This assessment project has been carefully designed for a group of 5<sup>th</sup> grade for the CLIL subject of Social Sciences. In this unit students will learn about the main population-related issues and concepts. They will use the English language as a vehicle to express what they are learning in this unit. As it is widely explained in the chart below, I will start by gathering the pre-knowledge my students have about this topic. Questions like the following ones will be asked to them:

Questions	Student A	Student B
What is population?		
How many people are there in Madrid?		
Do you know what a pyramid graph is?		
What are natural changes?		
Why do people emigrate from one place to another?		

I will gather the pre-knowledge of my students by developing a peer-assessment. They will work in pairs. Each student will have a peerassessment sheet as it can be seen above. They will write the name of the classmate they are assessing the pre-knowledge and then they will give me the paper so I can analyse how much my students know about this topic. It is important to involve the students in the learning process, for that reason I will start this unit of work by doing this activity.

I will provide now a detailed chart in which is fully explained all the contents, assessment criteria and learning outcomes of this didactic unit. Formative assessment has been taken into account, apart from a final assessment with an exam. Checklists to assess direct observation in each session will be used. I have included them after the chart. In addition, audio-visual files through the use of a wide range of websites have been included to foster the motivation of my students. I have also bear in mind the multiple intelligences of Howard Gardner. For the visualspatial students, I have designed an activity in which they have to draw a pyramid graph of their city. A real example has been included below.

AREA CONTENTS	ASSESSMENT CRITERIA	LEARNING OUTCOMES
Social Sciences - Population change: birt deaths, migration. - Representing population - Population groups. - The population of Spain - The population of Europ	demography, total population, population density and fertility rate and understand how they are calculated. - Interpret a population pyramid and	<ul> <li>related to the study of population and apply them to basic population data.</li> <li>Identify the population of an area or country and explain the main factors which cause population variations.</li> <li>Interpret information form a population pyramid and other graphs and charts used to represent population data.</li> <li>Describe and compare the main characteristics of</li> </ul>
METHODOLOGY		

Adequate and motivating activities in each session.

Reinforcement and extension worksheets.

Make use of the new technologies (computer and interactive digital board) to look up for information and play interactive activities.

Group and pair activities.

Project: Make a pyramid graph about Fuenlabrada population (the city in which this school is located)

TIMING , SESSIONS AND FORMATIVE ASSESSMENT

#### 1º session: What is population?

- To ensure that language doesn't impede my students understanding of the starting point of the unit I will project different pictures of people in the digital board so they will understand we are going to talk about population. I will show them different group of population and we will discuss what we see on the digital board.
- As I have mentioned before, it is essential to know their pre-knowledge about it. It is important to know the starting point of our students. They will do peer-assessment using the chart I have developed previously. After talking about this issue we will give students a definition for population and we will research the population of some major cities. This first introductory session will be carried out in the computer room so students have access to the Internet. Students will click in the following link: <a href="http://www.prb.org/Publications/Datasheets/2013/2013-world-population-data-sheet/world-map.aspx#map/world/population/2013">http://www.prb.org/Publications/Datasheets/2013/2013-world-population-data-sheet/world-map.aspx#map/world/population/2013</a> and in a sheet of paper they will write down the population of some important countries.

#### 2º and 3º session: why does population change?

- In this session students will learn to identify factors which contribute to population change and understand how to calculate the fertility rate of an area. They will learn concepts such as immigrants, emigrants, migration, decrease, increase, grow, fertility rate and average. After explaining all this concepts they will complete a reinforcement worksheet to check understanding. They will carry out peer assessment to check this worksheet. Then the teacher will tell them the correct answers.
- After explaining what fertility rate is, we will calculate the fertility rate in the class. They will do this activity in their notebook. (A same activity will appear in the final exam, so my students will know how to do it because we have practised it in this session) After that, in pairs they will research the fertility rate of certain countries. Each pair will have different countries and after the research they will draw conclusions in small groups. This is the web page they will use for their research: <a href="https://www.cia.gov/library/publications/the-world-factbook/fields/2127.html">https://www.cia.gov/library/publications/the-world-factbook/fields/2127.html</a>

#### 4º session: How do we represent population?

 In this session students will learn to identify different ways of representing population. We will pay special attention to pyramid graphs. Furthermore they will learn concepts such as age group, bar chart, female, male, gender, pyramid graph, percentages, top, middle and wider. After the explanation, students in groups of 4 will describe different pyramid graphs. According to what have been explained, they will have to analyse if the population of these areas is increasing or decreasing. After their research, students will put in common their conclusion with the rest of the class. This is the web page students will use to carry out their research: <a href="https://www.populationpyramid.net/">https://www.populationpyramid.net/</a>

#### 5º session: Fuenlabrada population.

• In this session students will analyse a real pyramid graph about their city, Fuenlabrada. I will give them a sheet of paper with real information about the population in their city and they will have to complete it. They will carry out peer assessment to check this worksheet. (Peer assessment paper provided below). After that I will give them graph paper and they will have to draw their own pyramid graph about Fuenlabrada population. This activity is really useful to foster the visual-spatial intelligence. A real example of a pyramid graph has been included below.

