.4.4 The change that is taking place in agricultural landscape – drainage of wetlands and the elimination of hedgerows. Environmental effects of the above. Economic gains of the above. Major types of farming in the UK including crafting in Scotland,	4.5.4 The natural and cultural environment. Threats to the environment especially wildlife habitats, the countryside and historic sites. Conservationist NGOs in the UK and in Malta e.g. Nature Trust, Bird Life, DLH, FWA.	

		Sheep in Scotland and Wales, cattle in western areas, mixed in the centre and arable in the east. The increase in oilseed rape cultivation. An overview of the development of C.A.P.		
	4.3.5 Lower river. Development of meanders, river cliffs, alluvium and silt.	4.4.5 Manufacturing industries, factories, assembling and constructing as features of secondary industries. Small industries (e.g. crafts) and large industries (e.g. steelworks).	Introduction to the concept of wildlife protection and biodiversity. Protection of different species. Endangered and extinct species. Threats to different species. Initiatives for the protection of wildlife.	
	4.3.6 Coastal erosion. Formation of headlands and bays. Headland erosion including cave, arch, stack. Beaches and	4.4.6 Factors affecting industrial location including raw materials, power, labour, market, transport and site.	4.5.6 Resources, renewable and non-renewable resources. Introduction to energy resources including fossil fuels,	

spits as depositional shore landforms.	Case study: location of a textile mill. Original choice of industrial site as influenced by proximity to raw materials especially coal and iron ore. The steel industry. Assembling plants e.g. car industries that are nearer to market. Inner city location of old factories for reason of transport and lack of electricity supply.	wood and nuclear. Introduction to renewable energy including water, solar, wind, geothermal, tidal and wave.	
	Information Technology on Science and business parks, high tech industries. Edge of city Greenfield sites of modern industrial estates. Changing needs of modern industry as a cause for changing industrial location with reference to iron and steel.	4.5.7 Pollution caused by industry including air, noise, visual water and smell. Measures to prevent or minimize industrial pollution. Environmental concern including careful use of resources, planning and management and conservation. Industrial Estates in Malta and Gozo. Some characteristics of the Industrial Estates including	

	position and advantages of grouping industries.	
seen in a map. De sparsely areas. Re	environment – exploitation and careful use of resources. The process of extraction, transportation and refining oil. Environmental loss when drilling on land	
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	soils, open grasslands, water supply. Negative factors affecting sparse population including cold climate, steep slopes, poor soils, dense forests.	power stations which use coal, oil, gas or nuclear power. Some effects of use of fossil fuels on the environment including global warming and acid rain. Some ways to reduce the use, or the negative effect of, fossil fuels.	
	4.4.10 World distribution of population. Reasons for dense population in Western Europe and Bangladesh as well as sparse population in Amazon, Himalayas, Antarctica and Sahara. Introduction to urbanisation and examples of largest 10 cities in developing world, Net growth in world population from AD 1000 to AD 2000. Birth rate, Death rate and population growth rate. Factors		

affecting birth rate. The consequences of urban sprawl in the Maltese Islands.	
Migration: Rural to urban and international migration. Mexico City as example of rural to urban migration and pull factors involved. Temporary migrants, seasonal jobs and migrant workers. Case study of Mexicans who migrate permanently or temporarily to the USA. Different points of view regarding advantages and disadvantages of migration for the migrant and country of destination.	

Geography General
Form 4 Secondary
Learning Outcomes

	4.3.1	Weathering and erosion. Four types of weathering including freeze-thaw, onion-skin, biological and chemical.	 Define weathering and erosion. Identify and define the four types of weathering namely; freeze-thaw, onion-skin, biological and chemical weathering. Associate most common type of weathering to particular environments. Build labelled flow diagrams describing 4 types of weathering.
Processes	4.3.2	The four agents of erosion including, sea, ice, wind and rivers.	 List materials according to resistance to weathering. Identify most common agent of erosion in different world regions.
and	4.3.3	Features of a river in its upper valley.	 Define and locate on diagrams: spurs, valley sides, v-shaped valleys, river channel, river banks, river bed and load. Describe development of v-shaped valley by vertical erosion.
Landforms	4.3.4	Waterfalls, cause and development. Plunge pool and development of a gorge.	 Explain the process of backward erosion at work at waterfalls and gorges. Draw and label diagrams to explain formation of waterfalls, including plunge pool and gorge. Research information about Niagara Falls.
	4.3.5	Lower river. Development of meanders, river cliffs, alluvium and silt.	 Draw and label cross-section of a river meander. Recognise features of a river from pictures. Suggest advantages and disadvantages of farming in a flood plain. Identify faster and slow flow in a river bend.

