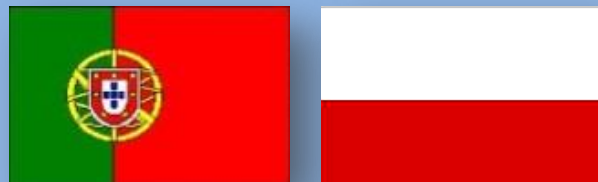


# PROGRAMA COMENIUS

Parceria Bilateral: Publiczne Gimnazjum im.  
Polskiej Organizacji Zbroznej w Bodzanowie  
Escola Básica de Leça da Palmeira



**Biénio: 2010-2012**



# Comenius Program

*"The art as a bridge between people of different cultures"*

*"A arte como ponte entre pessoas diferentes culturas"*

**Biênio 2010- 2012**

**Countries involved:** Portugal and Poland

**Teachers involved:**

From Portugal - Ana Cristina Neves,

Paula Caravelas

From Poland - Magdalena Kłysiak

Sylwia Dorobek

Natalia Czowgan

Malgosia

**Students involved:**

Portugal	Poland
Duarte Silva	Daria Owczarzak
Francisco Pereira	Mateusz Barciński
Ana Pacheco	Karolina Grudna
Catarina Cunha	Marysia Kowalska
Maria Maçana	Patrycja opała Marzena Jaszczak
Ana Sá	Ilona Staszewska Daria Damaziak
João Paulo NÓvoa	Łukasz Aftański
João Pereira	-----
Teresa Melo	Martyna Krzeszewska
Beatriz Amorim	Renata Fabianowicz
Beatriz Soares	Iwona Dominiak
Gonçalo Paiva	Rafał Pawicki
Manuel Tavares	Alicja Zakrzewska
Miguel Macedo	Dawid Urbański
André Ramos	Bartosz Cybulski
Benedita	Katarzyna jermkiewicz

## PROJECT OBJECTIVES AND STRATEGIES

- Making students public spirited: self-presentation, team cooperation, enhance problem solving ability, being responsible for oneself and others;
- Developing the ability to use information and communication techniques;
- Increasing the motivation to foreign language learning;
- Rising the level of the reading comprehension skills;
- Motivation to learning, developing interests in order to reduce early language difficulties;
- Promotion of students' creative expressions;

- Helping students to find themselves in the modern labour market;
- Increasing the attractiveness of learning science;
- Using the non-formal education as a means of improving individuals learning outcomes;
- Increasing digital materials usage in schools;
- Improvement of the teachers' methods and techniques and innovative learning approaches;
- Encouraging teachers to use digital technology and available resources;
- Parents involvement in school activities and in their children learning process;
- School promotion;
- Overturning stereotypes and preventing xenophobia;
- Exchanging the experience, good practice, and innovative ideas between schools;
- Making young people aware of other people and cultural differences;

### **INTEGRATION INTO ONGOING ACTIVITIES**

According to the Project particular activities will be included in the subjects' and some extra classes syllabus:

- Art - a contest for the project logo , graffiti, calendar, music,
- Biology - fauna and flora of the partnership country, ecology;
- Geography - a multimedia presentation about the partnership country;
- History - historical and social background of the nineteenth century Poland;
- ICT - e-mail to Chopin, sending Christmas cards, search for information, communication, image processing, multimedia presentations; use of social network
- Polish/Portuguese language - biography of the artist, writing a letter, ways of communicating (postcard, e-mail, sms); publications; public presentations;
- Mathematics - an analysis of questionnaires, placing Polish-Portuguese subject matter in the content of the tasks (e.g., calculation of population percent, diagrams, currency conversion)
- Physics - placing Polish-Portuguese subject -matter in the content of particular tasks (e.g., water/ground analysis);
- English language – listening/speaking skills in a communication basis;
- Ethics - religious rituals, traditions, holidays, the symbolism of food;
- Travelling extra classes - map of places associated with life and work of artists; country maps




