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# A METHODOLOGICAL GUIDE TO PLANNING THE IDEAL CITY

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BRĂILA  
2020

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**The Erasmus+ Project “iCity”  
2018-1-UK01-KA229-048124**

This product is part of the Erasmus+ project mentioned above.

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## FOREWARD

The current publication represents the result of implementing the Erasmus+ project “iCity” (reference number 2018-1-UK01-KA229-048124\_5, Key Action 2: Cooperation for innovation and the exchange of good practices – School Exchange Partnerships), carried out within the time framework September 1<sup>st</sup>, 2018 – August 31<sup>st</sup>, 2020. The content that follows presents materials that have been produced over the two-year period of implementing the project, which was designed to plan an **ideal city** (iCity). Within the project, the teachers applied innovative methods, procedures and techniques in their approach to teaching and evaluating the students involved in the implementation process. These innovative approaches to teaching have been promoted within the experience exchange meetings and in the activities carried out for the preparation of mobilities. The students were introduced to knowledge derived from multiple school subjects in multidisciplinary and transdisciplinary contexts, in which they also developed digital, linguistic and communicative skills. The materials produced and presented in this publication can be used for both lessons (be them compulsory subjects or optional classes) and extracurricular activities.

Here is a **brief presentation of the Erasmus+ project “iCity”**, as depicted in the application form:

### **The main three topics addressed:**

- ❖ ICT – new technologies – digital competences
- ❖ Environment and climate change
- ❖ Entrepreneurial learning – entrepreneurship education

### **The schools involved in the project:**

Stroud High School Academy Ltd, Stroud, the UK (coordinating school)  
Liceo Scientifico Statale Democrito, Rome, Italy  
Colegio Santo Angel de la Guarda, Badajoz, Spain  
Izmir Anadolu Lisesi, Izmir, Turkey  
“Ion Băncilă” Secondary School, Brăila, Romania  
Agrupamento de Escolas de Gondifelos, Vila Nova de Famalicao, Portugal

### **The rationale behind implementing the project:**

Cities have been growing in a very traditional, organic way, responding chaotically to fast-growing populations, exponential urban migration and catastrophic industrialisation without

taking into account our changing needs and without considering the advantages of using ICT not only for forecasting and planning, but also as an integral part of the functioning urban environment. On the one hand, vulnerable people suffer from old facilities no longer useful for them; on the other hand, resources have not been used efficiently so far. The waste of precious resources and the dissipation of energy day after day lead to more pollution, more money spent to rectify deteriorating environmental contexts and emergency plans to redirect and adapt malfunctioning obsolete designs. We need a new city design which takes new targets into consideration: a cooperative economy, new construction materials, ICT as a tool to boost efficiency both in design stages and in the infrastructure, the use of renewable energies, the decentralisation of the production and use of energy, stimulate the local production and distribution of food and protect the wider natural habitat. Our project proposes a radically different way of designing cities: students studied the negative impacts of the linear, consumer society and, instead, developed a city planning system that considers the appropriate size in a city, the services needed and how they can best be provided, as well as the resources required for that target, and the reduction to a minimum of the waste of resources and energy. Students were also encouraged to consider housing design, energy, transport, communication systems and facilities that meet the changing population profile needs, such as health, education, jobs, culture, leisure and economic activities.

**As a result of this project, the students are able to:**

- ✓ identify the elements that make up a functioning modern city;
- ✓ take an innovative approach to layout and service provision;
- ✓ plan the sustainable consumption of finite resources;
- ✓ use state of the art technologies to aid design;
- ✓ communicate clearly in formal/informal settings and use other languages;
- ✓ work in a collaborative and entrepreneurial spirit;
- ✓ employ an acute awareness of changing physical, social and moral contexts;
- ✓ apply their new knowledge and engage in decision-making in order to suggest improvements to their own real-life town/city;
- ✓ cascade their learning and develop similar skills in younger students by running workshops in feeder primary classes;
- ✓ design and produce promotional material for distribution and sale;
- ✓ formally present to the wider community on the recommendations for local environment improvement.

The project allowed the students to develop as model local and European citizens with the capacity to cope with new experiences and cultures as they travelled to partner schools, stayed with their peers and worked in cross-cultural teams. Through participation in these enriching activities, the students have gained life skills that will be relevant throughout their adult lives, and have made lasting connections with foreign communities. The development of team-working skills, the confidence to contribute



ideas and to critically assess proposals adds to the academic qualifications they take into the work place on leaving school.

We would like to introduce our readers to the topics that the students and the teachers involved in the Erasmus+ project “iCity” have tackled with over a period of two years.

## Chapter 1 - SUGGESTIONS OF TOPICS AND CONTENT

### OUR IDEAL CITY

#### Water supply

Each citizen consumes 127L per day. In one day, I-City consumes 52.298.600L. We need **40 water purification plants and 163 little water purification installations.**

#### Orchards

Each house and community has orchards. In both, they have 0.5m<sup>2</sup> of orchards per habitant. They shall plant seeds of mediterranean vegetables to keep the mediterranean diet.

- ✓ Little plants: radishes, carrots, onions, spinach, beetroot and lettuce .
- ✓ Big plants: cabbage, broccoli, cauliflower, aubergine and pepper.
- ✓ Vertical plants: tomatoes, cucumbers, beans, green beans and peas.

Also, the orchard includes some oregan plants to head off insect pests.

#### Mediterranean diet

The Mediterranean diet, centered around fruits, vegetables, olive oil, cereals, fresh meat, eggs, fishes, legumes, nuts and water. It's good for everything from your brain to your bones:

- ✓ preserve memory and prevent cognitive decline
- ✓ reduce your risk for heart disease
- ✓ strengthen bones
- ✓ manage diabetes and control blood sugar
- ✓ fight depression
- ✓ protect against cancer

#### Tropical and exotic food

Our food is imported from exotic places of the world, for example Tropical America. American papaya is chosen since it is originally from there.

#### A city that take cares of allergy sufferers

Allergies to cereals (like celiac disease), milk proteins, lactose intolerance, eggs, peanuts, soya, nuts, legumes, vegetables, fruits and seafood have importance in our city. Our city considers this allergies in the development, the production and the distribution of the food. All the allergies have special food to consume at supermarkets.

#### Fishes



This city is located in the shoreline so the ships provides it with fresh fishes every day. There, they eat around 4 and 5 pieces of fish every week.

### Fruits

All the fruit sold in this city is produced by ecology agriculture. People eat around 3 pieces every day. Figs, grapes and orange is part of the fruit that we eat.

### Restaurants

There are 150 restaurants. The mosts popular are the “Guriguri” who have five plants and is the biggest in the world. The second is the “Grandma mediterraneum” who have a wide range of different types of food.

### Organic residues

The recycling of organic waste is important in order to reduce the environmental impact they have.

#### Reasons why we recycle in our city:

- The saving of resources when transforming organic matter into compost
- The reduction of the emission of gases involved in the greenhouse effect.

#### Organic waste management:

- ❖ **Domestic composting:** under controlled ventilation, humidity and temperature conditions, it transforms organic waste. **It can be used as organic fertilizer.**
- ❖ **Anaerobic digestion:** organic matter is broken down into simpler compounds. The biogas generated can be used as fuel.

### Obesity

Our diet will be controlled by a dietician:

- we cancel all types of greases;
- we introduce vegetables and legumes;
- we increase exercises.

### Hydroponic orchards

Advantages of the hydroponic orchards:

- ✓ Reduce soil contamination with chemicals and, therefore, the implication that this has on.
- ✓ Increase the yield and quality of production.
- ✓ It considerably reduces the use of water for irrigation.
- ✓ Makes crops less likely to suffer from inclement weather such as drought, floods.

## GROWING / SHRINKING POPULATION PROFILES AND NEEDS

### Causes of growing population:

- decline in the death rate
- better medical facilities
- more hands to overcome poverty
- technological advancement in fertility treatment
- immigration
- lack of family planning
- better nutrition

### Effects of growing population:

- depletion of natural resources
- degradation of environment
- conflicts and wars
- rise in unemployment
- high cost of living
- unplanned urbanization
- decline in health care quality
- traffic

### Needs for a growing population:

- better education
- health care
- new jobs
- housing need
- making people aware of family planning
- social facilities (art galleries / sport centers)

### Causes of shrinking population - The size and demographics of the population change when

- fewer children are born
- families with children move to larger towns and cities
- young and better-educated people move to larger towns and cities.
- lack of jobs

### Effects of population decline include:

- fewer schools, due to there being fewer children;
- a drop in house prices because more homes are unoccupied;
- fewer new homes being built less demand for rented accommodation;
- fewer care facilities;
- less turnover for shopkeepers and businesses;
- fewer sports facilities;
- fewer people going to the theatre, cinema or concerts, so these facilities are eventually cut back;
- fewer people travelling by public transport, which thus costlier to run;
- local residents have to travel further to reach the facilities they want.

**In conclusion:**

Both shrinking and growing populations have different needs.  
Local authorities should work with national governments to solve the problems.  
Each member of the society should take part in this process.  
And the most important thing is “PLANNING”.

## HOUSES IN HAY

**Advantages:**

- ❖ Saving: It saves almost 75 percent of total costs.
- ❖ Environment: The construction of hay’s houses is sustainable for the environment because the hay is a natural material. The bales of hay are an excellent thermal insulation.
- ❖ Fire resistance: The House of hay protects from fire. The hay compressed in the bales contains a very low percentage of oxygen.

**Disadvantages:**

- ❖ Houses of hay are not comfortable in the city.
- ❖ We will never see hay’s skyscrapers.
- ❖ The houses in hay are not built as you think but with a strong wooden coating around the straw.
- ❖ It seems strange but the houses in hay are very resistant to fire and this video demonstrates this.

## NUTRITIONAL REQUIREMENTS OF MIXED PROFILE POPULATION

**Human settlements**

A human settlement - rural or urban - is a complex locality, with a continuously changing population, attracted to the mirage of a better life through the easy access to services, resources and personal security.

Did you know that... the number of inhabitants can reach such figures as up to 37 million in Tokyo – Japan, 25 million in Shanghai – China, 15 million in Istanbul – Turkey, 3,16 million in Madrid – Spain, 2,87 million in Rome – Italy?

Quite a demographic explosion!

## **The Numerical Evolution of the Population Within an Urban Settlement**

### **Causes of the demographic growth:**

1. A positive natural growth (the difference between natality and mortality)
2. Migration (from villages to cities or between cities), due to:
  - economic factors – economic inequalities related to the underground and agricultural resources, a better living standard;
  - social factors – the quality of the services, better medical care facilities and services, the variety of social and cultural activities;
  - natural factors – favourable climate, accessible relief, the presence of water resources;
  - political factors – e.g. political refugees;
  - psychological factors – the attraction towards the beauty of a scenery;
  - ecological factors – moving from areas affected by changes of the environment.

### **The consequences of migrations:**

- at demographic level – changes within the structure on groups of ages and genders, within the ethnic, racial and religious structures, which leads to social tensions through discrimination and aversion towards migrants;
- at economic level – the deficit/excess of workforce, the increase of economical pressure on the active population, the increase of unemployment rate, the overcrowding of communication ways and means of transport;
- at social level – the lack of specialised personnel, a deficit of qualified workforce;
- at psychological level – disturbances in children's education, reactions of rejection and conflicts due to differences in mentality, behaviour and living standards;
- at ecological level – pollution.

Some human settlements offer access to:

- ✓ dwelling areas
- ✓ education
- ✓ leisure areas
- ✓ hypermarkets
- ✓ access routes
- ✓ malls
- ✓ restaurants
- ✓ medical facilities

### **The provision of food to the city inhabitants – a current issue**

The task to feed appropriately the world's city inhabitants represents a growing issue which requires....

1. food procurement and processing
2. fast and safe transport

3. hygienic trading
4. a variety of foods

### 1. Food procurement

It is based on making use of agricultural products, vegetal or animal, but also on the food resources offered by the planetary ocean.

#### A. The production of raw material for the food industry outside the city or in remote areas (imports):

- cereal cultures
- orchards
- bodies of water
- green houses
- animal farms

#### Types of agricultural cultures:

- WHEAT – used in mill and breeding industry, and also for feeding animals. It is cultivated in prairies, with main producers in Russia, Ukraine, Romania, Canada, Latin America;
- BARLEY – used for bread, beer, starch, glucose, alcohol and feeding animals. It is largely cultivated in Sweden, Russia and Canada;
- CORN – used to produce oil, flakes, alcohol, to feed animals. It is largely cultivated in the USA, China, Brasil, France, Romania;
- SUNFLOWER – for oil. It is cultivated in Europe, Russia, Argentina.

#### Did you know that ...

... cereal and technical plants are especially grown in the temperate and subtropical (Mediterranean) areas;

... rice (also called “the bread of Asia”) is suitable to the tropical monsoonic areas and is largely cultivated in China, India, Japan, the USA;

... citrus trees, vine and olive trees are cultivated in subtropical or Mediterranean areas.

#### B. Processing raw materials in the food industry:

- semi-processed
- dairy
- preserves

### 2. Transport and trading

The TRANSPORT towards the trading place can be done internally or internationally through:

- Road transport
- Railway transport
- Water transport

The trading is done through hypermarket chains or proximity stores.

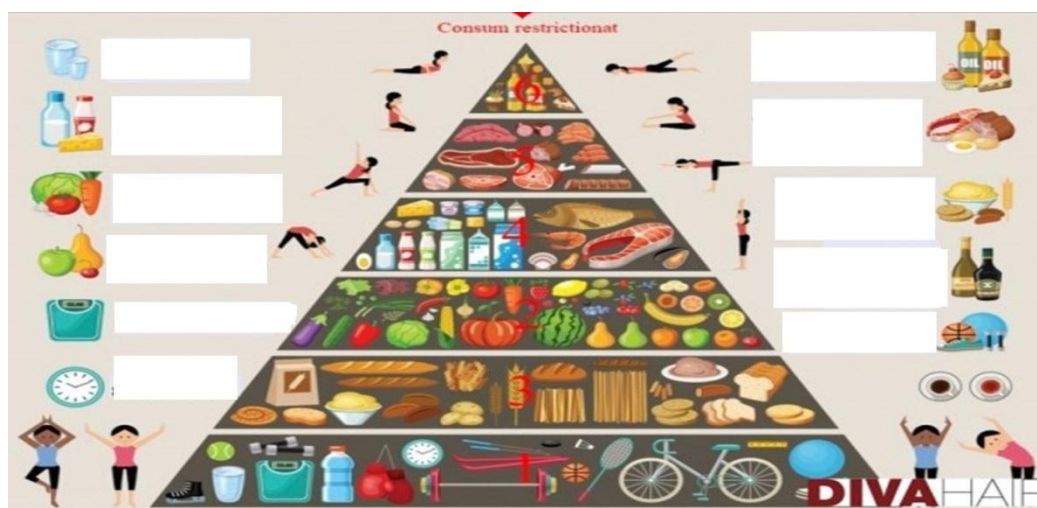
A handy means of procurement is also the virtual one, through online orders.

### 3. The food consumption

Specialists advise us to take into account the food pyramid. It comprises types of foods that must be eaten daily in order to provide nourishing substances (nutrients) and the energy that is necessary for current activities. These are:

- cereal: 6-11 servings/day
- vegetables: 3-5 servings/day
- fruit: 2- 4 servings/day
- dairy: 2-3 servings/day
- meat: 2-3 servings/day
- 

#### NUTRITIONAL REQUIREMENTS... FOOD PYRAMIDS



(according to the Spanish Society of Nutrition)

#### Bread, cereal, rice and fish

Bread, cereal, pasta, rice and other flour products contain complex carbohydrates, vitamins B, minerals and fibers. Complex carbohydrates and fibers are necessary for ensuring a good digestion and for reducing the risk of heart diseases, diabetes and some types of cancer.

Did you know that... as a child is growing, the fiber requirement is also growing, which can be calculated as it follows:  $\text{age} + 5 = \text{the quantity in grams necessary for one day?}$

### **Fruit and vegetables**

They provide significant sources of beta-carotene, vitamin C, vitamins B, potassium, calcium and other minerals which maintain the skin, the eyes and the gums healthy.

### **Milk and dairy**

Milk, yogurt and cheese bring calcium, vitamin D and proteins which are necessary for the growth and development of the muscular and bone systems and of the teeth.

### **Meat, fish, eggs**

Red and white meat, fish, eggs/beans, nuts and seeds are an important source of proteins, iron, vitamins B and other minerals that support the growth and development of the body, especially for children. Also, iron and vitamins B (B9 and B12) are necessary for the good development of the nervous system, for increased attention and concentration at school.

### **Sweets**

Fresh fruit should be offered as a snack, instead of ice cream or cakes. The amount of sweet juice should be cut down or even cut off!

### **Sometimes we eat...**

Nowadays we look for nutrients in the food provided fast by the chains of hypermarkets, fast food, proximity stores, restaurants, and very rarely in our kitchens.

The food often has calories in excess and lacks essential nutrients. The price represents another advantage of fast food. A menu bought from such a restaurant is sometimes half the price of a regular meal. Another reason for this choice lies in its presentation through appearance, taste, smell (all of these obtained through chemical substances).

This type of food attracts all age groups, but children in particular. Through its high content of saturated fats, carbohydrates and salt, this type of food can cause diabetes, obesity, heart and circulatory diseases, and even the decrease in life expectancy!

pizza-1200 calories...

juice -170 calories...

a serving of chips - 400 calories

shaorma- 1100 calories

People usually need about ...1000-2000 calories a day!

**Did you know that** ...as people grow older, their nutritional requirements change?

The food ratio for elderly people (60-74 years old) must contain:

proteins 68 g (men), 61 g (women),

fats 77 g (men), 66 g (women),

carbohydrates 335 g (men), 284 g (women),  
energetic value: 2300 kcal (men), 1975 kcal (women)!

Recommended products for 24 hours, in grams:

rye bread 150/ Wheat bread 75 / Pasta 10;

natural honey 15;

potatoes 320,

vegetables: beet 120, carrots 90, cabbage (fresh, pickled) 240,

other vegetables (pepper, cucumbers, tomatoes) 160

fruit, cantaloupe, watermelon, pumpkin 390!

### **Alternatives...truth or fiction?!**

**Did you know that** ... people assume that, in the future, food will come from tubes and eco cultures?

**Causes:** time passes very quickly and people find it more and more difficult to reach their daily goals – they need time for families, friends, leisure activities; is there any time left for regular complete meals?