	I		
	4.3.6	Coastal erosion. Formation of	Define bays, headlands, beaches and spits.
		headlands and bays. Headland erosion including cave, arch, stack.	Draw and label diagrams to explain processes of headland and bay formation.
		Beaches and spits as depositional shore landforms	 Draw and label diagrams to explain process of headland erosion (cave, arch, and stack).
			Describe process of formation of spits.
			 Locate important examples of coastal landforms in Malta and Gozo including important sandy beaches, Tieqa ż-Żerqa (Azure Window), Tieqa ta' Wied il- Mielaħ, caves under Ta' Ċenċ, Dingli Cliffs, Mtaħleb and stack at Għar Qawqla (Marsalforn).
	4.4.1	Define economic activities, primary industry, raw materials, natural resources, mining and quarrying.	Define the terms, economic activities, primary industry, raw materials, natural resources, mining and quarrying.
			Identify examples of primary industries.
sms			Distinguish between mining and quarrying.
/ste			Research environmental effects of quarrying.
nan S			Describe fishing methods used by Maltese fishermen including kannizzati, trawling, swordfish longlines, dragnet, lampara and seine net.
Socio-Economic Human Systems	4.4.2	Physical factors affecting farming including climate, relief and soil. Human factors affecting farming including size of farm, technology and market. 3 types of farming, pastoral, arable and mixed. Subsistence farming especially in monsoon lands, and problems of drought. Commercial farming on irrigated land, especially market gardening in California.	 Define the terms agriculture, arable, pastoral, mixed, subsistence, commercial, irrigated, labour intensive farming as well as market gardening. Distinguish between physical and human factors which influence farming. Analyse the problems of natural hazards in farming including snowdrift, frost, floods, winds, disease. Describe the processes, outputs and problems of monsoon farming in India and market gardening in California.

4.4.3	Extensive and intensive farming. Capital and labour in agriculture. Case study of intensive farm and extensive farm in the UK. An example of crop rotation on an intensive farm in the UK and Malta. Aspects of agriculture including chemical and biological pest control, rubble walls in Malta. Definition and advantages of organic farming.	 Distinguish between extensive and intensive farming. Evaluate the importance of capital and labour in intensive farming. Describe typical intensive farms and extensive marginal farmland in the UK. Attempt a crop rotation in a Maltese farm. Define organic farming. Describe the processes and methods of an organic farm in Malta. Investigate chemical and biological pest control and the use of rubble walls in Malta.
4.4.4	The change that is taking place in agricultural landscape – drainage of wetlands and the elimination of hedgerows. Environmental effects of the above. Economic gains of the above. Major types of farming in the UK including crafting in Scotland, Sheep in Scotland and Wales, cattle in western areas, mixed in the centre and arable in the east. The increase in oilseed rape cultivation. An overview of the development of C.A.P.	 Analyse the reasons for the elimination of wetlands and hedgerows in the UK and EU. Asses the environment concerns of the above. Define and investigate soil erosion and proper management. Describe the major types of agriculture economy in the UK by geographical region. Know the use of oil seed rape. Research the main functions, development, successes and failures of the C.A.P.

SI	4.4.5	Manufacturing industries, factories, assembling and constructing as features of secondary industries. Small industries (e.g. crafts) and large industries (e.g. steelworks).	 Define secondary industry. List examples of manufacturing industries. Distinguish between raw materials and manufacted goods. Research factories and their products in the local area. Understand reasons for large or small industry.
Socio-Economic Human Systems	4.4.6	Factors affecting industrial location. Case study: location of a textile mill. Original choice of industrial site as influenced by proximity to raw materials especially coal and iron ore. The steel industry. Assembling plants e.g. car industries that are nearer to market. Inner city location of old factories for reason of transport and lack of electricity supply.	 Identify the six factors that affect industrial location including raw materials, power, labour, market, transport and site Assess the reasons and importance of each of these factors. Analyse the workings of a nearby factory in relation to the six factors above. Understand the importance of raw material site for old iron and steel industries. Reasons for market site for car industry due to assemblage of component parts. List reasons for the siting of Malta's industrial estates. List reasons for siting of old factories in the inner city. List problems that face factories sited there today.
S	4.4.7	Information Technology on Science and business parks, high tech industries. Edge of city Greenfield sites of modern industrial estates. Changing needs of modern industry as a cause for changing industrial location with reference to iron and steel.	 Define IT, science parks, business parks and Greenfield sites. List factors affecting grouping of IT industries in a science park. Study the workings of Mosta technopark or Smart City. Assess the importance of factors determining the site of an old iron works and of a modern steel works.