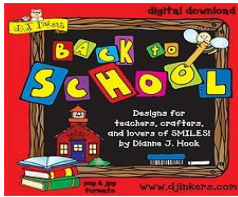



















Escola Básica Leça da Palmeira/Sta. Cruz do Bispo

# COMENIUS VISIT PLAN



Education and Culture  
Lifelong learning programme  
COMENIUS

DATE	ACTIVITIES					
<b>1</b> Saturday 12	Arrival at the airport. Meeting the families. (22h20)					
<b>2</b> Sunday 13 (14.30)	welcoming visit to the school(14h30) 	Walking around Leça da Palmeira 		Visit to the lighthouse 		Dinner
<b>3</b> Monday 14 (8.30H)	Visit to Guimarães, European Capital of Culture 	Paço dos Duques & Castle 	Lunch (School- EB 23 Egas Moniz)	Visit to the old town centre 	Trip to Penha by cable car 	Dinner (Families)
<b>4</b> Tuesday 15 (8.30h)	Tour around Matosinhos 	Welcoming at the City Hall (11h) 	Lunch (school)	Visit to Quinta de Santiago Museum 	Outdoor activities (beach) (17h00) 	Dinner
<b>5</b> Wednesday 16	School activities sports/ Maths/Portuguese ▶ exhibitions ▶ classes  		Lunch (school)	Activities within da Language week  		Dinner

DATE	ACTIVITIES					
<b>6</b> Thursday 17 (10h)	Tour to Porto historic centre ▶ Jardim da Cordoaria ▶ Cadeia da Relação ▶ Lello bookshop ▶ Clérigos Tower		<b>Lunch</b> MacDonalds Av. Aliados	Tour to Porto historic centre ▶ Estação de S. Bento ▶ Sé catedral ▶ Miradouro ▶ Elevador dos Guindais ▶ Ponte D. Luís	Boat Trip in Douro River 	<b>Dinner</b>
<b>7</b> Friday 18 (8.30h)	Visit to Tormes 	Ethnographic museum "Casa do Lavrador" 	<b>Lunch</b> Casa do Lavrador 	Visit to Foundation Eça de Queirós 	Walk to Jacinto's path 	<b>Dinner</b> (Families)
<b>8</b> Saturday 19	Visit to Qta da Conceição 		<b>Lunch</b>	<b>Shopping mall (shopping; movie; ...)</b>  	<b>Dinner</b>	
<b>9</b> Sunday 20 (10h)	Visit to the Modern Art Museum & Gardens of Serralves 	<b>Picnic</b> in 'Parque da Cidade' 	Sport and outdoor activities  	<b>Dinner</b> (families)		
<b>10</b> Monday 21	School activities 	<b>Lunch</b> (School)	reception at the Town Hall 	<b>Free Time</b>	<b>Farewell dinner with families</b> 	
<b>11</b> Tuesday 22 (05H)	Farewell at the airport (6h10) 					



# AN OUTLINE OVER PORTUGAL

## PORTUGAL, a warm country

Portugal has been inhabited since Paleolithic times. Various peoples settled in the region, though the modern Portuguese trace their descent to the Lusitanians, who spread over the peninsula in the third millennium B.C.E. Lusitanians made contact with Celtic peoples who moved into the region after 900 B.C.E. Roman armies invaded the peninsula in 212 B.C.E. and established towns at the present-day sites of Braga, Porto, Beja, and Lisbon. Successive invasions of Germanic tribes in the fifth and sixth centuries C.E. and Moors in the eighth century C.E. added new elements to the population, particularly in the south. Portugal emerged as an independent kingdom in 1140 with its capital in the northern city of Guimarães. Early statehood, the expulsion of the Moors, and the expulsion or conversion of the Jews laid the foundation for a unified national culture.



The name "Portugal" derives from a Roman or pre-Roman settlement called Portus Cale (the modern city of Porto) near the mouth of the Douro River. The Romans referred to this region as the province of Lusitania, and the prefix *Luso* (meaning "Portuguese") is still used in some contexts. In 1095, the king of Castile and Leon granted Portucale (northern Portugal) to a Burgundian count. Despite the diversity of invading populations and distinct regional economies and ways of living, Portugal is a homogeneous nation with a single national cultural identity and no ethnolinguistic groups.