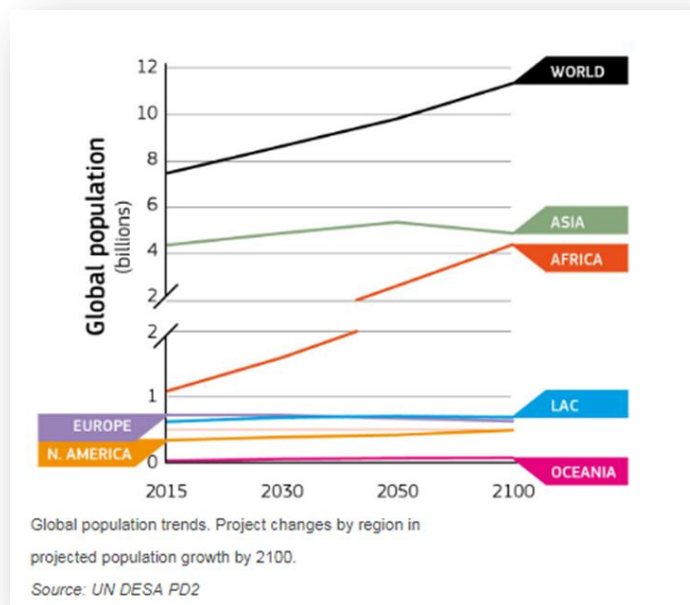
**Effects:** future means changes on all plans, and the food field is no exception. Despite the common people's scepticism, are our grandchildren and great-grandchildren unlikely to eat solid food?

**Truth or fiction:** according to the specialists, in ten years' time, the daily food will consist of 3D printed foods and oils. There are also voices that say that feeding will be done through plasters attached to the skin. They would work on the same system as those used for administering drugs, but will they contain the nutrients that will reach directly to the organism?!



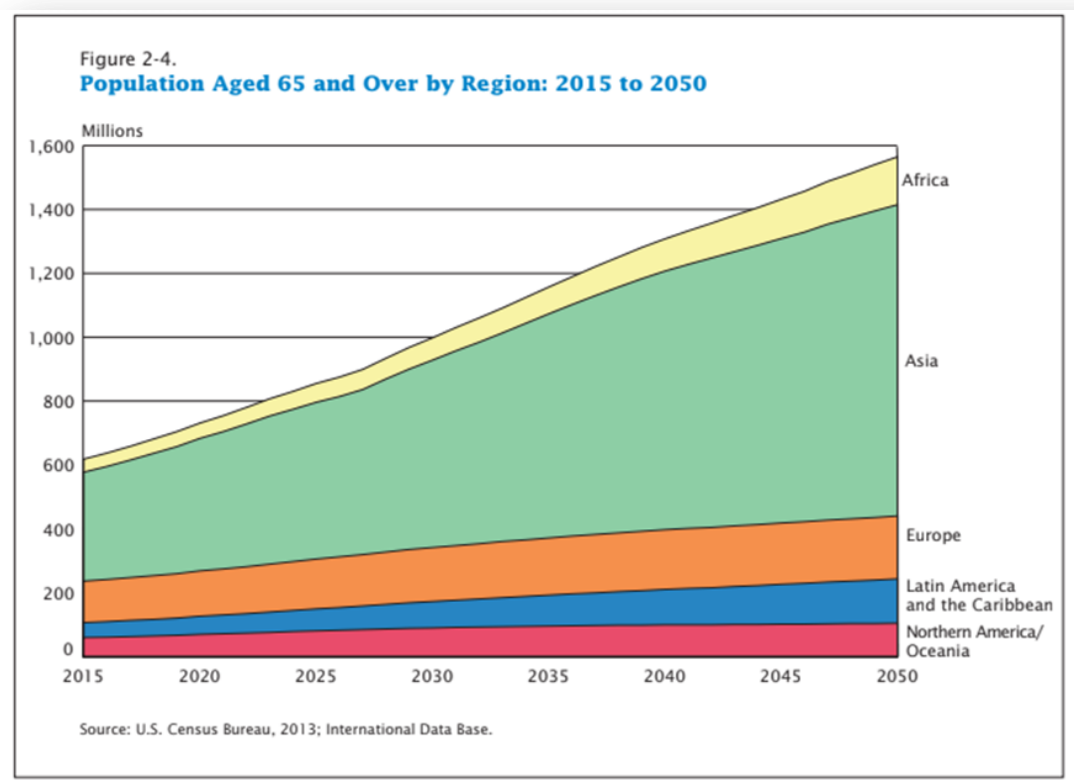
## HOUSING: AGE-RELATED POPULATION PROFILES AND NEEDS

Projecting ourselves into the future, surely makes us imagine how it will be. According to UN estimates, the human population on Earth is projected to increase by 50 % by 2100,



establishing at about 11.2 billion<sup>2</sup>. Recent analysis of these data, however, suggest that a stabilization of the world population this century is highly unlikely. It is estimated that there is an 80 % probability that the range of increase will in fact be between 9.6 billion and 12.3 billion by 2100. Regardless of the actual figure, it is clear that Earth's population is growing to unprecedented levels.

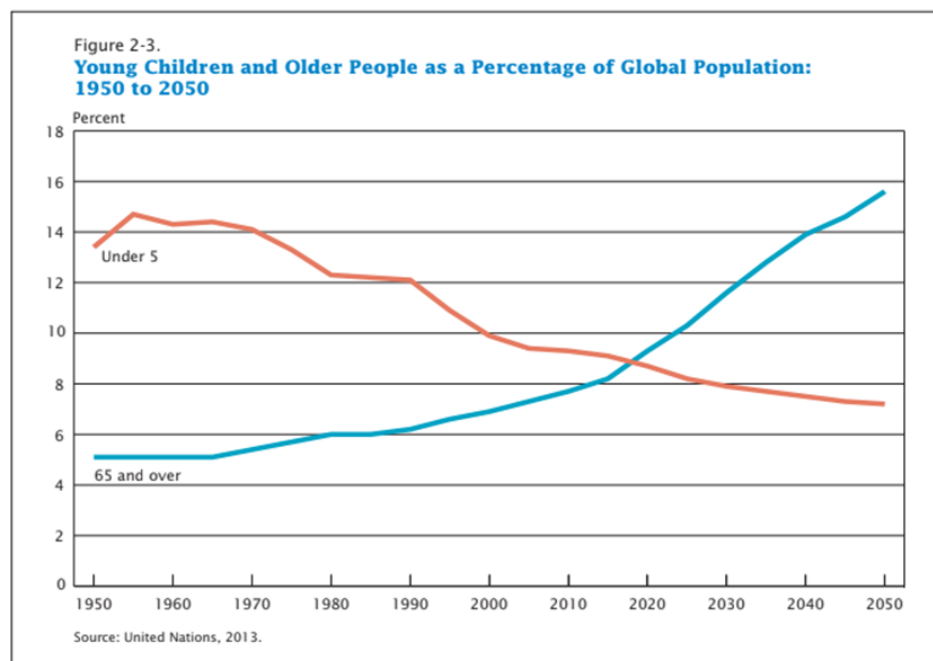
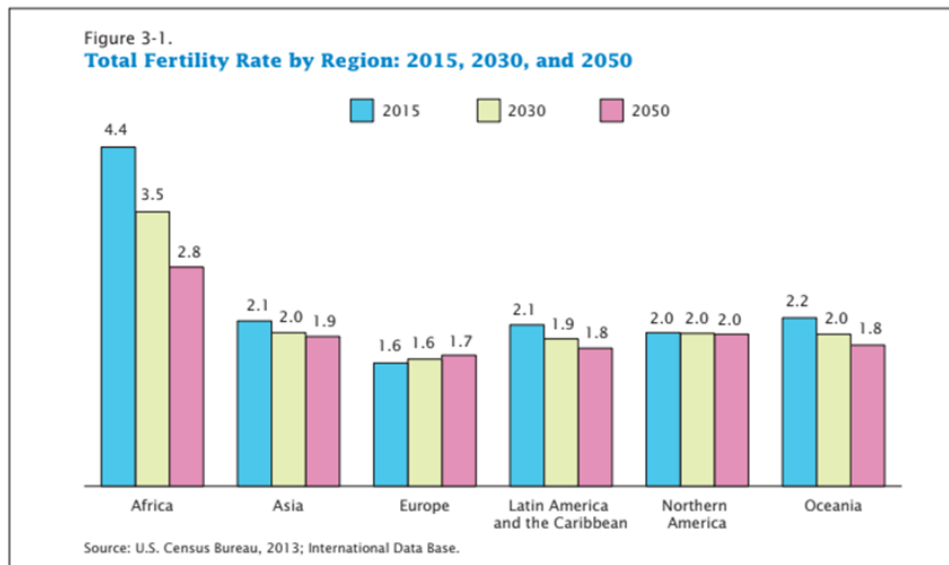
From 2017 to 2050, it is expected that half of the world's population growth will be concentrated in just nine countries: India, Nigeria, the Democratic Republic of the Congo, Pakistan, Ethiopia, the United Republic of Tanzania, the United States of America, Uganda and Indonesia. Most world population aged over 65 will be living in Asia. Europe comes second.



On the one hand, higher life expectancy rates worldwide naturally contribute to an ever-growing ageing population. Substantial improvements in life expectancy have occurred in recent years. Globally, life expectancy at birth has risen from 65 years for men and 69 years for women in 2000-2005 to 69 years for men and 73 years for women in 2010-2015. Nevertheless, large disparities across countries remain. We are led to believe that this tendency will continue into the future.

On the other hand, future lower fertility rates will be greatly, but not solely, due to an ageing population, which adds to the problem. Compared to 2017, the number of persons aged 60 or above is expected to more than double by 2050 and to more than triple by 2100, rising from 962 million globally in 2017 to 2.1 billion in 2050 and 3.1 billion in 2100. Population ageing is projected to have a profound effect on societies, underscoring the fiscal and political pressures that the health care, old-age pension and social protection systems of many countries are likely to face in the coming decades.

## Lower fertility rates versus high life expectancy



According to some reports, growth has returned to the European continent, but we should not forget this growth is leaving many behind and our societies are increasingly unequal. Housing inequalities and income inequalities do reinforce each other. This is reflected in increasing levels of homelessness. We face a structural housing shortage reinforced by recent waves of migration. We are relying on measures to increase the supply in the private sector.

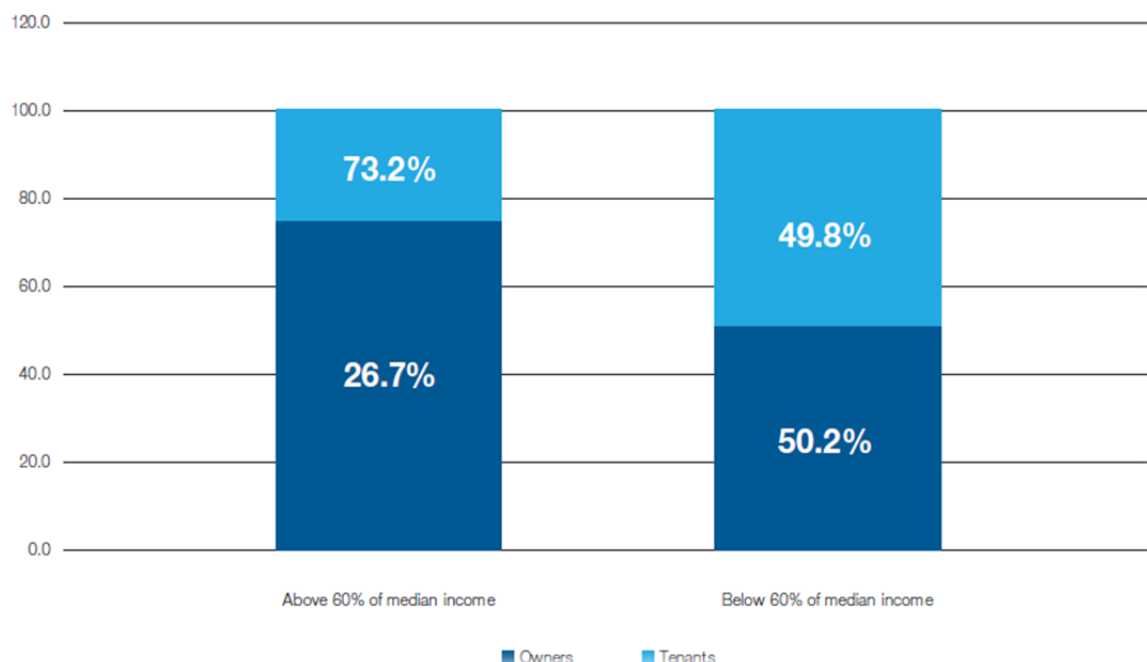
Interestingly, if we take the example of our country, Portugal, about 74 percent of the houses are occupied by owners, 17 percent is private rent, and 2 percent is social rent. This is true, but it does not mean that about 3 quarters of the population is rich. However, statistics in Europe show a different situation. The lower the median income the higher the probability of one being a tenant and not the owner of the house or property.

The proportion of the working age population aged between 50 (fifty) and the state pension age will increase from 26% (twenty-six percent) in 2012 (twenty twelve) to 35% (thirty-five percent) in 2050 (twenty fifty).

The employment rate currently declines from 86% (eighty-six percent) for 50 (fifty) year olds, to 65% (sixty-five percent) for 60 (sixty) year olds and 31% (thirty-one percent) for 65 (sixty-five) year olds. For example, in the UK, by 2037 (twenty thirty-seven) there are projected to be 1.42 (one point forty-two) million more households headed by someone aged 85 (eighty-five) or over – an increase of 161% (one hundred and sixty-one percent) over 25 (twenty-five) years. Therefore, supporting an ageing population will be a major concern in the future.

### ***DISTRIBUTION OF THE POPULATION BY TENURE STATUS AND INCOME GROUP***

**DISTRIBUTION OF THE POPULATION BY TENURE STATUS AND INCOME GROUP**  
EU 28 average  
Source: Eurostat SILC



Some of us have visited a day care centre for the elderly in Viatodos. Being aware of an ageing population, a group with such an age profile becomes one of great interest when we think about the future and wish to build a city that anticipates and answers the needs of

all its inhabitants. The purpose of the visit was to interview seniors about their housing needs, if they would change their houses in any way and, if they had the chance, what they would ask or suggest to local authorities, namely the municipal council. The people who were interviewed were aged 65-85. Most had worked as seamstresses, farmers, factory workers, waiters or cooks, masons and housewives. When asked if they would change their homes, 25 out of 28 said they would not change a thing.

When we finished interviewing them, we realised that most seniors are satisfied with what they have. What they want most is to be healthy and to have their relatives and friends' caring support and company. Nonetheless, a decent home is fundamental to people's well-being. As people grow older their housing needs can change. Older people spend between 70 and 90 percent of their time in their home, thus a warm, secure environment that meets individual requirements is crucial.

There is a central role for families in the life of a city. Family decisions regulate the number of children born, and families are responsible for transferring money and support between the generations. Families also play a major role in providing care – 73% of disabled people over 65 receive some care from a spouse or other family members. The ageing population, alongside a major increase in the diversity of family types, is likely to change the role of families, and challenge policies that rely on them. In a large-scale study of people living in private households, participants described how their neighbourhoods contribute to a good quality of life.

When looking for solutions for age-related population needs, it is important to have in mind that our city should have:

- Good access
- Many public and collective transports
- Green spaces
- More parks for outdoor activities
- Housing areas for different age groups
- Single-family houses
- Comfortable and heated houses
- Suitable/adapted furniture and house equipment (for example, in the bathroom)
- No obstacles inside and outside houses (for example, low steps)
- Easy access to health and support centres, leisure and recreation centres, forums, cultural facilities, libraries and mobile libraries
- In the end, it is crucial to create an urban fabric that keeps people close to each other and that provides good quality of life

**To sum up...**

Demand for housing that meets the needs of older people will increase as the population ages.

Thinking 'beyond the building' to include the neighbourhood and the community will be key. Therefore, as cities are at the forefront of the housing crisis, they are and will be showing a more prominent role in finding solutions.

**RENEWABLE ENERGY: SOLAR POWER**

Solar energy is the energy associated with solar radiation and is the primary source of energy on Earth. About all the other energy sources available to man descend from solar energy.

<https://www.youtube.com/watch?v=inPtRWtvDaM>

Solar Energy is produced in the sun's core and arrives on Earth in the form of electromagnetic radiation from Space. Most of the energy sources that humans use, comes from solar energy except nuclear, geothermal and tidal energy.

**Renewable energy - pros:**

- ✓ clean
- ✓ exploited through different technologies

**Renewable energy - cons:**

- ✓ does not work if the sky is cloudy
- ✓ suffers the day-night change

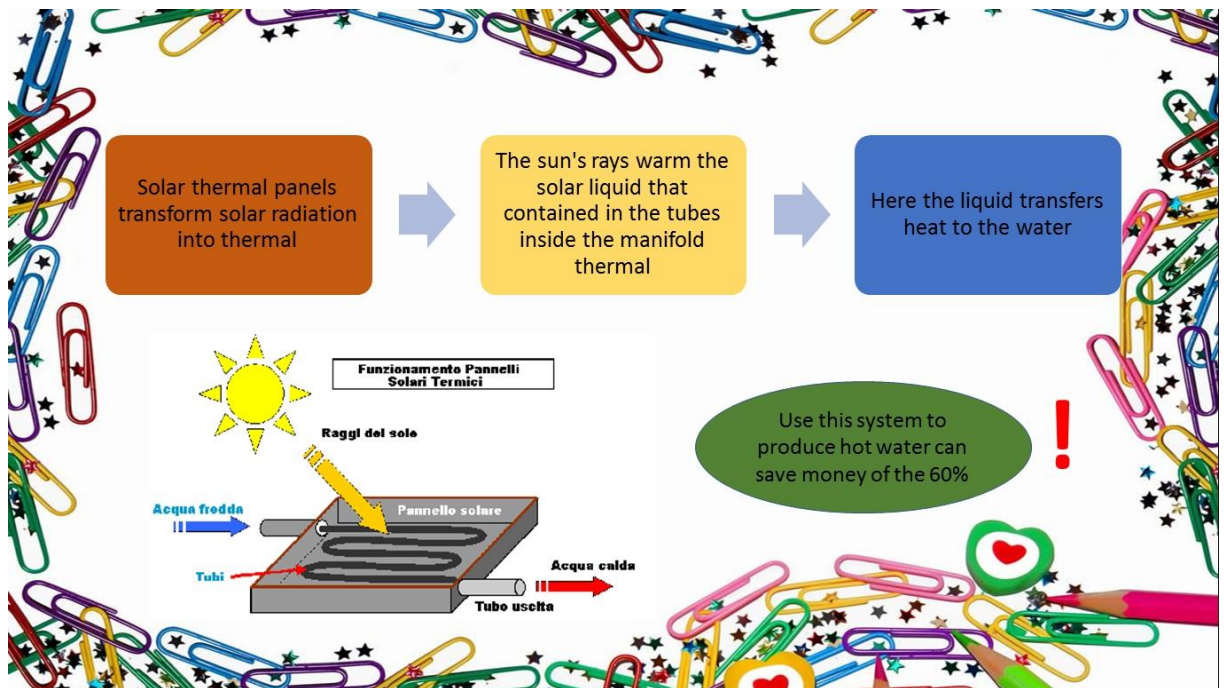
<https://www.youtube.com/watch?v=KEeH4EniM3E>

**How to use solar energy**

Solar energy can be used to generate electricity or heat. There are two technologies to transform the energy:

1. Thermal solar panel uses the sun's rays to heat a liquid which transfers heat to the water contained in a storage tank.
2. Photovoltaic panel exploits the properties of particular semiconductor elements to produce electrical energy when stressed by light.