4.4.8	The spread and distribution of population. Population density as seen in a choroplath map. Densely and sparsely populated areas. Reasons for unequal distribution and densities of population.	 Interpret choroplath map. Draw and interpret bar graphs to show population of cities. Define population density. List the positive factors leading to dense population.
4.4.9	Positive factors affecting dense population including pleasant climate, gentle slopes, good soils, open grasslands, water supply. Negative factors affecting sparse population including cold climate, steep slopes, poor soils, dense forests.	 List the negative factors leading to sparse population. Categorise the above factors in relation to the Amazon, Sahara, Bangladesh and Western Europe. Describe Malta's population distribution in simple terms.
4.4.10	World distribution of population. Reasons for dense population in Western Europe and Bangladesh as well as sparse population in Amazon, Himalayas, Antarctica and Sahara. Introduction to urbanisation and examples of largest 10 cities in developing world, Net growth in world population from AD 1000 to AD 2000. Birth rate, Death rate and population growth rate. Factors affecting birth rate. The consequences of urban sprawl in the Maltese Islands.	 Identify densely populated and sparsely populated world regions. List factors determining such densities. Analyse tables of population totals, population densities and doubling period for given countries. Read a line graph of world total population time chart. Define Birth Rate and death Rate. Contrast Birth rate and Death rate of select developed and developing countries. List factors affecting population growth rates.

	4.4.11	Migration: Rural to urban and International migration. Mexico City as example of rural to urban migration and pull factors involved. Temporary migrants, seasonal jobs and migrant workers. Case study of Mexicans who migrate permanently or temporarily to the USA. Different points of view regarding advantages and disadvantages of migrant for the migrant and country of destination.	 Define migration, migrants, rural to urban migration, international migration, push and pull factors. Analyse pull factors for people to move into cities with reference to Mexico City. List push and pull factors in international migration. Define temporary or seasonal migration. List the pull factors that constitute the 'American dream'. Compare and contrast social and economic conditions in the USA and Mexico.
II Concerns	4.5.1	Rivers as a source of water for people and industry. Pollution of rivers by sewage, industry and ships. Ways of reducing or eliminating pollution of rivers.	 Identify reasons for siting settlements near rivers. Draw warning posters advising people of pollution. Define the term pollution. Suggest measures to reduce river pollution by different categories of people such as farmers, local councils, and ordinary people.
Environmental Concerns	4.5.2	Sea as a source of sand, gravel, power station coolant, fish, coal, oil, gas and transport. Reduction of CO ₂ . Pollution of seas by sewage, chemicals, litter, oil, radioactive wastes and fish-farming. Ways of reducing or eliminating pollution of seas. Case studies of the North and Mediterranean Seas	 List causes and effects of sea pollution. List difficulties in cleaning a polluted sea. Assess the vulnerability of the Mediterranean Sea and the north Sea to pollution.

4.5.3	Environmental damage caused by spoil tips and quarries. Attempts at improving the unsightly areas of spoil tips and quarries. Pollution and negative impacts of quarrying in Malta. Measures being taken to lessen these effects.	 Define the terms spoil tips and quarries. Identify some important quarries in Malta and Gozo. List the types of pollution or environmental loss as a result of quarrying. Suggest ways of landscaping disused quarries or tips.
4.5.4	The natural and cultural environment. Threats to the environment especially wildlife habitats, the countryside and historic sites. Conservationist NGOs in the UK and in Malta.	 Define the terms conservationist and environmentalist, wildlife habitat and historic site. Research types of environmental loss/hazards faced by the countryside and historic places. List some international and Maltese environmentalist groups including WWF, Greenpeace, Birdlife International, Europa Nostra, UNESCO, Din L-Art Helwa, Fundazzjoni Wirt Artna, Nature Trust (Malta), Birdlife (Malta), Flimkien għal Ambjent Aħjar.
4.5.5	Introduction to the concept of wildlife protection and biodiversity. Protection of different species. Endangered and extinct species. Threats to different species. Initiatives for the protection of wildlife.	 Define the terms endangered and extinct species, wildlife protection and biodiversity. List some extinct and endangered species including, dodo and mammoth; tigers and whales. Design an environmentalist poster in aid of any endangered species. Identify the hazard facing different named species e.g. elephants are killed for their ivory.

	4.5.6	Resources, renewable and non-renewable resources. Introduction to energy resources including fossil fuels, wood and nuclear. Introduction to renewable energy including water, solar, wind, geothermal, tidal and wave.	 Define renewable and non-renewable resources, recycling of materials, fossil fuels. Describe the major attributes of all types of energy resources including coal, oil, gas, wood, nuclear, wind, sun, HEP, geothermal, wave and tidal.
Environmental Concerns	4.5.7	Pollution caused by industry including air, noise, visual water and smell. Measures to prevent or minimize industrial pollution. Environmental concern including careful use of resources, planning and management and conservation. Industrial Estates in Malta and Gozo. Some characteristics of the Industrial Estates including position and advantages of grouping industries.	 Identify types of pollution from diagrams. Assess the effects of air, water, visual, noise and smell pollution. Research ways of reducing these types of pollution. Discuss two places in the Maltese Islands that have been polluted in different ways and suggest solutions applied or to be applied e.g. Magħtab rubbish dump, quarries. Discuss simple measures by which one can help reduce pollution.
- VI	4.5.8	Oil and the environment – exploitation and careful use of resources. The process of extraction, transportation and refining oil. Environmental loss when drilling on land or at sea. Ways of protecting the environment when drilling or using oil. Improved technology used to extract oil. The location of major oil producing countries and oil consuming world regions. Case study of work on a North Sea oil rig.	 Define the terms exploitation and technology. List hazards of land and sea oil drilling. Know the five stages of oil extraction and use. Report on an oil spill disaster. List the major oil producing or consuming countries or world regions.