#### 6º session: Population of Spain

• In this session students will examine basic population data for Spain. They will locate the most densely populated areas on a map of Spain and identify the reasons for variations in population densities. They will learn concept such as coastal, high, unemployment, rural and square kilometre. After explaining all the contents objectives, students will go to the computer room to develop a research in groups. They will google this web page: <a href="http://countrymeters.info/en/Spain">http://countrymeters.info/en/Spain</a> and they will have to find out different issues about the population of Spain, for example: number of births this year, number of deaths, number of immigrants, Spanish age structure, life expectancy, etc. I will provide my students with strategies to help them in the understanding of the language and content. For example chart with information, graphs, etc.

#### 7º and 8º sessions: Population of Europe

• In this session students will identify basic population data for the European Union. They will need to identify the most densely populated cities in Europe and do a research about it. They will learn concepts such as average age, ethnic groups, and the name of the different countries which belong to the European Union.

• After explaining all the content objectives we will divide the class in groups of three students. Each group will have to make a poster about one country in the European Union. In the poster they will have to write information about the country, its flag, information about the population, fertility rate, population density, etc. Students will have two sessions to finish their poster. After that they will explain it and the poster will be displayed in the class. This is the web page they will use for their research: <a href="http://www.ducksters.com/geography/europe.php">http://www.ducksters.com/geography/europe.php</a>

#### 9º Session: Let's revise session

- In this session we will revise the most important contents of the unit:
  - Important definitions as population, immigrants, emigrants, fertility rate, etc.
  - Ways of representing population.
  - The different groups of population.
  - Population of Spain
  - Population of Europe.

In order to revise in a funny way and break from the traditional classroom activities, we will play "Kahoot". This game is commonly used to review students' knowledge and also for formative assessment. We will carry out this activity in the computer room. Each student has to answer to multiple choice questions that will be displayed on the screen of the digital board.

#### 10º Session: Written exam

The exam is provided below. It must be said that all the activities that appear in the exam have been done during the whole didactic unit in class.

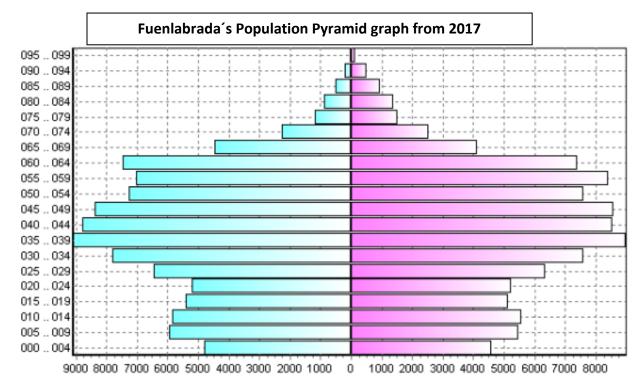
Tools	Description	Timing and regularity	Grade percentage
Direct observation	I will gather information of students while they are carrying out the activities, during the correction of homework, while they are doing group work or pair work and while they are working individually. Students must have a positive attitude towards learning and respect towards their classmates and teacher. <b>Checklist provided below.</b>	Every day	10%
Exams and adapted exams for children with learning problems or special needs.	Children with educational needs that have not significant adaptation have a test adapted to their needs. The activities in the exam will be very similar as the activities we have done in class during the whole unit. In the exam there are some activities like multiple choices and matching which reduce the linguistic (L2) demand.	One exam in each didactic unit	60%
Involvement in the different activities in the classroom and homework.	Assess the level of involvement in the subject through the performance of their duties and their participation in the classroom. Direct observation. <b>Checklist provided below.</b>	Every day	20%
Cleanliness and used of the notebook.	Evaluate cleanliness and order in the notebook. Check if the student follow the rules of the notebook (red pen for the title and blue pen for the activities)	Revise the notebook at the end of each didactic unit.	10%

#### Webpages used in this didactic unit

- http://www.prb.org/Publications/Datasheets/2013/2013-world-population-data-sheet/world-map.aspx#map/world/population/2013
- https://www.cia.gov/library/publications/the-world-factbook/fields/2127.html
- <a href="https://www.populationpyramid.net/">https://www.populationpyramid.net/</a>
- <u>http://countrymeters.info/en/Spain</u>
- <u>http://www.ducksters.com/geography/europ.php</u>