The concentrating solar panel uses a series of parabolic mirrors to convey sun's rays into a receiver tube.



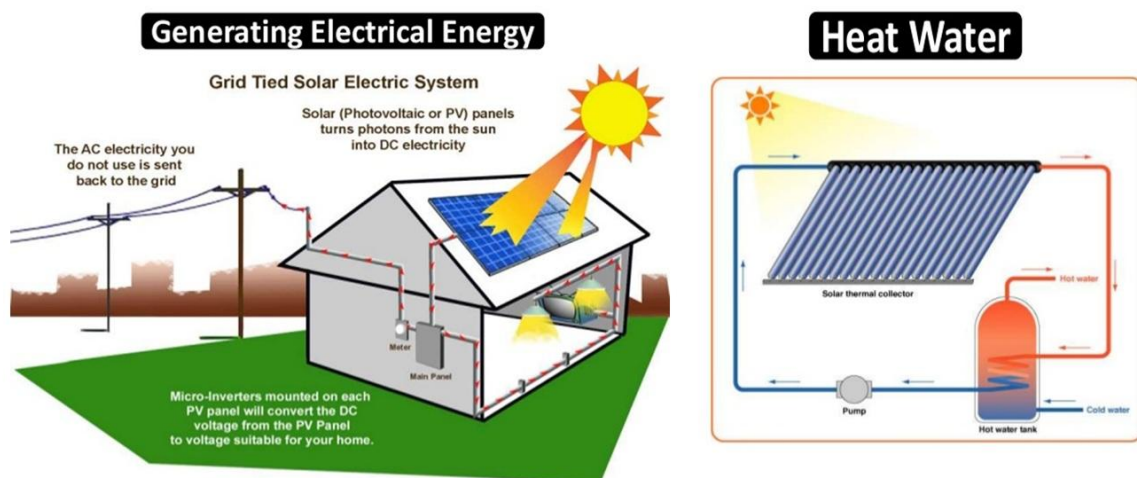
**Photovoltaic systems** are used to transform solar energy into electricity.

They are composed of the following tools:

- panels, where they can collect as much light as possible
- inverters, which transform the direct current

Photovoltaic systems can be:

- grid connected, connected to the electricity supply network.
- stand alone, in cases of isolated utilities.





**Benefits:**

- ✓ They have no moving parts.
- ✓ They only need to be cleaned periodical.
- ✓ The estimated operational life of the photovoltaic modules is 30 years.
- ✓ The cost of the panels has decreased very much.

**Problems**

- ✓ Energy is produced only during daylight hours, in hot seasons and not continuously.
- ✓ It's difficult to convert into easily energy with acceptable efficiencies.
- ✓ They have not yet had revolutionary results.

**Utilization**

- ✓ They supply hot water and heating to homes.
- ✓ Plants have been built to convert the heat stored into electricity.
- ✓ Photovoltaic panels are used in isolated systems to power devices.
- ✓ Solar tech
- ✓ Solar dryer
- ✓ They generate electrical energy.
- ✓ Satellites

**Future**

More ambitious studies point to the creation of orbiting solar power plants.

Prototypes of photovoltaic cogeneration systems in which the simultaneous production of electric and thermal energy is being tested.

**The Solar Panel**

There are 4 types of solar panels:

- 1. solar thermal panel:** heats a fluid
- 2. concentrated solar panel:** heats a fluid to generate electricity
- 3. photovoltaic solar panel:** it uses photovoltaic cells and converts them directly into electricity
- 4. hybrid solar panel:** it is a coupling between a solar thermal panel and a photovoltaic solar panel.

**The solar thermal panel** is a device for converting solar radiation into thermal energy, thus managing to heat the water and then use it in homes.

**The concentrated solar panel** is a type of power plant that uses solar radiation as its primary energy source, accumulating it in the form of heat by means of solar concentration techniques, to convert it, through a steam turbine, obtaining a production of electricity.



**The photovoltaic solar panel** is able to convert the incident solar energy into electrical energy through the photovoltaic effect, typically used as a current generator in a photovoltaic system.

**The hybrid solar panel** is a device that allows the conversion of energy radiated by the sun partly into electricity and partly into thermal energy by combining the effect of a photovoltaic module and a solar thermal panel.

### **The solar tower**

The Solar Tower uses solar energy in a very particular way, not with photovoltaic panels like we are used to. It is like a giant greenhouse that heats the air contained in the chamber below. The superheated air will tend to channel above and the only way out will be the central tower. At the base of the tower there is a group of turbines which produced clean electricity. Australia is now the principal country that uses the energy from Solar Tower.

## **WIND ENERGY**

Wind energy is renewable, generated through the wind kinetic energy transfer to a wind turbine.

Wind is formed due to the uneven heating of the surface of the Earth by the energy radiated by the Sun.

The variable heating of the air layers leads to areas of air of various densities, a fact which, in turn, causes movements of the air.

The humankind has been using the wind energy since ancient times...

- Sailing ships ... transport
- Wind mills ...grinding, wood chopping, water pumping
- Wind turbines ...electricity

### **Wind turbines**

Wind turbines are made up of 3 main components:

1. Rotor with turbine blades
2. Rotor spindle (either vertical or horizontal)
3. Electric generator

Their functioning is sensor-controlled! The blades take over the wind energy and turn it into mechanical energy, which is, in turn, transformed into electric power.



### Wind parks

The wind turbines are placed within wind parks. In order to open such a park, the following are necessary:

1. Research on the impact on the environment, on the wildlife and on the human settlements;
2. The choice of the turbine depending on the geographical and climate area. The ones of medium capacity, producing up to 1500 kW, are to be preferred.

### The ADVANTAGES of producing electric power through wind turbines:

- ✓ Wind represents an *inexhaustible* and *cheap* source of energy – as long as the Sun and the Earth exist, there will also be wind.
- ✓ Emissions are considered to be zero because they don't use any fuel. A wind turbine is only operated through wind, which makes its mechanism move.
- ✓ They generate only little waste. The only time they generate waste is during their maintenance, which is only done once a year, to replace oil and some components. This waste is discarded in an organised manner – the supplier comes and collects the waste and discards it as environmentally friendly as possible.
- ✓ They function for a long period of time. They start functioning when the wind velocity reaches 3 metres per second and only stop when the sensors indicate dangerous wind velocity which may damage the turbine.
- ✓ The costs of rendering them inoperative are low. In comparison, the costs for rendering a nuclear power plant inoperative are very high.
- ✓ The other resources are diminishing and about to be exhausted. Also, the nuclear energy supposes numerous risks. There is a tendency at global level to give up using nuclear power plants because of the radioactive waste.

**The DISADVANTAGES of producing electric power through wind turbines:**

- ✓ They can be destroyed by sudden, very powerful gust of winds if the turbine does not stop in time due to some equipment error.
- ✓ As far as noise pollution is concerned, the opinions vary. Nevertheless, the turbines are within the legal level of noise. The degree of noise pollution differs from one producer to another and from one type of turbine to another.
- ✓ The possibility to find an appropriate location for the wind park, able to comply with all the requirements – wind velocity in the area, distance from localities, environmental provisions (e.g. these parks must not interfere with the bird migration lanes or with the bat areas).

**Did you know that ...**

... the modern history of the wind energy industry started in 1979, with four companies in Denmark: Vestas, Kuriant, Nordtank and Bonus. The turbines produced at that time had a very small capacity, of only 20-30kW each?

... currently, wind energy represents the main source of alternative energy in the world, as compared to the energy obtained from conventional fuels?

... the wind turbines are SMART systems – they look for the wind themselves? There is a weather station built into the turbine which makes the turbine rotate in search for wind, which always needs to come from the front of the turbine. Also, in case the equipment detects icing on the blades, the turbine stops in order to limit its risks of self-destruction.

... the horizontal spindle wind turbines are more efficient than the vertical spindle ones, as they don't require a generator when they start operating and are activated by wind optimum intensity variations, due to the high position of the rotor?

## **GEO THERMAL ENERGY**

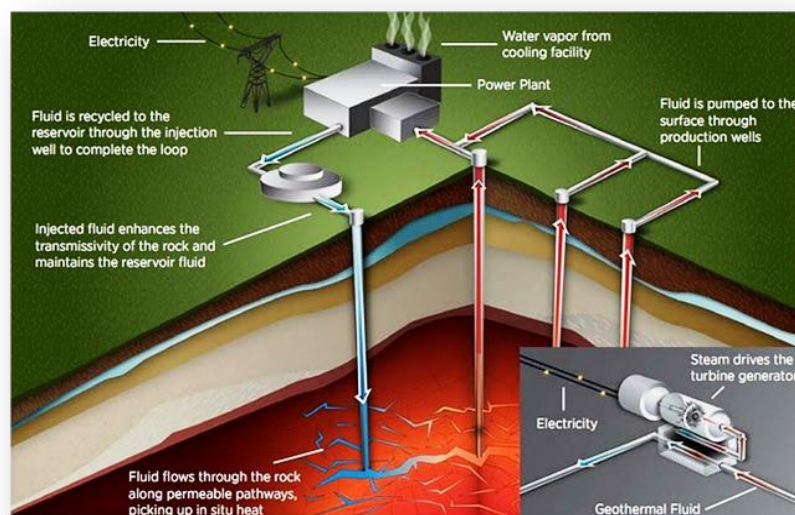
**What is geothermal energy?** As the name suggests, Geo means earth and thermal means heat. So geothermal energy is heat extracted from below the surface of the earth. It is clean and sustainable. These underground reservoirs of steam and hot water can be tapped to generate electricity or to heat and cool buildings directly or for growing plants in greenhouses.



**How is electricity produced?** To produce geothermal-generated electricity, wells, sometimes a mile (1.6 kilometers) deep or more, are drilled into underground reservoirs to tap steam and very hot water that drive turbines linked to electricity generators.

Resources of geothermal energy range from the shallow ground to hot water and hot rock found a few miles beneath the Earth's surface and down even deeper to the extremely high temperatures of molten rock called magma.

- ❖ Wells are drilled into underground reservoirs.
- ❖ Steam and hot water are tapped.
- ❖ Then turbines are driven by the steam.



- ❖ And these turbines are linked to electricity generators.

### The first example: California

Geothermal power was once king of California's renewable energy. But the industry's shortsightedness - and its slowness to innovate - left geothermal floundering for three decades in the shadows of the solar and wind energy juggernauts. While geothermal industry leaders take notes on the political front, researchers are investigating ways to overcome technological barriers.

The Energy Department is funding research into recycling unwanted hot water that is exhumed during drilling in the nation's expanding oil fields. Reclaimed superheated water - nine gallons of it for every gallon of oil - would be used to turn turbines that harness geothermal energy in small plants right in the oil and gas fields.

Researchers are also experimenting with an Enhanced Geothermal System, a technique that could unlock geothermal energy across the country.

Traditionally, geothermal prospecting takes place only where steam, made by hot rocks and water, naturally occurs. It's a phenomenon largely found in California, Nevada and Utah.



The EGS technique would enable companies to generate energy wherever molten rocks exist by injecting water into the ground to create steam that fuels turbines. These technological advances almost didn't get funded. The technology is already making a difference in California, where geothermal power plants generated more than 32% of California's total renewable energy last year, nearly three times more than solar.



### The second example: Iceland

The island of Iceland is one of the most geologically active places on earth. This can cause some problems of earthquakes and volcanic eruptions, but it also has its upsides. The nation has harnessed the power of geothermal energy to heat our homes. Iceland is an active tectonic area with about 200 volcanoes and 600 hot springs. There are temperature fields around tectonic plates that contain water at temperatures below 150 ° Celsius.

The first use of geothermal energy was recorded in 1907 and the first ducts in Reykjavík were built in 1930. We conclude that Iceland is trapped in a volcanic rock in the middle of the North Atlantic. We can also identify the origin of the name ' Reykjavík ' for geothermal activity because it literally means ' Smokey Bay '... Some of the floors in Reykjavík and Keflavík are heated with geothermal water to ensure that citizens do not slip in the winter used also for swimming pools.



With geothermal energy and hydroelectric power plants, Iceland has a renewable energy supply of 99.96%. About 73% of the energy supply is derived from hydroelectric power and 27% of the sources of geothermal energy. What's to stop us from going 100%? There are still 57 diesel-powered power stations in the country, but they only account for 0.4% of the country's total energy production.

Reykjavík has the largest district heating system in the world and 90% of the island's households have a permanent connection with the geothermal district heating system. The heating and the electricity are of the few things that are cheap in Iceland

### The third example: The Azores

The geothermal power plant of Pico Alto on Terceira/ Azores, inaugurated in 2017, provides up to 10% of the island's electricity demand and with another plant on the island of

San Miguel provides around one fourth of all electricity generated on the Azores.

With this plant on Terceira Island, it is estimated that geothermal production will reach about 10% of the island's electricity needs coverage in 2018, contributing to the increase in production from renewable sources from 22% in 2016 to almost 40%.

The Azores already have 37% of the electricity produced from renewable energies, of which 24% are from a geothermal source, giving the example of the island of Sao Miguel, where renewable resources already represent more than half of electricity production (54%).

### **Geothermal energy: Pros**

- ✓ Geothermal energy is generally considered environmentally friendly and does not cause significant amounts of pollution.
- ✓ Geothermal reservoirs are naturally replenished and therefore renewable (it is not possible to exhaust the resources).
- ✓ Massive potential – upper estimates show a worldwide potential of 2 terawatts (TW).
- ✓ Excellent for meeting the base load energy demand (as opposed to other renewables such as wind and solar).
- ✓ Great for heating and cooling – even small households can benefit
- ✓ Harnessing geothermal energy does not involve any fuels, which means less cost fluctuations and stable electricity prices.

### **Geothermal energy: Cons**

- ✓ There is a heavy upfront cost associated with both geothermal power plants and geothermal heating/cooling systems.
- ✓ Some resources are profitably exploitable, and some aren't. This limits where you can install geothermal plants.
- ✓ Some countries have been blessed with great resources – Iceland and Philippines meet nearly one third of their electricity demand with geothermal energy. If geothermal energy is transported long distances by the means of hot water (not electricity), significant energy loss must be taken into account.
- ✓ There is some environmental impact with some land use, but nothing major. Also, they are associated with sulphur dioxide and silica emissions, and the reservoirs can contain traces of toxic heavy metals including mercury, arsenic and boron, but this is nothing compared to fossil fuels.
- ✓ In some very rare cases, they can cause earthquakes because they affect the stability of the land. Earthquakes can be triggered due to hydraulic fracturing, which is an intrinsic part of developing EGS power plants.

## SPORTS

### The achievements of Spanish sport

The sport in Spain has led to an increase in interest in recent years, from 37% to 46,2% (2013 - 2018). 2018 was the golden year of Spain in the world of sport. Lately, it has increased to 42,1% in terms of female audience.

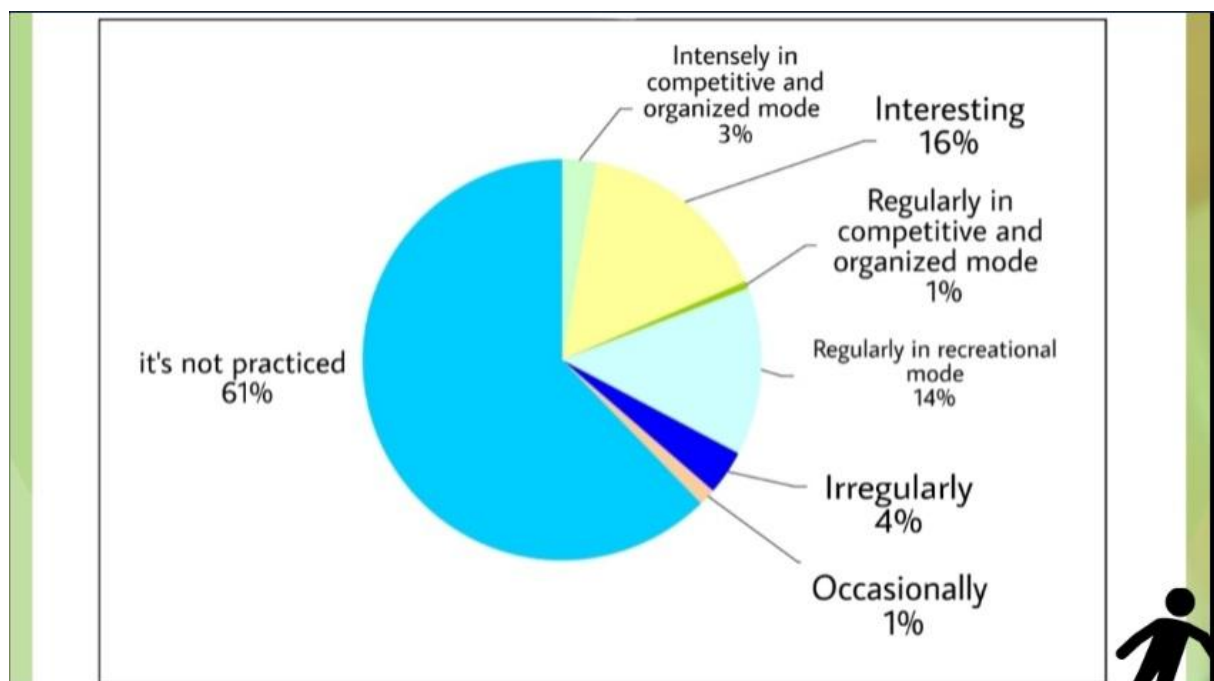
### Women and Sport

Women have overcome many barriers in access to sport. Despite this, we are still far from getting the equality with men. More exactly, in high level sports, they have obtained participatory equity and success.

### Football World Cup of 1982

Many cities around Spain were financed by the state to improve their football fields. Such an example is Camp Nou, which is the field of FC Barcelona – it received 3557991 euros. Just like Barcelona, 16 cities more were financed between 2 and 4 million euros.