	4.5.9	The importance and use of electricity. The processes of a thermal power station. Types of power stations which use coal, oil, gas or nuclear power. Some effects of use of fossil fuels on the environment including global warming and acid rain. Some ways to reduce the use, or the negative effect of, fossil fuels	 Define the term thermal power station. Describe the causes of acid rain and global warming. Suggest ways of reducing sulphur dioxide and carbon dioxide release.
			 Describe the major steps in the production of electricity in a thermal power station. List the users of electricity.
			Describe how power stations can form air, water and visual pollution.
laces	4.6.1	Industrial Estates in the Maltese Islands.	Know the position of and locate the Industrial Estates of Malta and Gozo on a map of the Maltese Islands, including; Xewkija, Mriehel, San Ġwann, Luqa, Marsa, Bulebel, Kordin, Hal Far; Ta' Dbieġi and Ta' Qali Crafts villages; Mosta Te chnopark and Smart City.
ocation and Places	4.6.2	Major oil producing countries or regions and major oil consuming countries or regions.	Know the position and locate the major oil producing and oil consuming countries or regions on a world map; including Mexico, USA, Alaska, Middle Eas North Africa, North Sea, Russia, Venezuela, Indonesia, Western Europe, Japan, and Nigeria.
Loc	4.6.3	The 10 largest cities in the developing world.	Know the position of and locate 10 fastest growing cities of the developing world on a world map, including Mexico City, Bogota, Lima, Belo Horizonte, Sac Paolo, Kinshasa, Addis Ababa, Madras, Dhaka, and Seoul.

GEOGRAPHY GENERAL SYLLABUS AND LEARNING OUTCOMES

Form 5

Directorate for Quality and Standards in Education Department for Gurriculum Management and eLearning

Edward Gilson Rita De Battista Anton Quintano

GEOGRAPHY GENERAL SYLLABUS Form 5 Secondary

GEOGRAPHY GENERAL SYLLABUS – FORM 5

5.1 Map Reading and Interpretation	5.2 Weather and Climate	5.3 Landforms and Processes	5.4 Socio-Economic Human Systems	5.5 Environmental Concerns	5.6 Location and Places
	5.2.1 Factors affecting climate	5.3.1 The main features of Volcanism	5.4.1 Types of economic activities	5.5.1 Soil erosion	5.6.1 Location of places with an equatorial climate
	5.2.2 Characteristics of Equatorial Climate	5.3.2 The effects of Volcanic Eruptions	5.4.2 The Tourist Industry	5.5.2 Soil management	5.6.2 Location of places with a hot desert climate
	5.2.3 The Natural Vegetation in the Equatorial Zones	5.3.3 Earthquakes and their effects	5.4.3 Negative Effects of Tourism	5.5.3 Causes and effects of global warming	5.6.3 Location of places with a Mediterranean climate
	5.2.4 Characteristics of the Hot Desert Climate	5.3.4 Areas where volcanoes and earthquakes are common	5.4.4 Case Study: Tourism in Majorca	5.5.4 Causes and effects of ozone depletion	5.6.4 Location of main volcanoes on a map of the world
	5.2.5 The Natural Vegetation in Tropical deserts	5.3.5 Soil Characteristics	5.4.5 Case Study: Euro-Disney in France		5.6.5 Location of major earthquake zones

5.2.6 Characteristics of the Mediterranean Climate	е	5.5.6 Case Study: The Alps	5.6.6 Map showing major plate boundaries
5.2.7 The Natural Vegetation of the Mediterranean Climate		5.4.7 National Parks and Reserves	5.6.7 Volcanic activity in the Mediterranean
		5.4.8 Conflicts of Interest in Environmental Protection	5.6.8 The main functions of the EU

Geography General
Form 5 Secondary
Learning Outcomes

Weather and Climate	5.2.1	Factors affecting climate	 Understand the difference between weather and climate. Understand how latitude, distance from the sea, prevailing winds and altitude affect the climate of an area.
	5.2.2	Characteristics of Equatorial Climate	 Describe the main characteristics of the equatorial type of climate. Know the daily sequence of weather experienced in such areas. Interpret a climate graph (temperature and rainfall) of this type of climate.
	5.2.3	The Natural Vegetation in the Equatorial Zones	 Describe the appearance of the tropical rainforest. Explore different ways how the vegetation has adapted to the equatorial climate (straight tree trunks, evergreen appearance, leaves with drip-tips, lianas, little undergrowth, large buttress roots). Know how wildlife had to adapt to living in the hot, wet forest environment.
	5.2.4	Characteristics of the Hot Desert Climate	 Describe the main characteristics of the desert type of climate namely deserts are very hot during the day, cold at night, few clouds, small amount of rainfall (less than 250 mm), rainfall is unreliable. Interpret a climate graph (temperature and rainfall) of this type of climate.