#### Session 5. Worksheet, Peer assessment sheet and pyramid graph.

**1.** Look at the pyramid graph and answer the questions.

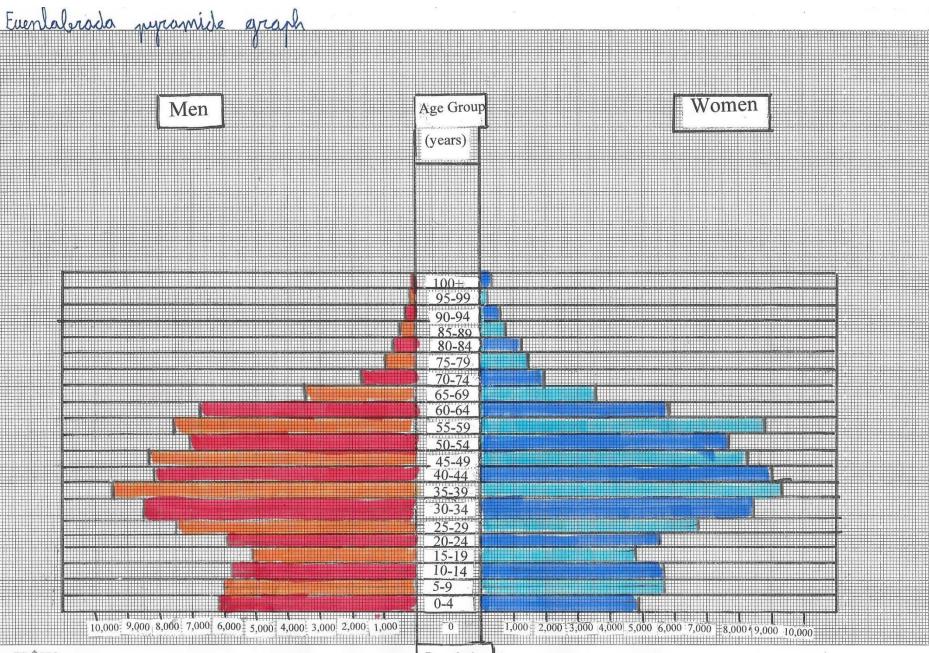


- What does this pyramid graph represent?
- What do the blue bars on the left represent? What do the pink bars on the right represent?
- Which age group has the highest population?
- Which age group has the lowest population?
- Look at the age group 25-29, were there more male of female citizens of that age group in Fuenlabrada in 2017?
- Where is the pyramid wider: at the top, at the bottom or in the middle? What does it mean?

Questions	sents. st population.	
	YES	NO
My classmate knows what's the meaning of the blue and pink bars		
My classmate knows what this pyramid graph represents.		
My classmate knows which age group has the highest population.		
My classmate knows which age group has the lowest population.		
My classmate knows how to interpret this pyramid.		

Draw a pyramid chart with the following information:

Age group	Male	Female
000 - 004	4.798	4.581
005 - 009	5.970	5.484
010 - 014	5.847	5.558
015 - 019	5.413	5.132
020 - 024	5.206	5.240
025 - 029	6.447	6.350
030 - 034	7.835	7.594
035 - 039	9.088	8.999
040 - 044	8.785	8.529
045 - 049	8.389	8.583
050 - 054	7.267	7.614
055 - 059	7.028	8.425
060 - 064	7.462	7.393
065 - 069	4.439	4.117
070 - 074	2.244	2.530
075 - 079	1.182	1.530
080 - 084	871	1.383
085 - 089	506	930
090 - 094	190	496
095 - 099	28	115
>= 100	10	9



#### GVA

Population

HA: Highly achieved A: Achieved AA: Almost achieved NA: Not achieved yet	Alicia	Ana	Héctor	Noelia	Patricia	Sergio	Silvia	Susana
LISTENING								
Understand key concepts related to the study of population								
Listen for specific information.								
SPEAKING								
Describe and compare the main characteristics of the populations of Spain and the EU.								
Identify the population of an area or country and explain the main factors which cause population variations.								
Identify and explain factors affecting the evolution of the Spanish and EU populations such as life expectancy, birth rates and migratory movements.								
READING								
Identify the population of an area or country and explain the main factors which cause population variations.								
Looks for specific information in a computer								
Recognises words related to population in a context.								
WRITING								

Interpret information form a population pyramid and other graphs and				
charts used to represent population data.				
Locate the most densely populated areas of Spain in a map.				
ACTITUDE AND BEHAVIOUR				
Have a positive behaviour in class				
Bring all the material required				
Cooperate with the other classmates				
Submit homework in time				
Participates actively in the conversations about the topic.				