### Type of sports practice following the classification proposed by the European COMPASS project, 2005:





## The Olympic Games in Spain

The Barcelona Olympics of 92 was an international multisport event held in the city of Barcelona, Spain, between July 25 and August 9, 1992. 9356 athletes, 6652 men and 2704 women from 169 national committees participated in the event.

## Sport evolution

The objectives of the study were the comparison between sports habits from 1980 to 2015 in Spain. It was carried out to compare the types of sports that were practiced, the amount of practice and the sports population involved.

**Tabla 2.5. Evolución del interés de la población por el deporte (1980-2015)**

INTERÉS	1980	1990	2000	2005	2010	2015
Mucho	15	23	18	18	21	24
Bastante	33	42	42	43	42	43
Poco	27	23	25	27	25	20
Nada	22	11	15	12	12	13
NC	2	1	—	—	—	—
Total	(4.493)	(4.625)	(5.160)	(8.170)	(8.925)	(11.018)

Fuente: CIS (1980, 1990, 2000, 2005 y 2010) y MCED (2015). Unidad: porcentajes. Base: total muestra. Las categorías de la encuesta de 2015 se han elaborado a partir de las siguientes equivalencias con la escala de interés de 0 a 10: mucho = 9 y 10; bastante = 6, 7 y 8; poco = 3, 4 y 5; nada = 0, 1 y 2.

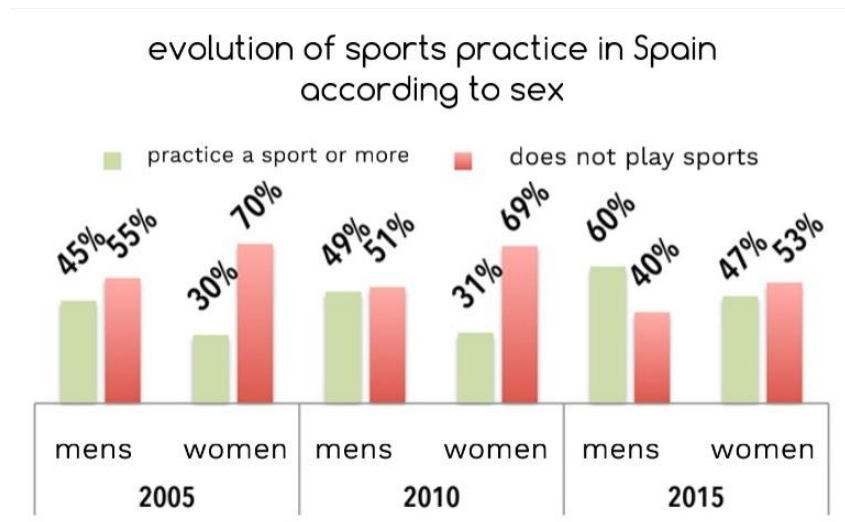
## Age-based sport evolution

**Tabla 3.7. Evolución de la práctica deportiva según edad (1980-2015)**

	1980	1990	2000	2010	2015
De 15 a 24 años	52	57	58	60	76
De 25 a 34 años	34	35	44	54	63
De 35 a 44 años	13	27	34	44	54
De 45 a 54 años	8	12	39	34	45
De 55 a 64 años	4	10	22	30	37
De 65 a 74 años	—	—	13	25	27
75 y más años	—	—	—	13	10

Fuente: MCED (2015). Unidad: porcentajes. Base: población entre 15 y 65 años en 1990; de 15 a 75 años en 2000 y mayor de 15 años en 1980, 2010 y 2015. Nota: la cifra de 2015 corresponde a la proporción de población que practica al menos una vez a la semana.

## Who does sports?



## SOCIAL AND HEALTH FACILITIES

**What is social and health facilities?** - from the identification of the needy people realization of social service intervention and follow-up, preventive, supportive developing and guidance services and counseling services for children, teenagers, women, men, disabled, elderly, individual and their families, local governments, universities, nongovernmental organizations and volunteers.

### Health facilities duty's:

- ✓ Protection and promotion of public health, reduction and prevention of disease risks.
- ✓ Carrying out diagnosis, treatment and rehabilitative health services.
- ✓ Prevention of international public health risks from entering into country.
- ✓ Development of health education and research activities

### Social facilities duty's:

- ✓ They are organizations where people can spend time and have fun, acces new hobbies, helping the homeless people, gathering areas such as nursing homes and disabled assistance.
- ✓ And Youth and Sports Club, children , young people, many adults to create health for themselves, scientific sport opportunities to create, to spread and to prepare sport opportunities

**Where are social facilities?**

- schools and universities
- libraries
- centers for disabled people
- public education centres
- entertainment centres
- gyms
- museums

**Where are health facilities?**

- hospitals
- community health centres
- rehabilitation centres
- blood banks
- pharmacies

**How should social and health facilities be?**

- ✓ clean and sterilised
- ✓ large and fresh
- ✓ bright
- ✓ must have adequate equipment
- ✓ appealing

**Examples of social and health facilities:****1. BUCA Social Life Centre**

Izmir Social Life Campus, a first in Turkey was opened in April, 2016.

The Social Life Campus has a nursing home, soup kitchen, gym and swimming pool, child and youth center, disabled center, rehabilitation center.

There is a nursing home with a capacity of 425 people.

A soup kitchen was established in a 3-storey building with the capacity to prepare meals for 5,000 people a day.

**2. BUCA Social Life Centre Nursing Home**

The new nursing home, which is the most important part of social life center, consists of geriatric unit and Alzheimer-dementia patient rooms and healthy elderly people.

There are all equipment for guests.

There are 90 single, 78 double and 32 triple rooms.

The nursing home has a ballroom, cafeterias, dining halls, a library, a hairdresser's and a barber's, a saloon for handcrafting, a tailor's, TV and game rooms.

### **3. BUCA Social Life Centre Soup Kitchen**

Under the umbrella of the Social Life Campus, Izmir's new and modern soup kitchen also serves.

The new soup kitchen unit has a construction area with the capacity to prepare meals for 5,000 people a day.

There is a soup service for 2,000 students in the winter period, and 2,000 foodstuff distribution services to all segments that need help are carried out in the new place.

### **4. BUCA Social Life Center Centre For Children And Teenagers**

The new center of children and young people has a cafeteria, multi-purpose hall, psychologist room, library, manual skills room, group therapy room, training room and computer room that can meet the needs of children and young people.

The Children and Youth Center at the Social Life Campus will be the main base of the Children and Youth Centers serving within the Family and Youth Center Branch Directorate.

### **5. BUCA Social Life Centre - Disabled Education Centre**

There is a literacy course room, painting workshop, handicraft workshop, ceramic workshop which will enable the disabled to participate effectively and freely in social life.

The Training Center includes personal development and training for people with disabilities, psycho-social guidance and counseling services, family support programs, hobby garden, sports activities and disabled swimming pool.

A modern day care unit for disabled people is planned to be established in the modern facility.

### **6. BUCA Social Life Centre - Rehabilitation Centre**

There are underwater massage, children's disabled and elderly rehabilitation pool, examination rooms, exercise hall, rehabilitation hall, group exercise hall, massage unit to serve disabled, disadvantaged groups in need of care.

### **7. BUCA Social Life Centre - Sports Saloon and Swimming Pool**

There is a fitness centre, swimming pool, gym, cafeteria, outdoor seating terrace.

The sports hall will be operated by Izmir Metropolitan Municipality Youth and Sports Club. A semi-Olympic pool with a depth of 310 cm was built in the facility.

In addition to the sports school students, many sports clubs in Izmir will benefit from the pool for training purposes.

Izmir Metropolitan Municipality underwater rugby team because of the appropriate depth will do the training here.

In addition, the sports clubs operating in Izmir underwater rugby, underwater hockey, water polo, swimmers, such as the application of branches to train and the relevant federations such as organizing competitions can be met.

### 8. BUCA Social Life Centre – The Reception Building

The facility, which will also serve as the Administrative and Technical Services Department of the Social Life Campus with a construction: foyer, multi-purpose hall, guidance room, training room, cafeteria, seminar room, interview room, children's game room, service office consists of sections. In addition, reception and referral services for visitors to the campus will be provided by this unit.

In Izmir Social Life Campus, an open parking lot of 159 cars, ornamental pools, a children's playground, an amphitheater and 2 outdoor fitness areas were created.

### 9. Izmir City Hospital

Izmir City Hospital is under construction in May 2019.

Izmir City Hospital is a hospital that performed in the city of Izmir.

The hospital, which is planned to open in 2020, will be the largest in Aegean Region and fourth largest in the country with a bed capacity of 2060.

## THE PENITENTIARIES

### Definition

The prison is a system of buildings, places where the people who are sentenced to being deprived of freedom or the ones held preventively are being confined. These people are called convicts.

### The aims

- the prevention of having other illegal acts committed by these people;
- the re-education/social re-integration through controlled educational activities.

### **The convict - rights and liberties:**

- the right to gain information and to freely express one's opinions and personal religious orientation;
- the right to access one's personal documents;
- the right to have medical care, food, education.

### **The convict - obligations:**

- to maintain one's personal hygiene and one's room clean;
- to obey the rules of the penitentiary.

**Examples of sanctions:**

- losing the right to being visited or to having supplementary talks;
- losing the right to have a supplementary walk, to one's freedom within the area – being confined to one's room;
- increased time of detention;

The sanctions can turn into rights.

**The National Administration of the Penitentiaries REGULATION for organisation and functioning**

**ART. 1 (1)** "The National Administration of the Penitentiaries is a public institution of national interest, having legal personality, subordinated to the Ministry of Justice, and part of the public institutions of defence, public order and national security of the state."

**ART. 1 (2)** "The activity of the National Administration of the Penitentiaries is held in accordance with the provisions of the Constitution of Romania, The Declaration of the Human Rights, The Charter of the fundamental rights of the European Union, the European Convention for protecting the human rights and fundamental liberties and its additional protocols, under the recommendations of the European Union regarding the treatment of the convicts (...)"

**ART. 1 (3)**

"The National Administration of the Penitentiaries applies the strategy of the Romanian Government regarding the execution of sentences and measures depriving of freedom given by the Courts of Law."

**Types of penitentiaries**

There are several types of institutions depriving of freedom, such as re-education centres for children, centres for women, for men, hospitals. They are categorised like this according to the following types of sentences:

- maximum security (the convict is held in one's room, the activities are carried out in special rooms within small groups, with permanent supervision) – for periods of over 13 years, for having committed severe illegal acts;
- confined ( the convict is held in common rooms, takes part in activities both inside and outside the penitentiary, with the approval of the manager, under supervision) – for periods between 3 and 13 years;
- semi-open (the convict is held in common rooms, takes part in activities both inside and outside the penitentiary, can freely move within a pre-determined area, with supervision – even electronic) – for periods between 1 and 3 years;
- open/semi-open (the convict is held in common rooms, takes part in activities both inside and outside the penitentiary, without any supervision, can freely move in pre-determined areas) – for periods up to 1 year.

### **The penitentiary – interior and exterior design**

It is structured on sections (E1, E2, ...), with additional places such as facilities, annexes.

The sections comprise detention rooms with private or common bathrooms, with a number of beds varying according to the convicts' type of sentences.

The convict has access to:

- one's own bed, endowed with bed sheets or bed sheets brought from home (it is the convict's right);
- one's personal space;
- television;
- the medical office – to provide medical care for the convicts
- the dental office
- infirmary – to provide treatment for the convicts;
- local oficina – to provide and distribute medicine

The sections also comprise spaces for social inclusion, where informing activities are held:

- a psychologist's office
- a social assistance office
- a library
- a gym

Other facilities:

- the chapel of the penitentiary
- a room for other religious beliefs
- rooms for family visits
- intimate rooms
- car parks
- spaces for walking
- workshops, farms
- kitchen
- laundry room
- bathrooms with showers

The penitentiary needs to offer programmes with activities for convicts. These are necessary for counseling, educating and rendering the convicts professional in order to ensure their social inclusion. Some penitentiaries offer school programmes, for primary, secondary and high school level, with specialised teachers.

- Examples of such school programmes: "The Second Chance", "Low Attendance Frequency School"
- Moral and religious activities, such as religious service, counseling, choir attendance.
- Access to information through reading, either at the library, or in one's room;
- Access to information in one's personal record.

Activities organised for the convicts:

- The penitentiary offers programmes of medical, social and psychological assistance, the possibility to take part in job fairs, in contests, or in meetings with people working in various fields in order to gain information;
- Emphasis is placed on maintaining the connections with the support environment through visits, letters, electronic mail, parcels, telephone conversations, shopping.

There has been a constant concern with providing:

- Modern facilities with new furniture, sanitary objects, wall painting, better cooking facilities, expanded detention space, replacement of the heating installation.
- The convicts' inclusion within work programmes;
- An increase in the number of convicts involved in productive activities, of getting qualified in order to be able to include them socially, to avoid recidivism and to allow them to earn some extra money;
- An increase in the security level within the sections through preventing illegal acts.

## SUPPORT FACILITIES FOR NEW INCOMING POPULATION

To start with, answer the following questions:

**How do migrants feel when they arrive at a new country?**

**Can you put yourselves in their shoes? How do they feel?**

*They feel...*

*afraid / relieved / insecure / excited / worried  
sad / hopeful / lonely / grateful / uncomfortable  
rejected / eager / confused / curious / nervous  
anxious / welcomed / frustrated*

These are the feelings we came up with. Naturally, there are mixed feelings and emotions, some are positive, some are negative.

The second important question is: **What do migrants need when they move to and settle in a new country? If you were a migrant, what would you need?**

*Housing / Support / Health Care / Tolerance / Money  
Jobs / Acceptance / Legal Advice / Respect / Food  
Clothing and Footwear / Peace / Language Classes  
Professional Training / Schools for their Children*



Some needs are obvious because everyone has the same basic needs. Migrants simply need more help and support.

There are many institutions in Portugal to provide some sort of support to migrants. This first group aims primarily at helping to integrate migrants.

CEPAC, ACM, CNAIM are centres and PAR and RIM are platforms created to promote, monitor, support and facilitate the process of welcoming and integrating migrants, mainly those who are socially vulnerable and refugees' children and families. Some carry out a preliminary assessment before instructing migrants to contact specific local services where they can get food, clothes, health assistance, legal advice, Portuguese classes or professional training.

Organizations such as CNJP, CAVITP and GAE are more concerned about legal aspects of migrants' lives. For instance, CAVITP seeks to help human traffic victims and provide them with useful information. On the other hand, GAE was created to protect all Portuguese emigrants' rights, to supervise their stay in their host countries and to support them when they return to Portugal.

JRS, Portuguese Caritas and OCPM are Church-related organizations, but they perform a role similar to that of the organizations mentioned before. JRS follows, serves and defends refugees and OCPM's work is to sensitize to the reality of migrants, displaced people and refugees. Portuguese Caritas, besides promoting the Integral Human Development and the Common Good, also distributes goods and provides assistance. These organizations work in partnership with other Church organizations and civil society.

In conclusion, there are many facilities and services available to welcome and support Migrants in their integration process but there is still much to be done to better their lives. All of us can contribute to make their lives better and happier.

## EDUCATIONAL SYSTEMS

### The Educational System in Italy

How is the school system divided in Italy?

- **first cycle of education** is divided into two consecutive and compulsory school courses: primary school, lasting five years, for pupils from 6 to 11 years; the first year secondary school, lasting three years, for pupils aged 11 to 14.
- **Primary school**, also called elementary school, allows children to acquire and develop logical-critical knowledge and skills, promotes personality development, promotes the learning of the Italian and English languages, enhances interpersonal skills and educates children to the fundamental principles of civil coexistence.

- **The first grade secondary school**, that is the middle school, introduces the study of a second language of the European Union and helps to orientate itself for the subsequent choice of education and training. The three-year course ends with a state exam, the passing of which constitutes admission to the second cycle
- **The second cycle of education** is divided into three types of courses: high school, technical institutes and professional institutes. At the end of which students take the state exam. Once the education diploma is obtained, the student has the possibility to enroll in a university course or in a higher technical education and training course..
- **The university system** is divided into state universities and non-state universities. The course has a three-year duration for graduation, followed by a further two-year path to obtain the master's degree.

## The Educational System in Romania

The Romanian education system is structured on 5 levels of age and learning:

- kindergarten (from 2 to 6 years old)
- primary education (from 6 to 11 years old) - the cycle of fundamental acquisitions
- secondary school (from 11 to 15 years old) - development cycle
- high school (from 15 to 19 years old)/school of arts and crafts (from 15 to 17 years old)
- university (higher education)

In Romania, compulsory education is until the end of the 10<sup>th</sup> grade. 90% of the students learn in public schools, private education represents a small part of the Romanian educational system.

Other types of education than traditional ones are accepted:

- ❖ the step-by-step system
- ❖ the Montessori system
- ❖ the Waldorf system

## The Educational System in Portugal

### School Year and Timetable

The school year in Portugal is 34 weeks long. It is divided into three terms as follows: 1<sup>st</sup> term, from September to December; 2<sup>nd</sup> term, from January to March; 3<sup>rd</sup> term, from April to June.

The average Portuguese student stays at school most of the day, morning and afternoon. Usually, a good part of the day is spent in classrooms.

The main school holidays in Portugal are Christmas holiday, which lasts around two weeks, Easter holiday, also lasts around two weeks, and Summer holiday, which begins in late June or early July and is usually about two and a half months long, if you have no exams.

### Structure and Duration

The **education system in Portugal** is divided into four main parts, pre-school education, basic education (from year 1 to year 9), secondary education and further and higher education.

**Basic education** in Portugal is also split into "key stages" or cycles which breaks down as follows:

- 1st cycle (attended by children from around the age of 6 to 10)
- 2nd cycle (attended by children aged 10 to 12)
- 3rd cycle (from 12 to 15).

Adolescents attend **secondary education** from around 15 to 18. Then they may continue in **further or higher education**.

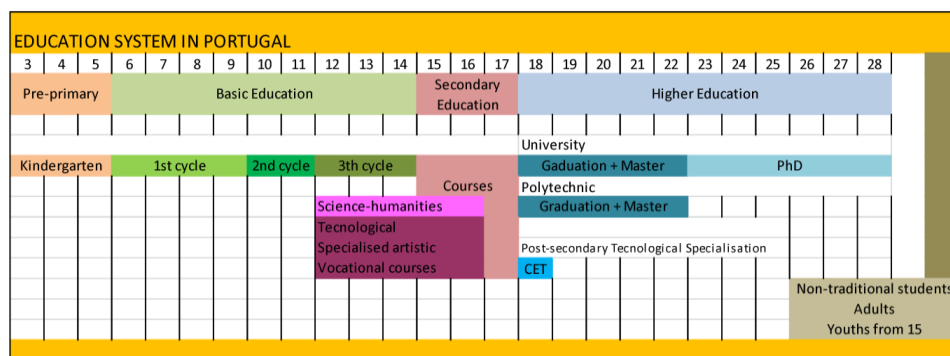


Figure 1. The Portuguese Education System  
(Adapted from the source: GEPE (<http://www.gepe.min-edu.pt>) [1]).