	5.2.5	The Natural Vegetation in Tropical deserts	 Explain how plants adapt to the summer drought including long and shallow roots, some plants can store water in bulbs, cacti have fleshy stem to store water, seeds lie dormant until it rains, thorns instead of leaves. Explain how wildlife have adapted to desert climate (nocturnal activity, burrowing into the sand, some creatures are cold blooded) Understand the features which help the camel to live in hot deserts.
Weather and Climate	5.2.6	Characteristics of the Mediterranean Climate	 Describe the main characteristics of the Mediterranean type of climate. Know the seasonal pattern of the weather experienced in such areas, that summers are hot and dry and that winters are mild and wet. Interpret a climate graph (temperature and rainfall) of this type of climate.
Weat	5.2.7	The Natural Vegetation of the Mediterranean Climate	 Describe the two main types of Mediterranean natural vegetation namely woodland and scrub. Name examples of trees typical of Mediterranean woodland including; pine, cypress and cork oak. Name examples of plants typical of scrub vegetation such as rosemary, lavender and thyme. Explain how the Mediterranean vegetation can survive the hot dry summers (small waxy glossy leaves, thorns, protective barks, long tap roots). Explain how the natural vegetation of the Mediterranean has been changed by natural causes and by human intervention.

	5.3.1	The Main features of Volcanism	Classify the three main types of volcano; active, dormant and extinct.
			Label the main features of a volcano, including; crater, lava flow, main vent, magma chamber, secondary cone,
			Know the meaning of the following terms; magma, lava, volcanic bombs, crater, secondary cone, ash, lava flow and main vent.
			Compare the nature and effects of different volcanic eruptions by using Krakatoa and Mauna Loa as examples.
ses			Differentiate between ash and lava volcanoes.
Landforms and Processes	5.3.2	The effects of Volcanic Eruptions	List and define the severe damage volcanic eruptions can cause to people, property and the environment.
<u>Б</u>			Outline the effects of eruptions on Mount Etna.
ms an	5.3.3	Earthquakes and their effects	Define the terms; earthquakes, epicentre, shock waves, focus and Richter scale.
ndfor			Identify the nature and effects of earthquakes by the use of various case studies.
ГО			List the urgent measures taken by the authorities after an earthquake.
	5.3.4	Areas where volcanoes and earthquakes are common	Recognise the core, mantle and crust in a diagram representing a cross-section of the Earth.
			Know the meaning of the terms; core, mantle, crust, plate and plate boundary.
			Identify links between the location of plate boundaries, volcanoes and recent major earthquakes.
			Explain briefly the processes responsible for earthquakes and volcanic activity at plate margins.

	5.3.5	Soil Characteristics	Realise that soil is a vital resource and that it takes a long time to form.
			Aware that soil is a renewable resource.
			Label a soil profile diagram with the following characteristics: underlying rock, depth of soil, grass and dead leaves.
			Know the factors leading to soil formation.
			Understand that soils differ in texture, depth, colour and organic matter.
			Differentiate between the three main types of soil in the Maltese Islands that is Terra Rossa soils, Xerorendzina soils and Carbonate Raw soils.
	5.4.1	Types of economic activities	Know the meaning of Primary, Secondary and Tertiary Industries.
			List examples from the Maltese economy of these occupations.
S	5.4.2	The Tourist Industry	Understand the importance of the tourist industry on a worldwide scale.
iem			Aware of the variety of jobs within the tourist industry.
yst			List tourist-related jobs.
ăn S			Know the benefits of the tourist industry to the Maltese economy.
Huma			Explore Malta's tourist attractions including climate, beaches, hospitality, historical and cultural.
nic			Meaning of the term ecotourism.
conor	5.4.3	Negative Effects of Tourism	List ways in which tourism can cause problems in areas where it becomes popular.
Socio-Economic Human Systems			Aware of the negative environmental and social effects of tourism in Malta including; land use conflict, overcrowding, traffic congestion, loss of natural environment, increase in pollution and waste and loss of traditional way of life.
	5.4.4	Case Study: Tourism in Majorca	Locate the Balearic Islands and Majorca on a map of Europe.
			Analyse the benefits and problems that tourism has brought to the Mediterranean Island of Majorca.
			1