In the fifteenth century, the Portuguese inaugurated the Age of Discovery and for three centuries built and expanded a seaborne empire. This imperial enterprise gave the nation a reputation for racial tolerance that is still invoked as the foundation of Portugal's comfort with cross-cultural diversity despite homogeneity at home. The loss of Brazil in 1822 and a series of economic and political crises led to a decline in the world position of the nation in the nineteenth century. The monarchy was eliminated in 1910 with the establishment of the First Portuguese Republic, which was replaced by the authoritarian dictatorship of António Salazar in 1926. Salazar formed his New State ( *Estado Novo* ) in 1932 on a corporatist political model and emphasized God, family, and work as the central values of the national culture. He limited access to higher education and, in emphasizing the Catholic faith, promoted humility, routine, and respect for authority as guiding principles of social life. He also celebrated the rural way of life by sponsoring a national competition in 1938 for the most Portuguese village.

The Salazarist regime survived until 1974, when it was overthrown by military men frustrated by the hopelessness of the colonial wars in Africa. This revolution is called "Revolução dos cravos" and marked a turning point in Portuguese history. The African colonial system was dismantled after 1974. In the late 1980s, Portugal became a member of the European Community, and in 1994, Lisbon served as the European cultural capital.

Continental Portugal at 35,516 square miles (91,986 square kilometers) occupies approximately a sixth of the Iberian peninsula. Since the majority of the population was rural until the 1960s, geography has been an important factor in cultural adaptations and worldview. The northwest (the province of Minho) is lush, green, densely populated, and the major source of emigrants. The northeast (the province of Trás-os-Montes) is more mountainous and is divided into a northern region (*terra fria*) with long cold winters and a warmer region (*terra quente*) to the south. The central part (including the provinces of Beira Alta, Beira Baixa, and Beira Litoral) varies from high and desolate mountain plateaus (the Serra da Estrela) to low coastal areas. The provinces of Ribatejo and Estremadura are low-lying regions near Lisbon and the Tagus River. Much industry is concentrated in this area. Southern Portugal, drier and more Mediterranean in climate, includes the provinces of the Alentejo and the Algarve. The Alentejo, an undulating plain with cork trees and wheat fields, was traditionally an important cash-crop area. The Algarve is semitropical with almond, fig, and citrus trees. It is also a region of tourism and fishing.

Portuguese inhabit the Azores and Madeira in the Atlantic. As a result of colonial expansion and massive emigration in the nineteenth and twentieth centuries, there are Portuguese-speaking people in Asia, Africa, South America, the United States, Canada, Australia, and northwestern Europe. The capital is Lisbon, located on a number of hills on the northern shore of the Tagus River estuary. The original name for Lisbon, an important Roman city, was *Olisipo*. Lisbon, which became the capital in 1298, is also the political, cultural, economic, educational, and social center.

## **LEÇA DA PALMEIRA, get inspired**

Leça da Palmeira is a bustling seaside resort located a short drive north of Oporto, Portugal's second largest city. Traditionally a fishing town, the population swells during the summer months on account of its long sandy beach.

It has a rich cultural heritage, namely Forte de Nossa Senhora Da Conceição, Piscinas das Marés (Tide Pools designed by the well-known architect Siza Vieira), a family-friendly swimming pool carved out of the beach rocks and refilled with seawater during the high tide, Boa Nova Tea House (also designed by Siza Vieira), Quinta da Conceição Municipal Park and other religious monuments as Corpo Santo, Santana, and Boa Nova churches. The star-shaped Leça da Palmeira Fortress (also known as Matosinhos Castle) is a 16th century fortified monument situated close to the seafront.

It is home of the international Leixões seaport, the country's second largest one, which was first constructed in 1884 to the plans of Nogueira Soares and greatly enlarged in 1932. Today it is one of the busiest ports in Portugal.; Petrolgal, an oil refinery. In sport, the town includes a football club, Leça FC, and a basketball club, Grupo Desportivo de Basquete de Leça

The town is also popular for its numerous high-quality fish and seafood restaurants you can find along the coast line.