Children in Portugal have to legally attend basic and secondary education. Parents have to keep their children in education until the age of 18. Those who continue in a form of **further education**, normally take vocational courses, called "professional courses".

Alongside 47 other European nations, Portugal is a signatory to the Bologna Process. **Higher education** in Portugal today, follows the traditional three-cycle format, split into undergraduate (Bachelor's degree), graduate (Master's degree) and post-graduate (Doctorate) certifications.

**Adult education and training provision** vary and is geared towards specific aims and target groups.

**Home schooling** is legal in Portugal, but pupils must receive full-time education, appropriate to their age, aptitude and any special educational needs they may have.

Students who study at home must take regular equivalence exams during compulsory education. After year 9, students who study at home will also enrol in national exams of Portuguese language and mathematics, like any other students.

## Subjects and Skills

All education levels and cycles comprise different **subjects and skills**.

The skills for **pre-school** in Portugal, which is optional, aim mainly at personal and social training, communication and knowledge of the world. **Basic education** gradually comprises all the following subjects: Portuguese, mathematics, English, geography, history, science, chemistry, art and technology, physical education, music education and citizenship. The latter subject develops knowledge, skills and understanding that pupils need to play a full part in society as active and responsible citizens. Religious education is optional.

**Secondary education** allows you to take one of four different main courses: Socioeconomic sciences, technology sciences, languages and humanities, and arts. All courses include four core subjects: Portuguese, a foreign language, philosophy and physical education. Then students have to choose specific subjects, two biennial subjects in year 10 and 11, and two annual subjects in year 12.

## Staff

In Portuguese schools there is no Welfare or pupil support staff. **Administrative staff and teachers** perform these tasks. Specialist and technical staff work are also taken on by teachers. The school librarian job is assigned to a teacher with special training.

In schools in Portugal there are different types of teachers. For instance, there are primary school teachers, special needs teachers, a headteacher, and secondary school teacher.

In Portugal, **“support staff”** tasks go from cleaning the facilities to aiding teachers with special needs pupils or students. They are indeed a precious help.

## Special Needs

In Portugal, children and teenagers with physical, developmental, behavioural or emotional **special needs** have individualized support lessons and adapted strategies such as adapted tests or curricula, among other adjustments that may facilitate their learning.

Here are some examples of **support available** for these kids:

- Following a different learning programme from the rest of the class
- Extra help from a teaching assistant or the class teacher
- Working in a smaller group
- Help with personal care (such as eating or using the toilet)
- Encouragement to complete tasks

The following **measures** are available to special needs pupils within mainstream schools:

- Support from specialised professionals (such as special education teachers, counsellors, mobility professionals, therapists, psychologists)
- Use of specific equipment and tools (like books in Braille, books with enlarged characters, optical and hearing devices)

- Special conditions for assessment (related to the type, place and time of a test, and timetables)
- A personalized curriculum (by replacing, introducing, removing contents and/or skills)

### **Career and Vocational Guidance**

**Career guidance** has a long tradition in Portugal, going back to the first decades of (the) 20th century.

**Psychology and Guidance Services in schools, Qualifica Centres, Public Employment Services, Career Centres in Universities** and other entities credited by the competent authorities, develop information and guidance actions for qualification and employment. These actions should be coherent, integrated, systematic, continuous and complementary, according to the competencies of each service, taking into account their users' profile and needs.

## Chapter 2 - SUGGESTIONS OF ACTIVITIES

### EXPLORING THE CITY: PAPER CHASE

#### Group A

Hello, everyone!

We challenge you to go on an outdoor hunt that will allow you to explore some of our city's landmarks. One of the main goals of this activity is for you to mingle into the city's daily life and its dynamics, and to interact with locals.

There are 8 tasks and overall you can get a total of 20 points.

You will need a camera phone, a map, vouchers and a pen or a pencil... And above all team work and good spirits!!

Do not forget to email your photos to [icity1820@gmail.com](mailto:icity1820@gmail.com)!

**INFO** “Casa da Juventude” was inaugurated in September 2013. It was built to respond actively to the current needs of young people aged 12 to 35. Aiming at fulfilling the municipal Office for Youth policies, it has a set of different spaces and provides a variety of services, where young people are invited to meet, share dreams, ideas and experiences and undertake projects; hence nurturing entrepreneurship.



**TIP** You are at the “Casa da Juventude”. Find way to the Municipal Council.

**TASK 1** Can you build a human pyramid?



If you manage to entice a local to join you, you get 2 extra points. Take a photo of your human pyramid in front of the Municipal Council.



**TIP** Turn right to Camilo Castelo Branco Street and you will come to “Rua Direita”.

**INFO** Our roots are strongly connected to Christianity. Many of the oldest Portuguese cities have a “Rua Direita” or High Street, that leads directly to the church. This street is considered the oldest in the city and although the original pavement was replaced, the houses facades weren’t.



**TASK 2** Find out where the Royal’s would sleep, whenever they came to our city. If necessary, seek help at “Casa da Cultura” to answer the question.

**Which detail confirms that the royal family used to stay there?**

*Answer:*

**TIP** Cross 25<sup>th</sup> April Avenue to Saint Anthony Street. You will find a “red” square with a monument to honour the dead.

**Even though this is a small city, Famalicão inhabitants are known for being brave. During World War I, a significant number of men were enlisted, and many died.**

**TASK 3** Answer the question.

**How many Famalicão citizens died fighting that war?**

*Answer:*

**TASK 4** Take a picture of your group pretending to be soldiers just getting back from the battle field. You are alive!



**TIP** Near 9<sup>th</sup> April Square, you will find an old church.



**INFO** “Igreja Matriz”, or Mother Church, is a 16th century building. It has been extensively rebuilt over time, which has completely altered its original design.



**TIP** Go back to Saint Anthony Street and find the Museum of Surrealism.

**INFO** The Cupertino de Miranda Foundation was founded following an initiative by Arthur Cupertino de Miranda (1892-1988) and his wife, and was inaugurated in 1972. Previously, this building belonged to a private institution of social welfare. Currently, it includes a museum, a library and an auditorium. The Museum of Surrealism, located along the tower, is lined with panels by Charters de Almeida, from the 2nd to the 7th floor.



**TASK 5** Answer the question.

**Who designed this building?**

**Answer:**

**TIP** Find way to Alves Roçadas Street and find a chocolate shop.

**INFO** “Tentações Gourmet” is a gourmet shop. It is known for the quality of its national products, including chocolate. Can you resist temptation?!





**TASK 6** Use your vouchers to get a chocolate candy. **Make sure you keep all 7 chocolate candy wrappers.**

**TIP** Turn right to Narciso Vieira Avenue and walk as far as the roundabout. You should be able to see a big pink housing complex.

**INFO** The Lameiras housing complex belongs to the parish of S. Tiago and Abbot of Vermoim and is made of 290 dwellings. This project also includes 30 stores and social facilities of the Association of Residents of Lameiras. The name Lameiras comes from the place where it was built, the old "Quinta das Lameiras", or the country estate of Lameiras.



**TASK 7** Identify the 4 famous people painted on the corners of this building and write down their names.

**Answer:**

**TIP** Near the Lameiras housing complex you will find the Central Bus Station. Next to it, there is one of the many entrances into the Devesa Park.

**INFO** Devesa Park is a recent urban green area located near the city centre. With a total land area of 27 hectares, the park is an exceptional place to hang out or exercise. The city is very proud of this park not only because of its public value but also as a contribution to youth education, public health and community building.



**TASK 8** Walk across this park until you reach an acoustic shell.



**Ask someone to take a picture of your group.** Be creative!

**Can you include of a couple kissing in the picture?**

If not, make it happen! You will get 2 extra points.



**TIP** Time flies and it is now time to end this activity. Look for the Office of Archaeology that is near the House of the Territory.



From there you will be taken to participate in an **acorn bread workshop** with archaeologist Ms. Felisbela Leite. Enjoy!



## PHOTO REPORT

**Wait for teams B and C.**

Ms. Verónica Sousa will be there waiting for you and will take you on a tour of the Community Garden. Take some photos and a few notes.

**Create a simple Photo Report of the visit.** If you want, use a photo report software to make it easier and faster to finish it. Tomorrow, teams will present their works at school.

**INFO** Next to Devesa Park, there is a community Garden. It is the first of municipal initiative in the county and aims at introducing its community to the many benefits of collective gardening such as growing fresh produce, spending time outdoors and feeling physically connected to the Earth. Associations, schools, youth volunteer organizations and persons with reduced mobility are welcomed and entitled to a garden patch.



We hope you've enjoyed the activities and got to know a bit more about Vila Nova de Famalicão.

**COMMENT**

*Did you like the activities?*

Task 1 \_\_\_\_  
 Task 2 \_\_\_\_  
 Task 3 \_\_\_\_  
 Task 4 \_\_\_\_  
 Task 5 \_\_\_\_  
 Task 6 \_\_\_\_ + \_\_\_\_  
 Task 7 \_\_\_\_  
 Task 8 \_\_\_\_ + \_\_\_\_

**Total \_\_\_\_ / 20**

**Group B**

**Hello, everyone!**

**We challenge you to go on an outdoor hunt that will allow you to explore some of our city's landmarks. One of the main goals of this activity is for you to mingle into the city's daily life and its dynamics, and to interact with locals.**

**There are 8 tasks and overall you can get a total of 20 points.**

**You will need a camera phone, a map, vouchers and a pen or a pencil... And above all team work and good spirits!!**

**Do not forget to email your photos to [icity1820@gmail.com](mailto:icity1820@gmail.com)!**

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**TIP** You are at the "Casa da Juventude". Find way to the Municipal Council.

### **TASK 1** Can you build a human pyramid?



If you manage to entice a local to join you, you get 2 extra points. Take a photo of your human pyramid in front of the Municipal Council.



**TIP** Turn right to Camilo Castelo Branco Street and then go to Dr. Francisco Alves Street. Then turn left to Ernesto Carvalho Street and left again to Eixidos Cross Street and continue to Manuel Souttomaior Square. Nearby is “Rua Direita”.

**INFO** Our roots are strongly connected to Christianity. Many of the oldest Portuguese cities have a “Rua Direita” or High Street, that leads directly to the church. This street is considered the oldest in the city and although the original pavement was replaced, the houses facades weren’t.



**TASK 2** Find out where the Royal’s would sleep, whenever they came to our city. If necessary, seek help at “Casa da Cultura” to answer the question.

**Which detail confirms that the royal family used to stay there?**

**Answer:**

**TIP** Cross 25<sup>th</sup> April Avenue and go to Barão da Trovisqueira Street. Find a chocolate shop.

**INFO** “Sim Bombons” is chocolate shop. It is known for its homemade chocolate and gourmet products. Can you resist temptation?!



**TASK 3** Use your vouchers to get a chocolate candy. **Make sure you keep all 7 chocolate candy wrappers.**

**TIP** Find way to 9<sup>th</sup> April Square, a “red” square with a monument to honour the dead.

Even though this is a small city, Famalicão inhabitants are known for being brave. During World War I, a significant number of men were enlisted, and many died.

**TASK 4** Answer the question.

How many Famalicão citizens died fighting that war?

**Answer:**

**TASK 5** Take a picture of your group pretending to be soldiers just getting back from the battle field. You are alive!



**TIP** Near 9<sup>th</sup> April Square, you will find an old church.

**INFO** “Igreja Matriz”, or Mother Church, is a 16th century building. It has been extensively rebuilt over time, which has completely altered its original design.



**TIP** Take Saint Anthony Street and go to D. Maria II Square. You will find the Museum of Surrealism.

**INFO** The Cupertino de Miranda Foundation was founded following an initiative by Arthur Cupertino de Miranda (1892-1988) and his wife, and was inaugurated in 1972. Previously, this building belonged to a private institution of social welfare. Currently, it includes a museum, a library and an auditorium. The Museum of Surrealism, located along the tower, is lined with panels by Charters de Almeida, from the 2nd to the 7th floor.



**TASK 6** Answer the question. **Who designed this building?**

**Answer:**



**TIP** Find way to Adriano Pinto Basto Street and then turn right to Narciso Ferreira Avenue. Walk till you get to the second roundabout. You should be able to see a big pink housing complex.

**INFO** The Lameiras housing complex belongs to the parish of S. Tiago and Abbot of Vermoim and is made of 290 dwellings. This project also includes 30 stores and social facilities of the Association of Residents of Lameiras. The name Lameiras comes from the place where it was built, the old "Quinta das Lameiras", or the country estate of Lameiras.



**TASK 7** Identify the 4 famous people painted on the corners of this building and write down their names.

**Answer:**

**TIP** Near the Lameiras housing complex you will find the Central Bus Station. Next to it, there is one of the many entrances into the Devesa Park.

**INFO** Devesa Park is a recent urban green area located near the city centre. With a total land area of 27 hectares, the park is an exceptional place to hang out or exercise. The city is very proud of this park not only because of its public value but also as a contribution to youth education, public health and community building.



**TASK 8** Walk across this park until you reach an acoustic shell. **Ask someone to take a picture of your group.** Be creative! **Can you include of a couple kissing in the picture?** If not, make it happen! You will get 2 extra points.



**TIP** Time flies and it is now time to end this activity. Look for the Office of Archaeology that is near the House of the Territory.



From there you will be taken to participate in an **acorn bread workshop** with archaeologist Ms. Felisbela Leite. Enjoy!



### PHOTO REPORT

Wait for teams A and C.

Ms. Verónica Sousa will be there waiting for you and will take you on a tour of the Community Garden. Take some photos and a few notes.

**Create a simple Photo Report of the visit.** If you want, use a photo report software to make it easier and faster to finish it. Tomorrow, teams will present their works at school.

**INFO** Next to Devesa Park, there is a community Garden. It is the first of municipal initiative in the county and aims at introducing its community to the many benefits of collective gardening such as growing fresh produce, spending time outdoors and feeling physically connected to the Earth. Associations, schools, youth volunteer organizations and persons with reduced mobility are welcomed and entitled to a garden patch.



We hope you've enjoyed the activities and got to know a bit more about Vila Nova de Famalicão.

### COMMENT

*Did you like the activities?*

Task 1 \_\_\_\_  
 Task 2 \_\_\_\_  
 Task 3 \_\_\_\_  
 Task 4 \_\_\_\_  
 Task 5 \_\_\_\_  
 Task 6 \_\_\_\_ + \_\_\_\_  
 Task 7 \_\_\_\_  
 Task 8 \_\_\_\_ + \_\_\_\_

**Total \_\_\_\_ / 20**



### Group C

**Hello, everyone!**

**We challenge you to go on an outdoor hunt that will allow you to explore some of our city's landmarks. One of the main goals of this activity is for you to mingle into the city's daily life and its dynamics, and to interact with locals.**

**There are 8 tasks and overall you can get a total of 20 points.**

**You will need a camera phone, a map, vouchers and a pen or a pencil... And above all team work and good spirits!!**

**Do not forget to email your photos to [icity1820@gmail.com](mailto:icity1820@gmail.com)!**

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**TIP** You are at the “Casa da Juventude”. Find way to the Municipal Council.

#### **TASK 1** Can you build a human pyramid?



**If you manage to entice a local to join you, you get 2 extra points. Take a photo of your human pyramid in front of the Municipal Council.**



**TIP** Take Adriano Pinto Basto Street and then turn right to Daniel Santos Street. Cross 25<sup>th</sup> April Avenue and go to “Rua Direita”.

**INFO** Our roots are strongly connected to Christianity. Many of the oldest Portuguese cities have a “Rua Direita” or High Street, that leads directly to the church. This street is considered the oldest in the city and although the original pavement was replaced, the houses facades weren’t.



**TASK 2** Find out where the Royal’s would sleep, whenever they came to our city. If necessary, seek help at “Casa da Cultura” to answer the question.

**Which detail confirms that the royal family used to stay there?**

*Answer:*

**TIP** Go back to 25<sup>th</sup> April Avenue and cross it to Saint Anthony Street. You will find a “red” square with a monument to honour the dead.

Even though this is a small city, Famalicão inhabitants are known for being brave. During World War I, a significant number of men were enlisted, and many died.

**TASK 3** Answer the question.

**How many Famalicão citizens died fighting that war?**

*Answer:*

**TASK 4** Take a picture of your group pretending to be soldiers just getting back from the battle field. You are alive!

**TIP** Near 9<sup>th</sup> April Square, you will find an old church.



**INFO** “Igreja Matriz”, or Mother Church, is a 16th century building. It has been extensively rebuilt over time, which has completely altered its original design.



**TIP** Go back to Saint Anthony Street and find the Museum of Surrealism.

**INFO** The Cupertino de Miranda Foundation was founded following an initiative by Arthur Cupertino de Miranda (1892-1988) and his wife, and was inaugurated in 1972. Previously, this building belonged to a private institution of social welfare. Currently, it includes a museum, a library and an auditorium. The Museum of Surrealism, located along the tower, is lined with panels by Charters de Almeida, from the 2nd to the 7th floor.



**TASK 5** Answer the question.

**Who designed this building?**

**Answer:**

**TIP** Find way to Alves Roçadas Street and find a chocolate shop.

**INFO** “Tentações Gourmet” is a gourmet shop. It is known for the quality of its national products, including chocolate. Can you resist temptation?!



**TASK 6** Use your vouchers to get a chocolate candy. **Make sure you keep all 7 chocolate candy wrappers.**

**TIP** Go back and turn right to Vasconcelos and Castro Street. Cross General Humberto Delgado Avenue. You should be able to see a big pink housing complex.

**INFO** The Lameiras housing complex belongs to the parish of S. Tiago and Abbot of Vermoim and is made of 290 dwellings. This project also includes 30 stores and social facilities of the Association of Residents of Lameiras. The name Lameiras comes from the place where it was built, the old "Quinta das Lameiras", or the country estate of Lameiras.



**TASK 7** Identify the 4 famous people painted on the corners of this building and write down their names.

**Answer:**

**TIP** Near the Lameiras housing complex you will find the Central Bus Station. Next to it, there is one of the many entrances into the Devesa Park.

**INFO** Devesa Park is a recent urban green area located near the city centre. With a total land area of 27 hectares, the park is an exceptional place to hang out or exercise. The city is very proud of this park not only because of its public value but also as a contribution to youth education, public health and community building.



**TASK 8** Walk across this park until you reach an acoustic shell. **Ask someone to take a picture of your group.** Be creative! **Can you include of a couple kissing in the picture?** If not, make it happen! You will get 2 extra points.