			<u> </u>
	5.4.5	Case Study: Euro-Disney in France	 Location of Paris on a map of Europe. Understand the reasons for the location of Disneyland Paris, on both a local and a Europe-wide scale.
	5.4.6	Case Study: The Alps	 Location of the Alps on a map of Europe. Know the benefits that tourism brings to Alpine resorts. Aware of the problems that can be caused by development of resorts in fragile mountain environments.
	5.4.7	National Parks and Reserves	 Understand why national parks and nature reserves are set-up. Know the location and names of some nature reserves in Malta. Aware of the role of the government and NGOs to protect and maintain protected areas.
	5.4.8	Conflicts of Interest and Environmental Protection	 Understand what land use conflict is. Know one or more examples of such conflicts from the local environment.
Environmental Concerns	5.5.1	Soil erosion	 Define the term soil erosion. Understand that soil erosion is a consequence of a combination of physical and human factors. Explain the terms that lead to soil erosion: overgrazing, up and down ploughing, deforestation, and soil exhaustion.
Environ	5.5.2	Soil management	 Understand that careful management of the land can help reduce the problem of soil erosion. Know the meaning of the following terms; controlled grazing, contour ploughing, afforestation and crop rotation. Aware of the importance of rubble walls to protect the soil.

	5.5.3	Causes and effects of global warming	 Understand what is meant by global warming. Know the evidence that suggests that global warming is happening. Describe the main causes of global warming. Analyse some of the possible consequences of global warming. Aware of the possible ways of reducing global warming.
	5.5.4	Causes and effects of ozone depletion	 Understand what is meant by ozone layer. Know the factors causing the depletion of the ozone layer. Analyse some of the possible consequences of ozone depletion. Aware of some of the possible ways of reducing ozone depletion.
	5.6.1	Location of places with an equatorial climate	Know the position of the major regions of equatorial climate; Amazon Basin, Congo Basin and Indonesia.
Se	5.6.2	Location of places with a hot desert climate	Know the location of the places with a hot desert climate; Mexican desert, Atacama, Sahara, Arabian, Australian, Kalahari and Namib.
ınd Place	5.6.3	Location of places with a Mediterranean climate	Know the position and locate places with a Mediterranean climate, namely; California, Central Chile, Mediterranean Lands, South Africa, and South-west Australia.
Location and Places	5.6.4	Location of main volcanoes on a map of the world	 Know the position and locate on a world map the following volcanoes; Krakatoa, Mauna Loa, Mt St Helens, Heimaey, Etna, Vesuvius, Nevada del Ruiz, Cotopaxi, Ngauruhoe, Aconcagua and Popocatapetl. Locate on a world map the active belt of volcanoes known as the Ring of Fire.
	5.6.5	Location of major earthquake zones	Locate the distribution of earthquakes on an outline map of the world.

5.6.6	Map showing major plate boundaries	•	Identify the following major tectonic plates on a world map namely; Eurasian Plate, Indo-African Plate, Pacific Plate, Nazca Plate, North American Plate, South American Plate and African Plate.
5.6.7	Volcanic activity in the Mediterranean	•	Locate the following active volcanoes on a map of Central Mediterranean; Vesuvius, Stromboli, Volcano and Mt Etna.
5.6.8	The main functions of the EU	•	Know the main reasons for the existence of the EU. Locate on a map of Europe all the countries that make up the EU. Locate on a map of Europe the capital city of each member country of the EU.

Annexe 1

Priorities for Forms 5

The following are the areas of study which should be given priority for the Annual Examination for Form 5 which is held during the month of February.

5.2 Weather and Climate	5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7
5.3 Landforms and Processes	5.3.5
5.4 Socio-Economic Human Systems	5.4.1, 5.4.2, 5.4.3
5.5 Environmental Concerns	5.5.1, 5.5.2, 5.5.3
5.6 Location and Places	5.6.1, 5.6.2, 5.6.3, 5.6.8