#### <u>Final exam</u>

Full name:	Date:
	SOCIAL SCIENCES
	POPULATION
1. – Match the popul	ation words to the definitions. (2 points)
a) Population density	1. The movement of people from one area to another
b) Fertility rate	2. A group of people with a common language and religion
c) Demography	3. The number of people living in one square kilometre
d) Migration	4. A graph that shows age and gender distribution of a population
e) Pyramid graph	5. The average number of children in each family
f) Ethnic group	6. The study of population

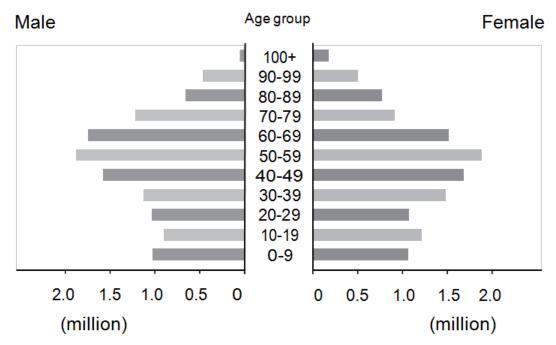
# 2. - How can we represent population? Write the name of the following ways of representing population: (1 point)

World Population: 1950-2050	Mate Spain - 2014 Female 396-3	World Population By Continent	Population of Major European Countries in 1997 and 2007
5 Billion 7 Billion 1 D Billi		ASS LASS LASS LASS	Feedballs 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Bource: U.B. Census Bureau, International Data Base, June 2011 Update.	Pepulation (in millions) Age Group Population (in millions)	USC8	

#### 3. - Write the words that match the definitions: (1 point)

- The study of population: \_\_\_\_\_\_
- The movement of people from one area to another: \_\_\_\_\_\_\_
- A group of people with a common language and culture:\_\_\_\_\_
- The two gender groups we can divide population into are: \_\_\_\_\_\_
  and \_\_\_\_\_

### 4.- Look at the pyramid graph and answer the questions about it: (1 point)



a) What gender groups are represented in the pyramid graph?

- b) How many age groups are represented in the pyramid graph?
- c) Where is the pyramid wider?
- d) Is the population increasing or decreasing?
- e) Which is the age group with more females?

Family 1	4 children
Family 1	4 children
Family 2	2 children
Family 2	
Family 3	5 children
Family 4	4 children
-	
Family 5	1 child
Family 6	3 children
Family 7	3 children
Family 8	2 children

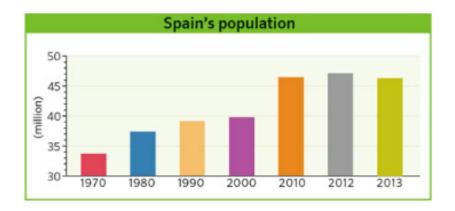
### 5. Look at this chart and calculate the fertility rate. (2 points)

6. - What are the natural changes in population? When does population increase? When does population decrease? (1 point)

7. – Complete these sentences about Spain and Europe using these words. (1 point)

- a) The fertility rate in Spain and the EU is \_\_\_\_\_\_.
- b) There is a high population density in \_\_\_\_\_ areas of Spain.
- c) There is a higher percentage of \_\_\_\_\_\_ than males in Spain and in the EU.
- d) \_\_\_\_\_ to Spain was high between 2000 and 2011.
- e) The population of \_\_\_\_\_\_ is about 507 million.

# 8. - Explain the evolution of population in Spain reading the information from the chart below: (1 point)



#### **Conclusions and reflections**

This didactic unit has been carefully designed so my students can achieve not only the learning outcomes established by LOMCE but also communicative competence in English. They will use L2 to deal with the topic of population. Language barriers and problems with the language will be overcome with the use of charts, images, and audio-visuals materials and resources. Digital competence will be also fulfilled as my students are going to work with computers and the Internet.

Regarding assessment, my students are involved in the learning process in every moment. Peer- assessment will be carried out with the help of the sheets I have mentioned before. I strongly believe that students learn more and better when working in pairs and groups collaborating and helping each other. Furthermore direct observation is really important if we want to bear in mind the formative assessment. I have provided some checklists that I will try to use every day while my students are working on their tasks. The information gathered in these checklists will help me to analyse the educational process taken place. It will provide constant information about my students 'learning and it will help me to make any changes if it is necessary.

Summative assessment will be carried out through a written exam. It will help to value and quantify my students' achievements. It must be said that all the activities that appear in the exam have been previously done in class so students are familiarised with them.

In every moment I will help my students if they have any problem. I will offer support by modelling and demonstrating the realization of some activities.

Finally it must be said that attention to diversity has been taken into account. I will provide my students with remedial activities. In addition there are some activities to work with the multiple intelligences. The design of the pyramid graph deals with the visual-spatial intelligence and the use of the new technologies with the logical and mathematical intelligence.