**TIP** Time flies and it is now time to end this activity. Look for the Office of Archaeology that is near the House of the Territory.



From there you will be taken to participate in an **acorn bread workshop** with archaeologist Ms. Felisbela Leite. Enjoy!



## PHOTO REPORT

**Wait for teams A and B.**

Ms. Verónica Sousa will be there waiting for you and will take you on a tour of the Community Garden. Take some photos and a few notes.

**Create a simple Photo Report of the visit.** If you want, use a photo report software to make it easier and faster to finish it. Tomorrow, teams will present their works at school.

**NFO** Next to Devesa Park, there is a community Garden. It is the first of municipal initiative in the county and aims at introducing its community to the many benefits of collective gardening such as growing fresh produce, spending time outdoors and feeling physically connected to the Earth. Associations, schools, youth volunteer organizations and persons with reduced mobility are welcomed and entitled to a garden patch.



We hope you've enjoyed the activities and got to know a bit more about Vila Nova de Famalicão.

## COMMENT

*Did you like the activities?*

Task 1 \_\_\_\_

Task 2 \_\_\_\_

Task 3 \_\_\_\_

Task 4 \_\_\_\_

Task 5 \_\_\_\_

Task 6 \_\_\_\_ + \_\_\_\_

Task 7 \_\_\_\_

Task 8 \_\_\_\_ + \_\_\_\_

**Total \_\_\_\_ / 20**



### Group D

**Hello, everyone!**

**We challenge you to go on an outdoor hunt that will allow you to explore some of our city's landmarks. One of the main goals of this activity is for you to mingle into the city's daily life and its dynamics, and to interact with locals.**

**There are 8 tasks and overall you can get a total of 20 points.**

**You will need a camera phone, a map, vouchers and a pen or a pencil... And above all team work and good spirits!!**

**Do not forget to email your photos to [icity1820@gmail.com](mailto:icity1820@gmail.com)!**

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**TIP** You are at the “Casa da Juventude”. Find way to the Municipal Council.

#### **TASK 1** Can you build a human pyramid?



**If you manage to entice a local to join you, you get 2 extra points. Take a photo of your human pyramid in front of the Municipal Council.**



**TIP** Turn right to Camilo Castelo Branco Street and then go to Dr. Francisco Alves Street. Then turn left to Ernesto Carvalho Street and left again to Eixidos Cross Street and continue to Manuel Souttomaior Square. Nearby is “Rua Direita”.

**INFO** Our roots are strongly connected to Christianity. Many of the oldest Portuguese cities have a “Rua Direita” or High Street, that leads directly to the church. This street is considered the oldest in the city and although the original pavement was replaced, the houses facades weren’t.



**TASK 2** Find out where the Royal’s would sleep, whenever they came to our city. If necessary, seek help at “Casa da Cultura” to answer the question.

Which detail confirms that the royal family used to stay there?

*Answer:*

**TIP** Cross 25<sup>th</sup> April Avenue and go to Barão da Trovisqueira Street. Find a chocolate shop.

**INFO** “Sim Bombons” is chocolate shop. It is known for its homemade chocolate and gourmet products. Can you resist temptation?!



**TASK 3** Use your vouchers to get a chocolate candy. **Make sure you keep all 7 chocolate candy wrappers.**

**TIP** Find way to 9<sup>th</sup> April Square, a “red” square with a monument to honour the dead.

Even though this is a small city, Famalicão inhabitants are known for being brave. During World War I, a significant number of men were enlisted, and many died.

**TASK 4** Answer the question.

How many Famalicão citizens died fighting that war?

*Answer:*



**TASK 5** Take a picture of your group pretending to be soldiers just getting back from the battle field. You are alive!



**TIP** Near 9<sup>th</sup> April Square, you will find an old church.

**INFO** “Igreja Matriz”, or Mother Church, is a 16th century building. It has been extensively rebuilt over time, which has completely altered its original design.



**TIP** Take Saint Anthony Street and go to D. Maria II Square. You will find the Museum of Surrealism.

**INFO** The Cupertino de Miranda Foundation was founded following an initiative by Arthur Cupertino de Miranda (1892-1988) and his wife, and was inaugurated in 1972. Previously, this building belonged to a private institution of social welfare. Currently, it includes a museum, a library and an auditorium. The Museum of Surrealism, located along the tower, is lined with panels by Charters de Almeida, from the 2nd to the 7th floor.



**TASK 6** Answer the question. **Who designed this building?**

**Answer:**

**TIP** Find way to Adriano Pinto Basto Street and then turn right to Narciso Ferreira Avenue. Walk till you get to the second roundabout. You should be able to see a big pink housing complex.

**INFO** The Lameiras housing complex belongs to the parish of S. Tiago and Abbot of Vermoim and is made of 290 dwellings. This project also includes 30 stores and social facilities of the Association of Residents of Lameiras. The name Lameiras comes from the place where it was built, the old "Quinta das Lameiras", or the country estate of Lameiras.



**TASK 7** Identify the 4 famous people painted on the corners of this building and write down their names.

**Answer:**

### PHOTO REPORT

**Wait for teams E, F and G.**

The architect Noé Diniz, who designed the Lameiras housing complex, will be there waiting for you and will take you on a tour of this urban equipment. Take some photos and a few notes.

**Create a simple Photo Report of the visit.** If you want, use a photo report software to make it easier and faster to finish it. Tomorrow, teams will present their works at school.

**TIP** Near the Lameiras housing complex you will find the Central Bus Station. Next to it, there is one of the many entrances into the Devesa Park.

**INFO** Devesa Park is a recent urban green area located near the city centre. With a total land area of 27 hectares, the park is an exceptional place to hang out or exercise. The city is very proud of this park not only because of its public value but also as a contribution to youth education, public health and community building.



**TASK 8** Walk across this park until you reach an acoustic shell.  
Ask someone to take a picture of your group. Be creative!



Can you include of a couple kissing in the picture?  
If not, make it happen! You will get 2 extra points.



**TIP** Time flies and it is now time to end this activity. Look for the Office of Archaeology that is near the House of the Territory.



You will now participate in an **acorn bread workshop** with archaeologist Ms. Felisbela Leite. Enjoy!



We hope you've enjoyed the activities and got to know a bit more about Vila Nova de Famalicão.

### COMMENT

*Did you like the activities?*

### SCORE

Task 1 \_\_\_\_  
Task 2 \_\_\_\_  
Task 3 \_\_\_\_  
Task 4 \_\_\_\_  
Task 5 \_\_\_\_  
Task 6 \_\_\_\_ + \_\_\_\_  
Task 7 \_\_\_\_  
Task 8 \_\_\_\_ + \_\_\_\_

**Total** \_\_\_\_/

### Group E

**Hello, everyone!**

**We challenge you to go on an outdoor hunt that will allow you to explore some of our city's landmarks. One of the main goals of this activity is for you to mingle into the city's daily life and its dynamics, and to interact with locals.**

**There are 8 tasks and overall you can get a total of 20 points.**

**You will need a camera phone, a map, vouchers and a pen or a pencil... And above all team work and good spirits!!**

**Do not forget to email your photos to [icity1820@gmail.com](mailto:icity1820@gmail.com)!**

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**TIP** You are at the “Casa da Juventude”. Find way to the Municipal Council.

#### **TASK 1** Can you build a human pyramid?



**If you manage to entice a local to join you, you get 2 extra points. Take a photo of your human pyramid in front of the Municipal Council.**



**TIP** Take Adriano Pinto Basto Street and then turn right to Daniel Santos Street. Cross 25<sup>th</sup> April Avenue and go to “Rua Direita”.

**INFO** Our roots are strongly connected to Christianity. Many of the oldest Portuguese cities have a “Rua Direita” or High Street, that leads directly to the church. This street is considered the oldest in the city and



although the original pavement was replaced, the houses facades weren't.

**TASK 2** Find out where the Royal's would sleep, whenever they came to our city. If necessary, seek help at "Casa da Cultura" to answer the question.

Which detail confirms that the royal family used to stay there?

**Answer:**

**TIP** Go back to 25<sup>th</sup> April Avenue and cross it to Saint Anthony Street. You will find a "red" square with a monument to honour the dead.

Even though this is a small city, Famalicão inhabitants are known for being brave. During World War I, a significant number of men were enlisted, and many died.

**TASK 3** Answer the question.

How many Famalicão citizens died fighting that war?

**Answer:**

**TASK 4** Take a picture of your group pretending to be soldiers just getting back from the battle field. You are alive!



**TIP** Near 9<sup>th</sup> April Square, you will find an old church.





**INFO** “Igreja Matriz”, or Mother Church, is a 16th century building. It has been extensively rebuilt over time, which has completely altered its original design.

**TIP** Go back to Saint Anthony Street and find the Museum of Surrealism.

**INFO** The Cupertino de Miranda Foundation was founded following an initiative by Arthur Cupertino de Miranda (1892-1988) and his wife, and was inaugurated in 1972. Previously, this building belonged to a private institution of social welfare. Currently, it includes a museum, a library and an auditorium. The Museum of Surrealism, located along the tower, is lined with panels by Charters de Almeida, from the 2nd to the 7th floor.



**TASK 5** Answer the question.

**Who designed this building?**

**Answer:**

**TIP** Find way to Alves Roçadas Street and find a chocolate shop.

**INFO** “Tentações Gourmet” is a gourmet shop. It is known for the quality of its national products, including chocolate. Can you resist temptation?!



**TASK 6** Use your vouchers to get a chocolate candy. **Make sure you keep all 7 chocolate candy wrappers.**

**TIP** Go back and turn right to Vasconcelos and Castro Street. Cross General Humberto Delgado Avenue. You should be able to see a big pink housing complex.

**INFO** The Lameiras housing complex belongs to the parish of S. Tiago and Abbot of Vermoim and is made of 290 dwellings. This project also includes 30 stores and social facilities of the Association of Residents of Lameiras. The name Lameiras comes from the place where it was built, the old "Quinta das Lameiras", or the country estate of Lameiras.



**TASK 7** Identify the 4 famous people painted on the corners of this building and write down their names.

**Answer:**

### PHOTO REPORT

**Wait for teams D, F and G.**

The architect Noé Diniz, who designed the Lameiras housing complex, will be there waiting for you and will take you on a tour of this urban equipment. Take some photos and a few notes.

**Create a simple Photo Report of the visit.** If you want, use a photo report software to make it easier and faster to finish it. Tomorrow, teams will present their works at school.

**TIP** Near the Lameiras housing complex you will find the Central Bus Station. Next to it, there is one of the many entrances into the Devesa Park.

**INFO** Devesa Park is a recent urban green area located near the city centre. With a total land area of 27 hectares, the park is an exceptional place to hang out or exercise. The city is very proud of this park not only because of its public value but also as a contribution to youth education, public health and community building.





**TASK 8** Walk across this park until you reach an acoustic shell. **Ask someone to take a picture of your group.** Be creative!



**Can you include of a couple kissing in the picture?** If not, make it happen! You will get 2 extra points.



**TIP** Time flies and it is now time to end this activity. Look for the Office of Archaeology that is near the House of the Territory.



You will now participate in an **acorn bread workshop** with archaeologist Ms. Felisbela Leite. Enjoy!



**INFO** Next to Devesa Park, there is a community Garden. It is the first of municipal initiative in the county and aims at introducing its community to the many benefits of collective gardening such as growing fresh produce, spending time outdoors and feeling physically connected to the Earth. Associations, schools, youth volunteer organizations and persons with reduced mobility are welcomed and entitled to a garden patch.



We hope you've enjoyed the activities and got to know a bit more about Vila Nova de Famalicão.

### COMMENT

*Did you like the activities?*

### SCORE

Task 1	___	
Task 2	___	
Task 3	___	
Task 4	___	
Task 5	___	
Task 6	___ + ___	
Task 7	___	
Task 8	___ + ___	Total ___/

### Group F

**Hello, everyone!**

We challenge you to go on an outdoor hunt that will allow you to explore some of our city's landmarks. One of the main goals of this activity is for you to mingle into the city's daily life and its dynamics, and to interact with locals.

There are 8 tasks and overall you can get a total of 20 points.

You will need a camera phone, a map, vouchers and a pen or a pencil... And above all team work and good spirits!!

Do not forget to email your photos to [icity1820@gmail.com](mailto:icity1820@gmail.com)!

**INFO** "Casa da Juventude" was inaugurated in September 2013. It was built to respond actively to the current needs of young people aged 12 to 35. Aiming at fulfilling the municipal Office for Youth policies, it has a set of different spaces and provides a variety of services, where young people are invited to meet, share dreams, ideas and experiences and undertake projects; hence nurturing entrepreneurship.



**TIP** You are at the “Casa da Juventude”. Find way to the Municipal Council.

**TASK 1** Can you build a human pyramid?



If you manage to entice a local to join you, you get 2 extra points. Take a photo of your human pyramid in front of the Municipal Council.



**TIP** Turn right to Camilo Castelo Branco Street and then go to Dr. Francisco Alves Street. Then turn left to Ernesto Carvalho Street and left again to Eixidos Cross Street and continue to Manuel Souttomaior Square. Nearby is “Rua Direita”.

**INFO** Our roots are strongly connected to Christianity. Many of the oldest Portuguese cities have a “Rua Direita” or High Street, that leads directly to the church. This street is considered the oldest in the city and although the original pavement was replaced, the houses facades weren’t.



**TASK 2** Find out where the Royal’s would sleep, whenever they came to our city. If necessary, seek help at “Casa da Cultura” to answer the question.

Which detail confirms that the royal family used to stay there?

**Answer:**

**TIP** Cross 25<sup>th</sup> April Avenue and go to Barão da Trovisqueira Street. Find a chocolate shop.

**INFO** “Sim Bombons” is chocolate shop. It is known for its homemade chocolate and gourmet products. Can you resist temptation?!



**TASK 3** Use your vouchers to get a chocolate candy. **Make sure you keep all 7 chocolate candy wrappers.**

**TIP** Find way to 9<sup>th</sup> April Square, a “red” square with a monument to honour the dead.

Even though this is a small city, Famalicão inhabitants are known for being brave. During World War I, a significant number of men were enlisted, and many died.

**TASK 4** Answer the question.

How many Famalicão citizens died fighting that war?

*Answer:*

**TASK 5** Take a picture of your group pretending to be soldiers just getting back from the battle field. You are alive!



**TIP** Near 9<sup>th</sup> April Square, you will find an old church.

**INFO** “Igreja Matriz”, or Mother Church, is a 16th century building. It has been extensively rebuilt over time, which has completely altered its original design.



**TIP** Take Saint Anthony Street and go to D. Maria II Square. You will find the Museum of Surrealism.

**NFO** The Cupertino de Miranda Foundation was founded following an initiative by Arthur Cupertino de Miranda (1892-1988) and his wife, and was inaugurated in 1972. Previously, this building belonged to a private institution of social welfare. Currently, it includes a museum, a library and an auditorium. The Museum of Surrealism, located along the tower, is lined with panels by Charters de Almeida, from the 2nd to the 7th floor.



**TASK 6** Answer the question. **Who designed this building?**

**Answer:**

**TIP** Find way to Adriano Pinto Basto Street and then turn right to Narciso Ferreira Avenue. Walk till you get to the second roundabout. You should be able to see a big pink housing complex.

**INFO** The Lameiras housing complex belongs to the parish of S. Tiago and Abbot of Vermoim and is made of 290 dwellings. This project also includes 30 stores and social facilities of the Association of Residents of Lameiras. The name Lameiras comes from the place where it was built, the old "Quinta das Lameiras", or the country estate of Lameiras.



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**Can you include of a couple kissing in the picture?**  
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**We hope you've enjoyed the activities and got to know a bit more about Vila Nova de Famalicão.**



## COMMENT

*Did you like the activities?*

## SCORE

Task 1 \_\_\_\_  
 Task 2 \_\_\_\_  
 Task 3 \_\_\_\_  
 Task 4 \_\_\_\_  
 Task 5 \_\_\_\_  
 Task 6 \_\_\_\_ + \_\_\_\_  
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### COMMENT

*Did you like the activities?*

### SCORE

Task 1 \_\_\_\_

Task 2 \_\_\_\_

Task 3 \_\_\_\_

Task 4 \_\_\_\_

Task 5 \_\_\_\_

Task 6 \_\_\_\_ + \_\_\_\_

Task 7 \_\_\_\_

Task 8 \_\_\_\_ + \_\_\_\_

**Total** \_\_\_\_/



## EXPLORING SCHOOL

### Discovering Gondifelos School and Its Activities **GROUP F**

**1**

You are in Sala +, a room dedicated to school activities: study, games, projects...

Go out. Go along the corridor. At the end of the corridor, turn right. Go down the stairs. Turn right next to classroom 12. Go out. Turn to the vegetable garden.

Plant some vegetables and trees.



**2**

Go into the school again, through the main entrance.

Head to our beautiful library.

Write some news about this activity (a few lines).

Record the news at the school radio. The radio is used by students to broadcast music and school news.



**3**

Go out.

Turn left and then turn left again. At the end of the corridor, turn right at the Auditorium. Enter ET room.

Enter the classroom and make the origami game according to the model.



**4**

Go out.

Enter the Laboratory, in the same corridor, dedicated to Arts and Science.

Do the activities related to Science and Chemistry.



**5**

Go out.

Turn right and enter the corridor in front of the Auditorium. At the end of the corridor, turn left. Go down the stairs. At the end of the corridor, enter the Activities classroom, a classroom where the Maths Club takes place, in front of classroom number 16.

Solve the problems.



**6**

Go out.

Turn right to the Gymnasium. This is where all the classes have their Physical Education lessons.

Dance.



**7**

Go out to the exterior playfield. This field is used by students to practise and play sports together.

Play badminton.

Return to Sala+.





## ACTIVITY ON ENERGY

**ENERGY:** it is the ability to do work. We use energy every day in many different ways. It is essential for our lives. The gas we use to make a cup of coffee for breakfast is energy, the petrol in the bus that brings us to school is energy, the electricity that we use to give us light is energy, the battery that powers our mobile phone is energy. But where does this energy come from?

### SOURCES OF ENERGY

Sources of energy are divided into 2 groups, Renewable energy and Non-renewable energy. Renewable energy is a source which can be replenished and is always available. It continues to be available for use by humans indefinitely

Non-renewable energy is a source which cannot be replenished and eventually it will be used up. It disappears after the use and can't be used again.

### ALTERNATIVE ENERGY

**WIND ENERGY** is a good example of renewable energy. It is the transformation of wind energy into electricity, using wind turbines. Wind turbines are normally grouped together in windy locations to form wind farms. Nowadays, many countries are developing wind energy, in fact the electricity produced by wind power is increased by more than 40% in recent years. This production only represents 1% of world-wide electricity use. The world's largest offshore wind turbines are in Great Britain. The turbines are 70 meters high and provide electricity for 3,000 houses.