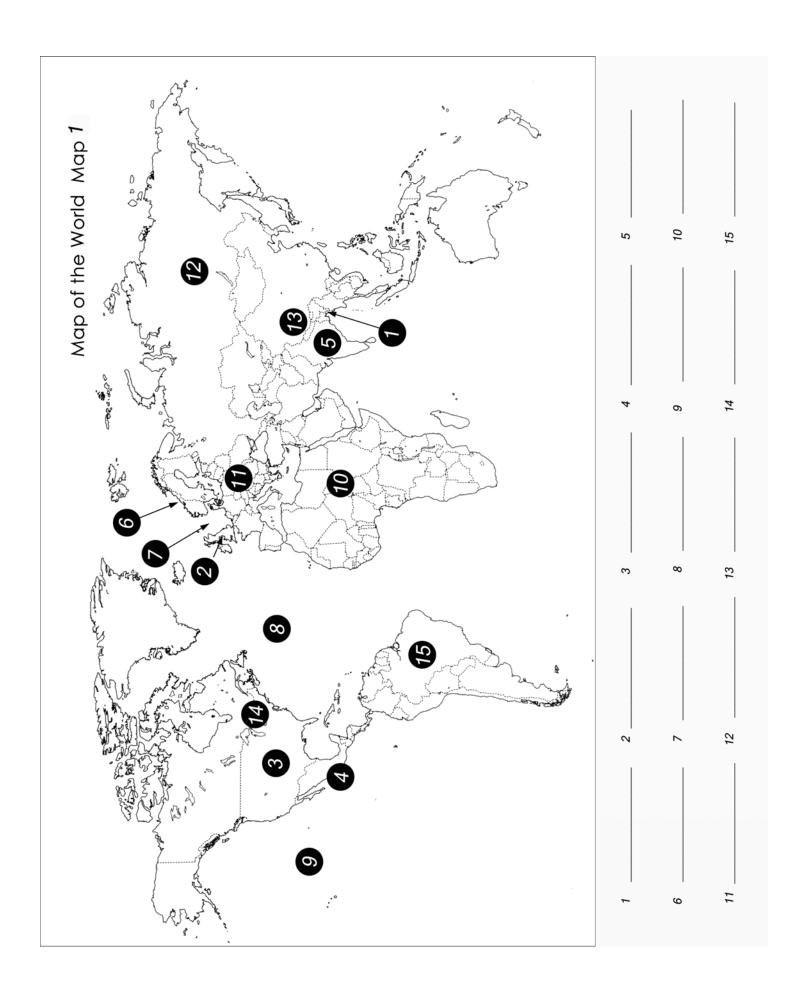
The rest of the syllabus then needs to be to be covered for SEC examination purposes.

Annexe 2 Sample Paper

SECONDARY SCHOOLS ANNUAL EXAMINATIONS DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION

Educational Assessment Unit

FORM 4	GEOGRAPHY (GENERAL)	TIME: 1h 30 min
Name:	Class	:
Answer all questio	ns.	
1. Study carefully t	he world map (Map 1). In the space provided on	the map itself:
a. Name the co	ountries numbered 1, 2, 3, 4, 5 and 6.	
Choose from	: USA, Canada, England, India, Netherland Bangladesh, Mexico	ds, Norway, India, Japan,
	5 ,	(6 marks)
b. Name the sea	a numbered 7.	
Choose from	Mediterranean Sea, North Sea, Caribbear	n Sea.
		(1 mark)
c. Name the oce	eans numbered 8 and 9.	
		(2 marks)
d. Name the con	ntinents numbered 10, 11 and 12.	(3 marks)
		(3 marks)
e. Name the mo	ountains numbered 13.	(2 marks)
C N	. (1)	
	terfall numbered 14.	•
Choose from	: Niagara Falls, Chadwick Falls, Victoria F	
g. Name the for	est numbered 15.	(1 mark)
-	n: Black Forest, Congo Forest, Amazon Fo	rest.
	, 5: 1:,	(1 mark)



2. The table below shows birth rates, death rates and natural increase of population in a number of selected countries.

Country	Birth Rate	Death Rate	Natural Increase
	(per 1000)	(per 1000)	(per 1000)
Bangladesh	29	8	21
USA	14	8	6
Mexico	20	5	15
India	23	7	16
France	13	9	4
UK	11	10	1

a.	Briefly explain wha	at each of these terms means.	
	Birth-rate:		
			(4 marks)
b.	. How is the natural i	ncrease of population calculated?	
			(2 marks)
c.	Work out the natura thousand.	al increase for Malta if the birth-rate is	10 and the death rate is 8 per
			(2 marks)
d.	. Underline the corre	ect answer.	
	i. The UK has the	e (highest/lowest) death rate.	
	ii. (Bangladesh/U	SA/UK) has the highest birth rate.	
	iii. The USA has a	natural increase of (16, 6, 11).	

iv. The USA and (India, Mexico, Bangladesh) have the same death rate.

(4 marks)

3. Look at the photo taken in Malta.



- a. Tick (\checkmark) the correct answer.
 - i. The rocks shown in the picture are being broken down as a result of

freeze-thaw weathering	
onion-skin weathering	
biological weathering	

ii. Freeze-thaw weathering is also known as

frost shattering	
chemical weathering	
erosion	

iii. Freeze-thaw weathering is common in

Hot desert areas	
Mountainous areas	
The Maltese Islands	

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137	(nemical	weathering	is main	iv cansed	nv the	action	ΩT
1 V .	Chemical	Weathering	is mani	iy causcu	Uy tiic	action	O1

rain	
wind	
high temperatures	

(4 marks)

b.	Briefly explain how the rocks shown in the picture are being broken down.