## PORTO, a city with a heart

**Porto**, also known as **Oporto** in English, is the second largest city in Portugal, after Lisbon, and one of the major urban areas in Southern Europe. Located along the Douro river estuary in northern Portugal, Porto is one of the oldest European centres, and registered as a World Heritage Site by UNESCO in 1996. Its settlement dates back many centuries, when it was an outpost of the Roman Empire.



One of Portugal's internationally famous exports, port wine, is named after Porto, and in particular the caves (cellars) of Vila Nova de Gaia, were responsible for the production and export of this exquisite wine.

Among the architectural highlights of the city, Oporto Cathedral is the oldest surviving structure, together with the small romanesque Church of Cedofeita, the gothic Igreja de São Francisco (Church of Saint Francis), the remnants of the city walls and a few 15th-century houses. The baroque style is well represented in the city in the elaborate gilt work interior decoration of the churches of St. Francis and St. Claire (*Santa Clara*), the churches of Mercy (*Misericórdia*) and of the Clerics (Igreja dos Clérigos), the Episcopal Palace of Porto, and others. The neoclassicism and romanticism of the 19th and 20th centuries also added interesting monuments to the landscape of the city, like the magnificent Stock Exchange Palace (Palácio da Bolsa), the Hospital of Saint Anthony, the Municipality, the buildings in the Liberdade Square and the *Avenida dos Aliados*, the tile-adorned São Bento Train Station and the gardens of the Crystal Palace (*Palácio de Cristal*). A guided visit to the Palácio da Bolsa, and in particular the Arab Room, is a major tourist attraction.



In 2001, Porto shared the designation European Culture Capital. In the scope of these events, the construction of the major concert hall space Casa da Música, designed by the Dutch architect Rem Koolhaas, was initiated and finished in 2005. The city has concert halls of a rare beauty and elegance such as the Coliseu do Porto by the Portuguese architect Cassiano Branco; an exquisite example of the Portuguese decorative arts. Other notable venues include the historical São João National Theatre, the

*Rivoli* theatre and the recent Casa da Música. The city has a magnificent and beautiful bookshop, "Lello", that was featured in third place in The Guardian's list of world's top bookshops.



## GUIMARÃES, the cradle of the nation

**Guimarães** is a northern Portuguese city located in the district of Braga, in the Ave Subregion (one of the most industrialized subregions of the country), with a population of 52 181 inhabitants, distributed throughout 20 parishes.

This city played an important role as the major municipality during the time of the Condado Portucalense, the name given to the feudal lands between the Lima and Ave rivers under the rule of the **Kings of León (Spain)**. In the Battle of São Mamede, Dom Afonso Henriques gained the independence for the Condado Portucalense, founding the Portuguese Nation.



Guimarães is a city surrounded by history. Its diverse monuments are associated to some point in the past where the city played a major role in the Portuguese history. Some of these monuments are:

- A castle built in the 10th century by the Countess Mumadona Dias to protect the local population;
- The Chapel of St. Michael, built in the 12th century in the Romanesque style, where D. Afonso Henriques was baptized;
- The Palace of the Dukes of Bragança built in the 15th century;
- The City Walls of Guimarães are remnants of those that encircled Guimarães during the reign of Kings Dom Dinis and Dom João I, in the 14th and 15th centuries;
- The Old Town Council Chambers (Antigos Paços do Concelho) , a building from the 14th century.

Guimarães was declared a World Heritage Site in 2001 by UNESCO, due to its Middle Age historical monuments.