### SOLAR ENERGY – Hot water solar panels

Solar energy is widely used today in many countries, many governments around the world are trying to encourage this alternative energy source. It comes from the sun. This energy will exist as long as the sun exists

**YOUR TASK:** choose a form of renewal energy (HYDROELECTRIC ENERGY, EOLIC ENERGY, PHOTOVOLTAIC ENERGY, BIOMASS ENERGY, TIDAL POWER, HYDROGEN ENERGY) and do some research about it and then report your findings to the class

**Exercise 1** - Fill in the grid by using the following words: oil, wind, solar, coal, natural gas, geothermal, ocean, biomass, nuclear, hydroelectric, tidal, wood

Renewable energy	Non-renewable energy

### Exercise 2 - Wind turbines

Advantages	Disadvantages

Ruins the landscape, injure birds, do not pollute the air, can be noisy, only work in windy countries, last a long time.

### Exercise 3 - Solar panels

Advantages	Disadvantages

Solar panels don't work at night, in winter there is less sunshine and so less energy, there are no fuel costs, it doesn't pollute, in cooler areas solar panels can't produce very hot water, it is safe, it is easy to use, the panels take up a lot of space

### Exercise 4 - Oil energy

Advantages	Disadvantages

Very efficient, more and more difficult to find new reserves, easy to transport, expensive, produces a lot of air pollution, relatively safe

## STREET SIGNS WEBQUEST

Do you know your traffic signs? You may think you don't need to know what these traffic signals and signs mean because many of them you don't see on a day to day basis. The truth is, not knowing these signs can put you or someone else in harm. How important are signs?

Say you are walking down the street, come to a cross walk, and have to cross the street to get where you want to go. How are you going to know where and when to cross? If there were no signs telling you, or the people in the cars driving by, then most likely someone is going to get hurt. It could be you, or it could be the person driving the car as they try to avoid hurting you. Nobody wants that!



Today, you will have to think about the Street signs you are going to place in our iCity. First, you need to get some useful information about them. With this webquest, we provide you with all you need to know about them.

Follow the instructions below and let's get started! **ENJOY!!!!**

Click on the link and read carefully. Discuss with your group.

1. <https://sites.google.com/site/safetysignswebquest3/introduction>

2. **Type of signs:**

- Danger warning signs
- Priority signs
- Prohibitory or restrictive signs
- Mandatory signs
- Special regulation signs
- Information, facilities, or service signs
- Direction, position, or indication signs

### Part 1:

The first thing you will need to look for when trying to understand what the sign is telling you is its **colour**. Go over the Sign colour chart and get familiar with Sign Colours.

Following this link, we will get you started. <http://www.trafficsign.us/signcolor.html>

### Part 2:

Once you think you have got what the colours stand for, You can start learning about the shapes. Go over the shapes of the different signs and what signs have those shapes.

Here's a Link to a chart of street sign shapes to help you out. [http://www.topeka.org/pdfs/sign\\_shapes.pdf](http://www.topeka.org/pdfs/sign_shapes.pdf)

### Part 3:

Ok, now that you know the color and shapes of the signs, let's see what the colors and shapes look like when they are put together; Regulatory, Warning, Marker Guide and Information, and Recreational and Cultural Interest signs sections at the Link below.

<http://www.trafficsign.us/index.html>

### Part 4:

Now that you have had a chance to go over the colors, shapes, meanings and actual appearances of the most common of the safety signs, please , follow the **next instructions**:

1st – Each group is going to design **3 different STREET SIGNS** You can choose colours which have not been used yet.

2nd- Discuss them with your group and try to draw them in paper.

3rd- Give two reasons why you have chosen each of them.

4th- Use **CANVA** to design them on line (feel free to choose colour, shape, etc...)

5th- Show results to the rest of the students. We will have them printed as **a final product** of this task.

Divided into groups, you will have to DESIGN YOUR OWN ONES. Think of the type of city we are working with ( in terms of population , sustainability, etc...) and try to choose proper ones for it. Use your imagination and try to make up new ones. Use your imagination!!

Each group will have to design three signs of the group which have been chosen at random. You will be asked three reasons why you have made up those signs and what are your objectives when placing them in the streets of our i-city.

**GROUP "TOLERANCE" will make up:**

- 1 danger sign
- 1 mandatory sign
- 1 information sign

**GROUP "RESPECT" will make up:**

- 1 priority sign
- 1 special regulation sign
- 1 direction sign

**GROUP "EMPATHY" will make up:**

- 1 prohibition sign.
- 1 warning sign
- 1 service sign

**GROUP "HONESTY" will make up:**

- 1 restrictive sign
- 1 warning sign
- 1 facility sign

**GROUP "FREEDOM" will make up:**

- 1 position sign
- 1 mandatory sign
- 1 warning sign

**GROUP "MODERATION" will make up:**

- 1 danger sign
- 1 prohibitory sign
- 1 service sign

**GROUP "EQUALITY" will make up:**

- 1 special regulation sign
- 1 position sign
- 1 priority sign

**GROUP "HUMANITY" will make:**

- 1 indication sign
- 1 danger sign
- 1 special regulation sign

**Types of signs:**

**1. Regulatory Signs** – Usually in black and white (but sometimes seen in red and white), these are the Rules of Road, as defined in the Motor Vehicle Act, (aka the law). These are the stop and do not enter signs – the ones which communicate the message with little or no text. You know them, you obey them, and we love them



**2. Warning Signs** – These signs are designed to call attention to potentially hazardous/dangerous conditions on or adjacent to a roadway. They say “HEY! WATCH OUT FOR THIS” in not so many words. Warning signs are yellow with black information.



**3. Guide Signs** – Show you the way home (or how to get away from it all) with route numbers, destinations, direction and distances as well as transportation and emergency services information displayed, usually on a green background with white writing.



**4. Information Signs** – These signs give you general information, such as points of interest, and geographical or cultural information. They tell you when to pull over for the perfect picture of your road trip, or where you can take a break and have a snack.



**5. Construction Signs** – Alert you to construction ahead and how it is impacting the road. They tell you to slow down and be aware of changes to normal traffic patterns. They are fluorescent orange with black information.



**6. Service and Attraction Signs** – Also in blue and white to complement our information signs, these signs tell you where you might find food, gas, lodging, boat launching areas, Sani-stations as well as tourist attractions, such as: zoos, gardens, museums, artisans , even theme parks!



**7. Supplemental Traffic Signs** – If our incredible catalogue of signs doesn't hold just the right sign for the situation, we have a backup catalogue which includes everything else – such as: scenic routes, wine routes, environmental awareness signs, adopt a highway signs and farmer's market signs – everything you need to know to make your next trip even better!





## Chapter 3 - SUGGESTIONS OF LESSON PLANS

### Lesson Plan - Topic: Provision of food to a growing, aging, changing population




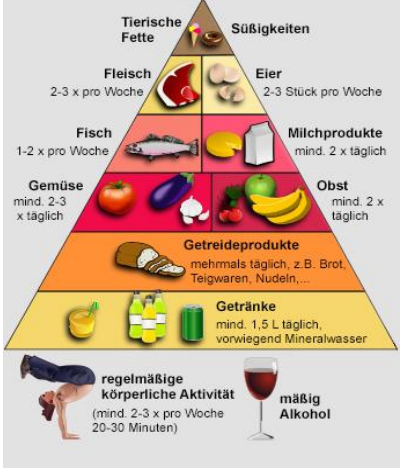
**Children's age:** 14-15

**Working time:** 50 minutes

**Lesson Objectives:**

1. to acquire information on food requirements according to ages
2. to identify food categories
3. to gain awareness of food producers around the world

**Expected Outcomes:** students will learn how to choose an appropriate diet according to various ages and how to plan any food requirements for an urban environment

A. Human ages and needs	B. Types of foods	C. Sources of food	Discover/ Apply/Create:
<p><b>1. The baby:</b></p>  <p>- juice, cereal, mashed vegetables, yoghurt.</p> <p><b>2. The child:</b></p>  <p>- foods that contain iron (lean meat, fish, green vegetables, spinach, lettuce, parsley,...); calcium and vitamin D (dairy); zinc (meat, fish, cereal,...) fluor (water).</p> <p><b>3. The teenager:</b></p>  <p>- dairy products, foods</p>	<p><b>The food pyramid</b></p>  <p><b>1. Cereal-beased food</b>, like bread, rice, pasta, cereal for breakfast. There are two types of cereal-beased foods: whole and processed. The whole cereal has not got the exterior of the grain and the germs removed. It is rich in carbohydrates, fibers, healthy fats, vitamins, minerals, vegetable enzymes, hormones and hundreds of phytochemicals.</p>	<p><b>Sources of food</b></p> <p><b>1. Cereal comes from:</b> The most important cereal producers in the world, in tones: 1. <u>China</u> 460.3532. <u>Bangladesh</u> 44.669 3. The USA 414.066 4. Germany 42.295 5. <u>India</u> 252.121 6. <u>Argentina</u> 41.961 7. <u>Russia</u> 80.495</p> <p><b>2. Fruit and vegetables come from:</b> <b>Bananas</b> come from Africa, Latin America and the Caribbean Islands. <b>Avocado</b> comes from tropical and Mediterranean climate (Mexico). <b>Watermelons</b></p>	<p><b>I. Analyse within your work group the information in column A and identify the ages and their food requirements.</b></p> <p><b>II. Identify and mention the food categories in the Food Pyramid in column B. Analyse within your work group these food categories and, by reading the text under the Food Pyramid, discover the substances called nutrients which the body extracts from the foods.</b></p> <p><b>III. Imagine you are a</b></p>

containing iron and varried types of food.

#### 4. The adult:

- the ypes of food varry depending on the occupation.

Physycal work increases the need for consistent foods.

#### 5. The elderly:



-complex carbohydrates (whole grains, vegetables), unsaturated fats (fish, dairy products, sunflower and olive oil), supplements of vitamins B12, D, E, calcium, zinc.

Source:

<https://www.cdt-babes.ro/articole/alimentatia-pe-grupe-de-varsta.php>

**In conclusion: foods are specific to each age! Combining food in an appropriate way is called a diet.**

**2. Vegetables.** They are divided into five sub-groups, based on the content in nutrients, and identifiable through colour: vegetables with dark green leaves, rich in calcium (lettuce, spinach, broccoli, mustard leaves, collard greens), the orange and red ones, rich in beta-caroten (carrots, tomatoes, sweet potatoes, red peppers), legumes, rich in fibers (dried beans, peas, lentil, chickpeas), starch-based vegetables, rich in starch, which partially turns into sugar once they are processed (potatoes, corn, green peas), and a heterogeneous category including mushrooms, avocado, onion, cucumbers, calliflower, celery, cabbage, eggplants, beet, etc.

**3. Fruit.** Any type of fruit (fresh, boiled, frozen, etc.), and juices 100% made of fruit, although these do not include the fibers offered by fruit. Fruit is an important source of vitamins and minerals, essential to health.

**4. Dairy** – milksoft or hard cheeses, yoghurt, kefir, soy drinks , milk-based deserts.

**5. Proteine-based foods** – meat (pork, veal, chicken and organs), eggs, fish and shell fish, nuts, seeds and soy.

**6. Oils.** Liquid fats (various oils), hard fats (coconut and palm oil, butter, lard) and foods rich in fats such as nuts, olives, avocado and fatty fish. This group is very important because fats provide important nutrients such as vitamins and fatty acids, omega-3. They allow the body to absorb the vitamis soluble in fats (A, D, E, K), protect the organs and help regulate the body temperature.

Source:

<http://accentmontreal.com/grupele-de-alimente-si-clasificarea-nutrientilor/>

come from Asia, but they got adjusted to all the warm climates in the world.

**Sweet potatoes**, from Central or South Asia.

**The orange** comes from Brasil, which is the world's largest producer (30% of the world's crops). **The cucumber** originated in India, and got adopted by China which currently covers almost 77% of the world production.

Source:

<https://sloop.ro/harta-fructelor-si-legumelor-de-unde-provin-bunatatile-pe-care-le-consumi-zi-de-zi/> și Wikipedia

**By using the Internet, dicover the countries which can provide meat and fish! What other types of food would you offer to elderly people!?**

**team within the City Hall of a city with an aging population. Draw a pyramid on the flip chart which should include foods useful to the elderly and present your findings to the class. By reading the text in column C, mention the way you procure these foods so that they can be provided in a fresh manner at all times (where you bring them from, by what means of transport, how you deliver them).**

## Lesson Plan - Topic: Sources and resources of energy for the human environment

Children's age: 14-15

Working time: 50 minutes

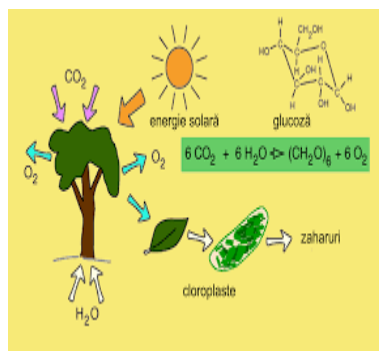
### Lesson Objectives:

1. to acquire information on the role of photosynthesis
2. to identify sources of green energy
3. to gain awareness of the importance of environmentally-friendly types of energy

**Expected Outcomes:** students will learn how to extract information about sources of energy and how to select environmentally-friendly types of energy for an urban environment

### Photosynthesis

A.



C.

The photosynthesis is the process through which plants, bacteria and animals transform the solar energy in order to produce nutrients in the form of sugar.

In essence, the photosynthesis consists in plants using the carbon dioxide and water in order to produce glucose and oxygen.

**Carbon dioxide + water = glucose + oxygen**

Source:

<https://www.scientia.ro/biologie/biologie/851-cum-functioneaza-fotosinteza.html>

The process takes place at leaf or other green organ level in structures called chloroplasts which contain substances called pigments, among the best-known being the chloroplasts, which absorb the light and turn it into chemical energy used for their functioning by live organisms.

### Activity stages:

#### Discover/Compare/Apply

I.a. Look at the pictures closely and write a sentence about the information you can extract, based on your previous knowledge.

I.b. Within your group, select one sentence and complete it with information from the other sentences. The final sentence will be presented by a group representative.

II. Carefully analyse pictures A and B and tell your group mates what processes are depicted! A group representative will present the findings to the class.

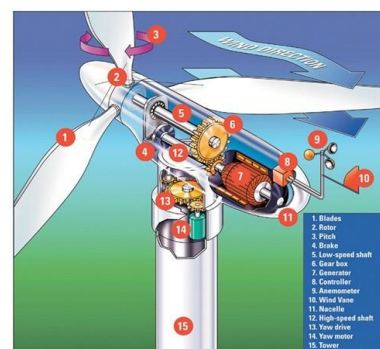
III.a. Read Carefully texts C and D. Write on the flipchart the components of the structures involved in developing the two processes depicted in texts C and D.

IV. Within your group, analyse texts C and D and discover the uses of the forms of energy mentioned. On the flipchart, associate the forms of energy discovered to the structures already depicted and create the dwelling of the future, which should make use of these types of energy. Then present your product!

V. Discover on the Internet other processes through which one can access environmentally-friendly types of energy! Present to the class and bring arguments to why such types of energy should be used!

### Sources of green energy/Wind energy

B.



D.

The wind turbines are products that turn the kinetic wind energy into mechanical energy, and the mechanical energy created is turned into electrical energy. Electrical energy is produced by a system with the help of a charging regulator. Then it is stored in various batteries. The group of batteries is then connected to an inverter, which turns the direct current obtained in the turbine into alternative current.

Source: <https://blog.romstal.ro/ce-sunt-turbinele-eoliene-si-cum-functioneaza/>

## Lesson Plan - Topic: Water and the human body

**Children's age:** 14-15

**Working time:** 50 minutes

**Lesson Objectives:**

1. to identify the types of food necessary for bringing water into the human body
2. to identify the role of water for the human body

**STAGES:**

**1. Organisational moment** - The students are set in groups of four and receive the materials. They designate the group leaders who will hold the presentations.

**2. Topic presentation** – The teacher stresses the importance of water for the well-functioning of the human body.

**“... Did you know that the physiologist Claude Bernard is the first to have tried, in the previous century, to calculate the proportion of water in the human body? He weighed the Egyptian mummies, which were completely dehydrated. Then he compared the weight of these mummies to the weight of living people of the same height and with the same physical traits. Through this procedure, he determined that water represents 90% of the human body. Later on, more precise research has been done, which revealed not only the amount of water that there is in the body, but also how much water tissues contain. On average, a human being who weighs 65 kilograms may be sure that approximately 41 kilograms (63 – 70%) of the body is water”**

The teacher writes on the board the topic: “Water in the human body”

**3. The teacher mentions the types of activities the students are about to carry out:** watching a film, defining the concepts, identifying types of foods with an increased amount of water, applying the concepts by making a poster, presenting the posters to the class and pointing out the messages depicted by the posters.

**4. The activities:**

- Reading the given text in order to discover the content of water in various foods.
- Watching a film on getting drinkable water; the film was made at the Water Treatment Station and presents the characteristics of the drinkable water.
- Carrying out the tasks in the Activity Worksheet and making the posters.
- Presenting the posters and the message depicted in the poster.

**5. Evaluation:** The students grant scores for the posters and vote for their favourite.

**6. Expected Outcomes:** better knowledge of the relationship between health and the presence of the water in the human body; an increase in research skills through accessing various sources concerning the importance of water for the human body and on the resources of drinkable water; an increase in the ability to cooperate in order to accomplish tasks; development of creative and aesthetic spirit.

## WORKSHEET

### Read the following text:

“Water is introduced into the body through drinks and foods. Apart from the water that we drink, our body also forms water through various chemical changes. Usually, fruit and vegetables contain more than 90% water, and the foods we consider to be dry (bread, meat) contain 60 – 85% water. Water reaches the stomach and the intestines, then it travels to the blood and to the entire body and it is retained by organs. The water reserve of the body lies especially in the muscles and the skin, due to their volume. Normally, the human body needs a daily intake of 2 ½ liters, but sometimes this need may increase to tens of liters. The question is: why is it necessary to change the water? It goes without saying that, once we eliminate it, we should also put it back. But why do we eliminate it? ... Water is mainly eliminated from the body through the kidneys (1 ½ liters/day). The kidneys play a major role, as they extract from the blood all the useless or damaging substances, which the blood gathered from the organs. In order to throw out these substances, the body needs water to dilute them. The rest of the water is eliminated through the lungs, as vapors (about 400 cm<sup>2</sup>), through intestines (100 – 200 cm<sup>2</sup>) and through skin (500 cm<sup>2</sup>). During an increased physical activity, the quantity of water eliminated through the lungs increases, due to the accelerated breath. The people working in high temperatures may lose up to 6 – 10 liters of water. A lot of people have asked themselves why they feel thirsty. Thirst is the signal for the lack of water in the body. The cells, the smallest parts in the body, run short of water. This thing happens especially in summer. The cells announce the brain about the lack of water. The brain processes the information and creates the sensation of thirst which forces us to drink water. How long can a living being survive without water? Some species, such as moths or snakes, have an increased resistance to water deprivation. Camels have good resistance to dehydration. The human body only survives for 7 days! Without food, the human body can survive for 40 days!”