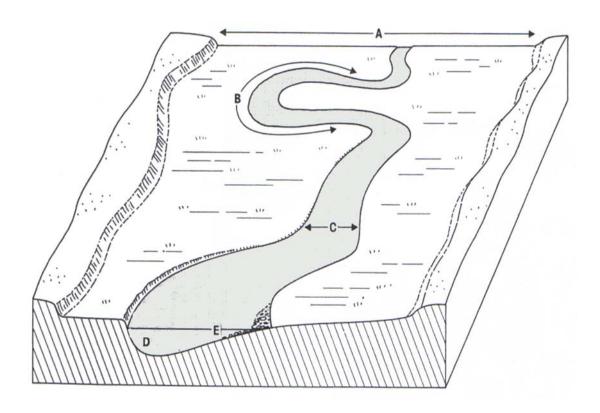
(6 marks)

4. Pair off the following by writing the correct letter.

A	Erosion	Wildlife in danger of becoming extinct.
В	Waterfall	A sudden fall of water over a steep drop.
С	Bay	Waste material from homes and industry.
D	Sewage	When farmers produce food for their own needs.
E	Wildlife habitats	The wearing away and removal of rock by rivers, ice, sea and wind.
F	Endangered species	Surplus supplies of farm products.
G	Arable farming	A wide curved inlet of sea.
Н	Natural resources	The homes of plants and animals.
1	Subsistence farming	Raw materials obtained from the environment such as coal.
J	Food mountain	The growing of crops.

(10 marks)

5. Study carefully the figure shown below.



a.	Do you think	that the river	shown in	the diagram	is in its	upper or	lower c	ourse?
							(2	marke)

b.	What do we call the flat land on either side	e of the river marked by the le	etter \mathbf{A} on the \mathbf{c}	diagram?
			(2 marks)	

- d. What can happen to area ${\bf A}$ after a very long period of heavy rain?

(2 marks)

e. Tick (\checkmark) the correct sentences.

i.	It is very safe to construct houses on area marked A.
ii.	Area A is made up of silt also known as alluvium.
iii.	Area A has rich fertile soils.
iv.	The valley shown has a shape of letter V and is known as a V-shaped valley.
v.	Letter C on the diagram shows a very steep sided valley known as a gorge.
vi.	Farmers make good use of area A since soils are fertile.

(3 marks)

f. Write either **D** or **E** next to each question. (Refer to diagram on page 6)

i.	Where is the water shallower?	
ii.	Where is the river flowing slower?	
iii.	Where is the river cliff?	
iv.	Where is the river depositing material?	
v.	Where is the river eroding?	
vi.	Where is the channel deeper?	

(6 marks)

6. The table below lists ten different sources of energy.

	Α	В	С
Coal			
Water			
Nuclear			
Oil			
Wave			
Geothermal			
Tidal			
Solar			
Natural gas			
Wind			

ii. In column A, write N next to the non-renewable resources.

(5 marks)

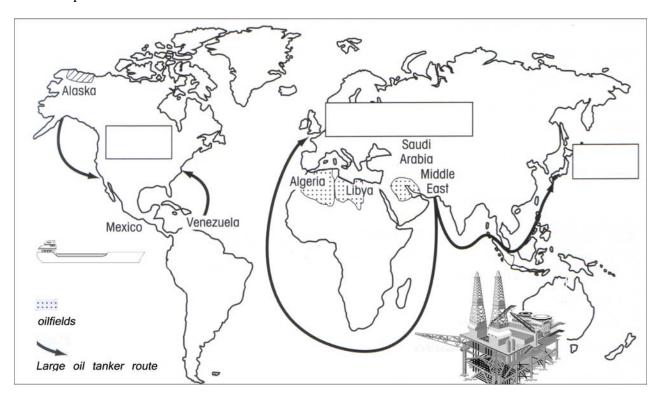
b. In column B, write F next to each of the fossil fuels.

(3 marks)

- c. In column C, write
 - H next to the resource which produces HEP.
 - V next to the resource which uses heat from inside the earth.
 - Y next to the resource produced from uranium.
 - **K** next to the resource which uses heat from the sun.

(4 marks)

7. The map shows where most of the world's oil is found.



a. Three places are marked with a box on the map. They all import a lot of oil. Write the names **Japan**, **Western Europe** and the **USA** in the correct boxes.

(3 marks)

b. Conti	nue the sei	itences by	referring	to the map	above.
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	i.	It is difficult to explore and drill for oil in Alaska because
	ii.	The USA imports oil from
	iii.	Saudi Arabia and other Middle East countries export oil to
	iv.	Oil can be moved from one place to another by
	v.	It is difficult to explore and drill for oil in Libya because
		(10 marks)
c.	Но	w can the exploration, drilling and transportation of oil harm the environment?