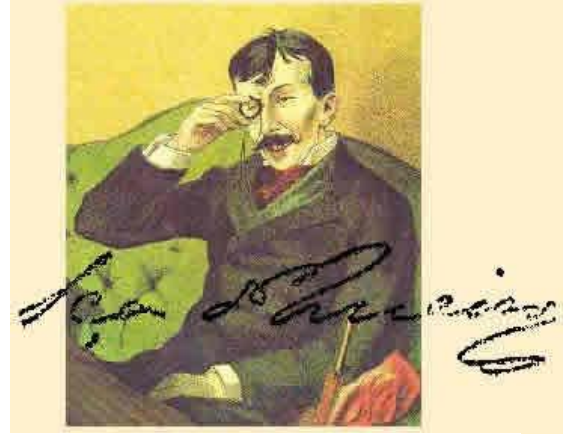
It is an average size city but with a booming cultural life. Besides its museums, monuments, cultural associations, art galleries and popular festivities

Guimarães is also the European Capital of Culture in 2012, together with Maribor and was elected by the New York Times one of the 41 places to go in 2011 and NYT called it one of the Iberian Peninsula's emerging cultural spots.



# Eça de Queirós

José Maria de Eça de Queiroz or Queirós (November 25, 1845 - August 16, 1900) is generally considered to be the greatest Portuguese writer in the realist style, and one of the great figures of European 19th century fiction. Zola considered him to be far greater than Flaubert. Others rank him with Dickens, Balzac and Tolstoy. Eça never officially rejected Catholicism, but was very critical of the Catholic Church of his time, as is evident in his novels.



Eça de Queiroz was born in Póvoa de Varzim, Portugal, in 1845.



At age 16 he went to Coimbra to study law at the University of Coimbra; there he met the poet Antero de Quental. Eça's first work was a series of prose poems, published in the *Gazeta de Portugal* magazine, which eventually appeared in book form in a posthumous collection edited by Batalha Reis entitled *Prosas Bárbaras* ("Barbarous texts"). He worked as a journalist at Évora, then returned to Lisbon and, with his former school friend Ramalho Ortigão and others, created the *Correspondence of the fictional adventurer Fradique Mendes*. This amusing work was first published in 1900.

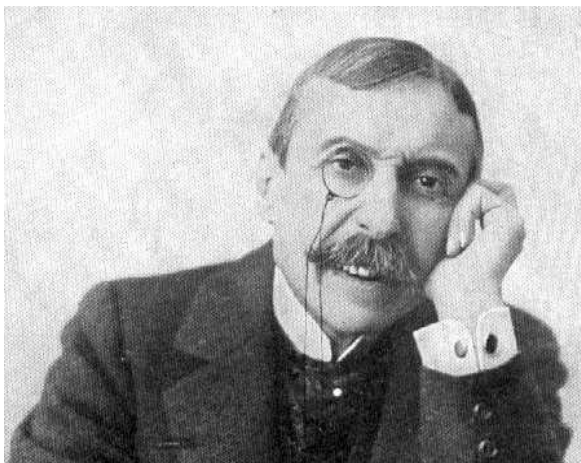
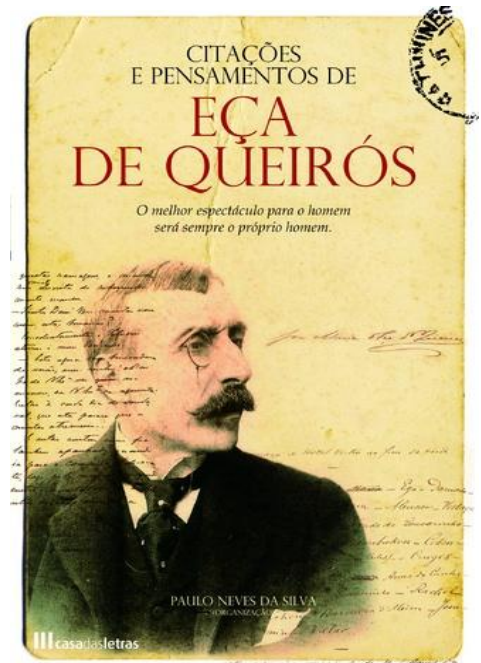
In 1869 and 1870, Eça de Queiroz travelled to Egypt and watched the opening of the Suez Canal, which inspired several of his works, most notably *O Mistério da Estrada de Sintra* ("The Mystery of the Sintra Road", 1870), written in collaboration with Ramalho Ortigão, in which Fradique Mendes appears. *A Relíquia* ("The Relic") was also written at this period but was published only in 1887. When he was later dispatched to Leiria to work as a municipal administrator, Eça de Queiroz wrote his first realist novel, *O Crime do Padre Amaro* ("The Sin of Father Amaro"), which is set in the city and first appeared in 1875.