### Based on the text listed above, accomplish the following tasks:

**1.a. Discover in the text the ways of acquiring water by the body. Write them on the flipchart.**

**1.b. Discover in the text foods that bring water to the body. Write them on the flipchart.**

Based on previous experience, discover other sources of water than the ones mentioned in the text.

1.c. Write a short text on the flipchart revealing the necessity for a hydration programme as a result of the thirst sensation generated by the water waste.

1.d. By analysing the text, find out how much water the human body consumes within normal conditions and during heavy work.

2. Create a written or drawn message containing the following words: need of water, thirst, blue gold, cells, brain, health.



## Lesson Plan - Topic: Designing a logo

**Children's age:** 14-16

**Working time:** 50 minutes

**Lesson Objectives:**

1. to acquire information on the way logos are designed
2. to identify the traits of a good logo
3. to gain the skills of designing a logo

**Expected Outcomes:** students will learn how to design a logo taking into account particular traits

**STAGES:**

**1. The students answer the question "What do logos do?"**

- Increase awareness of a business or products
- Advertise a business or products
- Link to the nature of the company or products
- Give a value to a business or products

**2. "The teacher explains what makes a good logo."**

- well considered Typography
- well considered Colours
- well considered simplistic shapes
- well considered layout/composition

**3. Now let's look at some of these areas:**

**A. Typography**

Typography is the *art of letterings*.

You could say a *choice of fonts*.

Different lettering styles give people different feelings or appeal to certain people.

**Comic sans is clear and easy to read.**

**Bauhaus is contemporary and designer.**

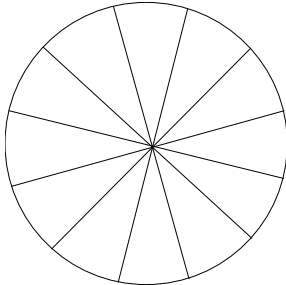
**Jokerman is fun and appeals to children.**

*Brush script is sophisticated and appeals to adults.*

## B. Colour

There is a theory that some colours work better together than others.

A circle split into 12 pieces is called a colour wheel.

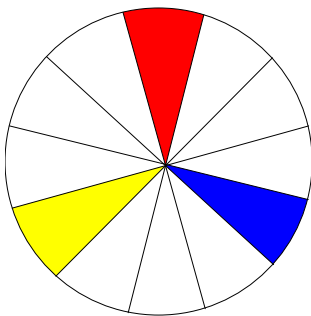


### Primary colours

The primary colours are red, blue and yellow.

All the colours in the world are made up of use these colours.

Black and white can be added to give tone.

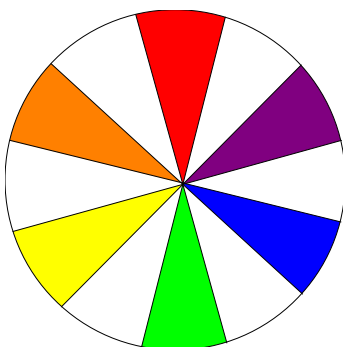


### Secondary colours

Red and blue make purple.

Red and yellow make orange.

Blue and yellow make green.



### Tertiary Colours

All the colours in-between are tertiary colours.

They are mixtures of primary and secondary colours.

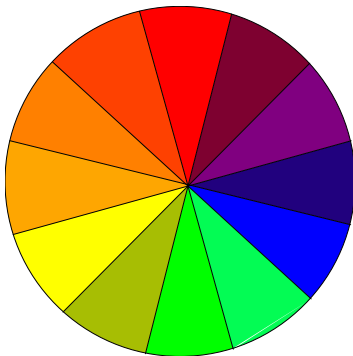
redish oranges

orangy reds

yellowish oranges

bluey purples

purply blues



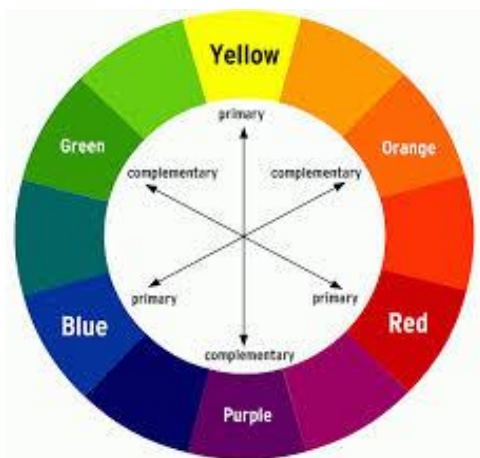
### Complimentary and harmonious

Complimentary colours “compliment” each other.

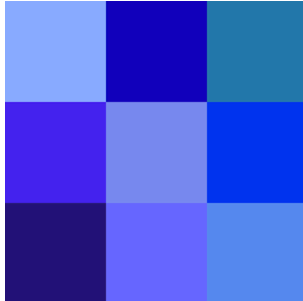
These are opposite on the colour wheel.

Harmonious colours work in “harmony” with each other.

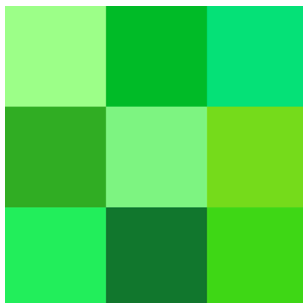
These sit next to each other on the colour wheel



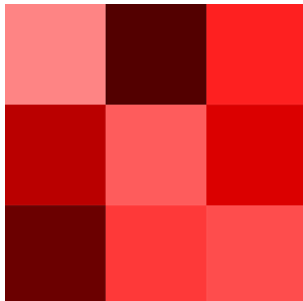
### C. Colours and their associations



- Cold
- Masculine
- Water
- Technology



- Calming
- Environmental
- Genderless
- Go, Start, Begin
- Correct



- Hot
- Anger
- Stop, End, Prohibit
- Wrong

### D. TASK: Design a logo for the Erasmus+ project “iCity”.

## Lesson Plan - Topic: Influencers and influences in the media

**Children's age:** 14-16

**Working time:** 50 minutes

**Lesson Objectives:**

1. to become aware of the consequences of online activities
2. to define the concept of influencer
3. to identify the categories of influencers
4. to distinguish between positive and negative impacts
5. to express a point of view by bringing arguments on a particular topic

**Expected Outcomes:** students will distinguish between various types of influences in the online environment.

**STAGES:**

**1. Warm-up activity - "The story of my life"**

You have just signed a contract with a prestigious publishing house who asked you to write your autobiography. Your agent is anxious to have your book published. He decided to help you with some questions.

- a. First, take a sheet of paper and fold it in half, then in half again, to make up a book.
- b. Choose the title of a famous song as the title of your book. Write this title on the book cover.
- c. On the second page, write the table of contents for your book:
  - the name of the place where you were born
  - a description of your first school
  - the number of years you spent at the first school
  - draw your family on the third page
- d. On the back cover, draw what you are planning to do when you graduate.

When all the books are completed, the students will tell their stories while using their books as prompts.

**2. Connecting to previous information – the technique "think – work in pairs - communicate"**

Work individually for 3 minutes. Write the word INFLUENCER in the middle of an empty sheet of paper and circle it. The teacher writes the same key-word on the board. Write all the words/phrases that come into mind connected to the word given. Circle them and link them through a line to the word given, or to other words you have come up with. When writing, keep in mind the following rules:

- ✓ Write down all the ideas that come to mind.

- ✓ Do not make appreciations on the ideas you have produced.
- ✓ Do not limit the number of ideas or of the connections among them.
- ✓ Do not stop writing until the time expires.

Present your result to your desk mate and fill in your grid with his/her ideas.

### 3. Organisation of previous knowledge in a cluster

The teacher takes one piece of information from each student and writes it on the board. Each pair provides one single item which has not been introduced. Then, the students need to think about the answer to the question “Can influencers influence your personality?”.

### 4. Raising awareness

#### Debate

The teacher announces the topic and writes it on the board.

The students are divided into two groups. Each group needs to watch a video of an influencer. After watching the video, each team will present three ideas depicted in the presentations. The teacher points out that there is no such thing as complete positive influence. Youtubers/vloggers post things in order to gain as many followers as possible.

Group 1 – <https://www.youtube.com/watch?v=W2p4OD5c9R0>

Group 2 – [https://www.youtube.com/watch?v=qy\\_-MV0hvbo](https://www.youtube.com/watch?v=qy_-MV0hvbo)

The definition of the concept “influencer” is provided. (An influencer is a person who, by their actions and statements, manages to influence the decisions of others through the message they convey.) - <https://www.youtube.com/watch?v=D5mejkiTla0>

#### Role play

The students are divided into groups and pretend to become influencers for one day. They have to come up with a campaign bearing the title “Stay @ school”. Each group needs to produce a video in which they advocate for attending school. The end-up products are presented to the entire class. Then, they vote for the best team of influencers.

According to a study carried out by StarcomMediaVest Group, together with Cristian Manafu, influencers belong to three categories:

1. professionals
2. people like us / regular people
3. celebrities

Based on the role of each type of influencer, one can create specific communicative objectives. For example:

- to educate consumers, to increase credibility or product performances, communication through **professionals** is recommended.
- if the desired goal is to create an emotional connection, education or relevance of a product, the category **people like us** is recommended.



- if the aim is an increase in popularity, a premium or an aspiring image, the best option is to include a **celebrity** in the campaign.

## 5. Reflection

There will be a debate of the type “the discussion network”. The topic is “Can influencers influence your personality?”.

- ❖ The students work in pairs and make up the network. They look for three arguments for the affirmative answer and for three arguments for the negative answer. Each pair talks to a different pair – they reveal their arguments and write down the ones of other pairs.
- ❖ The students reflect on the arguments they have written and each student takes up a for or against position. The students are split into three major groups – for, against and indecisive.
- ❖ A student in each group is asked to express their position and to bring arguments. Then, the members of the three groups contradict the opposing arguments while providing reasons for their beliefs. The students who become convinced of opposing arguments may change groups. After 10 minutes, the leader of each group states their group’s conclusion.

## 6. Extension

The students make a pole among their colleagues. The following questions are asked:

- ✓ What does an influencer mean to you?
- ✓ Do you often watch, through various online media channels, people whom you may consider influencers?
- ✓ Who are the influencers that you watch?
- ✓ What are the topics these influencers approach?
- ✓ Mention two qualities an influencer should have.
- ✓ Do you think you could become an influencer to your generation?
- ✓ What topics would you approach?
- ✓ Do you think influencers can shape your personality?

## Lesson Plan - Topic: The Medieval City

**Children's age:** 14-16

**Working time:** 50 minutes

**Lesson Objectives:**

1. to become aware of the way medieval cities were organised
2. to raise awareness of the social structure in medieval cities
3. to develop research skills through study cases

**Expected Outcomes:** students will be able to produce study cases through research and cooperation.

**STAGES:**

**1. The teacher stresses the importance of medieval cities in the political, economical, social, cultural and religious life and points out the origin of medieval cities.**

Most Roman cities survived and knew a revival during Middle Ages: Paris, Rome, Koln, Alba Iulia. They were placed at the crossroads of major commercial routes or in the vicinity of castles or monasteries. At first, medieval cities were under the domination of a senior, only to become free at a later point, either peacefully or through violence. In some cities, the inhabitants formed a commune and led their own city. They elected a Council made up of 12 representatives.

Social categories:

- the patricians (the rich) – who provided the representatives for the City Council
- the merchants, the doctors, the priests, the teachers, the pharmacists, etc
- the poor

The merchants were grouped according to their trades and protected their interests and organised their activity through these associations.

The development of medieval cities led to a new type of social organisation, the bourgeoisie. Cities like Venice or Genoa dominated the commerce on the Black Sea and the Mediterranean Sea.

**2. The students carry out a study case on the medieval city of Constantinople.**

The city of Constantinople was founded by Constantin the Great in the year 330.

It is the current city called Istanbul.

In medieval times, it was the political, administrative, economical, religious and cultural centre of the Roman Empire.

This urban settlement continued to be prosperous during Middle Ages.

It was a very large city (it reached a population of one million inhabitants in the 6<sup>th</sup> century).

It was very well organised, with:

large streets

stone or brick houses

large markets

a supply system

running water

public baths

impressive monuments

## WEBLIOGRAPHY:

1. <https://www.cso.ie/en/csolatestnews/presspages/2017/census2016summaryresults-part1/>
2. [www.housingeurope.eu/file/614/download](http://www.housingeurope.eu/file/614/download)
3. [https://www.ageing.ox.ac.uk/files/Future\\_of\\_Ageing\\_Report.pdf](https://www.ageing.ox.ac.uk/files/Future_of_Ageing_Report.pdf)
4. <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p95-16-1.pdf>
5. <https://www.oecd.org/eco/surveys/Portugal-2017-OECD-economic-survey-overview.pdf>
6. [http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA\\_2017\\_Highlights.pdf](http://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA_2017_Highlights.pdf)
7. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6338/1776873.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/6338/1776873.pdf)
8. <https://www.csh.org/wp-content/uploads/2017/11/Profile-Y3-Aging-10.31Update.pdf>
9. [https://www.ahuri.edu.au/\\_\\_data/assets/pdf\\_file/0021/3099/AHURI\\_Research\\_Paper\\_Older\\_persons\\_in\\_public\\_housing.pdf](https://www.ahuri.edu.au/__data/assets/pdf_file/0021/3099/AHURI_Research_Paper_Older_persons_in_public_housing.pdf)
10. [https://england.shelter.org.uk/\\_\\_data/assets/pdf\\_file/0013/41440/factsheet\\_older\\_people\\_and\\_housing\\_may\\_2007.pdf](https://england.shelter.org.uk/__data/assets/pdf_file/0013/41440/factsheet_older_people_and_housing_may_2007.pdf)
11. [https://esa.un.org/unpd/wpp/publications/files/wpp2017\\_keyfindings.pdf](https://esa.un.org/unpd/wpp/publications/files/wpp2017_keyfindings.pdf)  
<https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html> <https://ourworldindata.org/future-population-growth>  
<https://wad.jrc.ec.europa.eu/populationdistribution>
12. <https://www.renewableenergyworld.com/geothermal-energy/tech.html>
13. <https://www.nationalgeographic.com/environment/global-warming/geothermal-energy/>
14. <https://www.latimes.com/local/la-me-geothermal-20141020-story.html>
15. <https://www.whatson.is/hottest-nation-earth-icelands-geothermal-power/>
16. <http://www.thinkgeoenergy.com/geothermal-plants-on-azores-meets-large-part-of-electricity-demand/>
17. <https://www.bettermeetsreality.com/geothermal-energy-pros-cons-now-future/>
18. <https://energyinformative.org/geothermal-energy-pros-and-cons/>
19. <https://www.giz.ro>
20. <https://www.imopedia.ro>
21. <https://www.insse.ro>;
22. <https://www.primăriabrăila.ro>
23. <https://www.adevăruł.ro>;
24. <https://www.montepio.org/ei/ultimas/gestao-diaria-ultimas/cepac-o-amparo-de->

- quem-chega-a-portugal-sem-trabalho/
25. <https://www.acm.gov.pt/pt/acm>
  26. <https://www.acm.gov.pt/pt/-/cnai-centro-nacional-de-apoio-ao-imigrante>
  27. <http://www.refugiados.pt/>
  28. <http://www.jrsportugal.pt/2660-2/>
  29. <http://www.ecclesia.pt/cnjp/>
  30. <http://aciportugal.org/project/colaboracao-com-a-cavitp-comissao-de-apoio-as-vitimas-de-trafico-de-pessoas/>
  31. <https://www.portaldascomunidades.mne.pt/pt/gabinete-de-apoio-ao-emigrante-gae>
  32. <https://www.imvf.org/>
  33. <http://www.jrsportugal.pt/quem-somos/>
  34. [https://pt.wikipedia.org/wiki/Caritas\\_Portugal](https://pt.wikipedia.org/wiki/Caritas_Portugal)
  35. <https://espiritanos.pt/obra-catolica-portuguesa-das-migracoes/>
  36. [https://eacea.ec.europa.eu/national-policies/eurydice/content/portugal\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/portugal_en)
  37. <http://projectbritain.com/subjects.html>
  38. [https://en.wikipedia.org/wiki/Citizenship\\_education\\_\(subject\)](https://en.wikipedia.org/wiki/Citizenship_education_(subject))
  39. <https://www.angloinfo.com/how-to/uk/family/schooling-education/school-holidays>
  40. [https://en.wikipedia.org/wiki/English\\_school\\_holidays](https://en.wikipedia.org/wiki/English_school_holidays)
  41. <https://www.businessinsider.com/why-america-needs-longer-school-days-2013-9>
  42. <https://www.angloinfo.com/how-to/uk/family/schooling-education/school-holidays>
  43. <https://www.prospects.ac.uk/jobs-and-work-experience/job-sectors/teacher-training-and-education/jobs-in-education>
  44. [https://eacea.ec.europa.eu/national-policies/eurydice/content/other-education-staff-or-staff-working-schools-78\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/other-education-staff-or-staff-working-schools-78_en)
  45. <https://www.angloinfo.com/how-to/uk/family/schooling-education/special-needs-education>
  46. <https://pbwslaw.com/special-needs-children-rights/>
  47. <https://www.quora.com/What-is-the-importance-of-special-education>
  48. <https://education.findlaw.com/special-education-and-disabilities/an-overview-of-special-ed-law.html>
  49. [https://simple.wikipedia.org/wiki/Inclusive\\_education](https://simple.wikipedia.org/wiki/Inclusive_education)
  50. [https://en.wikipedia.org/wiki/Special\\_education\\_in\\_the\\_United\\_Kingdom](https://en.wikipedia.org/wiki/Special_education_in_the_United_Kingdom)
  51. <https://www.angloinfo.com/how-to/portugal/family/schooling-education/special-needs-schools>
  52. [https://www.internationalstudent.com/study\\_uk/education\\_system/](https://www.internationalstudent.com/study_uk/education_system/)
  53. <https://www.educations.com/study-guides/europe/study-in-portugal/education-system-7811>
  54. <https://www.euroguidance.eu/guidance-system-in-portugal>

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