Eça then worked in the Portuguese consular service and after two years' service at Havana was stationed at 53 Grey Street, Newcastle upon Tyne, from late 1874 until April 1879. His diplomatic duties involved the dispatch of detailed reports to the Portuguese foreign office concerning the unrest in the Northumberland and Durham coalfields. The Newcastle years were among the most productive of his literary career. He published the second version of *O Crime de Padre Amaro* in

1876 and another celebrated novel, *O Primo Basílio* ("Cousin Basílio") in 1878, as well as working on a number of other projects. These included the first of his "Cartas de Londres" ("Letters from London") which were printed in the Lisbon daily newspaper *Diário de Notícias* and afterwards appeared in book form as *Cartas de Inglaterra*. As early as 1878 he had at least given a name to his masterpiece *Os Maias* ("The Maias"), though this was largely written during his later residence in Bristol and was published only in 1888. There is a plaque to Eça in that city and another was unveiled in Grey Street, Newcastle, in 2001 by the Portuguese ambassador.

Eça, a cosmopolite widely read in English literature, was not enamoured of English society, but he was fascinated by its oddity. In Bristol he wrote: "Everything about this society is disagreeable to me - from its limited way of thinking to its indecent manner of cooking vegetables." As often happens when a writer is unhappy, the weather is endlessly bad. Nevertheless, he was rarely bored and was content to stay in England for some fifteen years. "I detest England, but this does not stop me from declaring that as a thinking nation, she is probably the foremost." It may be said that England acted as a constant stimulus and a corrective to Eça's traditionally Portuguese Francophilia.

In 1888 he became Portuguese consul-general in Paris. He lived at Neuilly-sur-Seine and continued to write journalism (*Ecos de Paris*, "Echos from Paris") as well as literary criticism. He died in 1900.



*"Politicians and diapers should be changed frequently, and for the same reason."*

*"History is always a grand fantasy... To reconstruct is to invent."*

*"Let us depart instead for the fields of Dreams and wander those blue, romantic hills where stands the abandoned tower of the Supernatural, where cool mosses clothe the ruins of Idealism. Let us, in short, indulge in a little fantasy!"*

*Eça de Queirós, The Mandarin and Other Stories*



**LET'S DO SOME WORK**





# Task 1



Tell us a little about your journey to Portugal. (for Polish students)

Did you travel by:

- a. train
- b. plane
- c. bus
- d. plane and bus

Tell us a funny thing that happened *en route*.

---

---



How long was your journey?

---

What were your first thoughts as you arrived in Portugal?

---

## My Portuguese Family



1. Father's name: \_\_\_\_\_
2. Mother's name: \_\_\_\_\_
3. Children's name(s): \_\_\_\_\_
4. Any pets? \_\_\_\_\_
5. My new address: \_\_\_\_\_
6. Stick in a photo of your new family.



## Task 2



- A. The school *Escola Básica Leça da Palmeira/Santa Cruz do Bispo* reopened in 2011 and it is run by a headmaster and his staff. It is part of the Grouping of Schools Leça da Palmeira/Sta Cruz do Bispo.

What is the headmaster's name?

\_\_\_\_\_



How many people work directly in this staff's board?

\_\_\_\_\_

True or False?

- There are 1500 students in this school. \_\_\_\_\_
- The school boarding administers a large number of other schools. \_\_\_\_\_
- There are over 200 teachers working for the whole Grouping of Schools of Leça da Palmeira/Sta Cruz do Bispo \_\_\_\_\_

How many floors has the building got?

\_\_\_\_\_

Where do the students have lunch?

\_\_\_\_\_

How do you recognize each classroom?

\_\_\_\_\_

B. In this school there are:



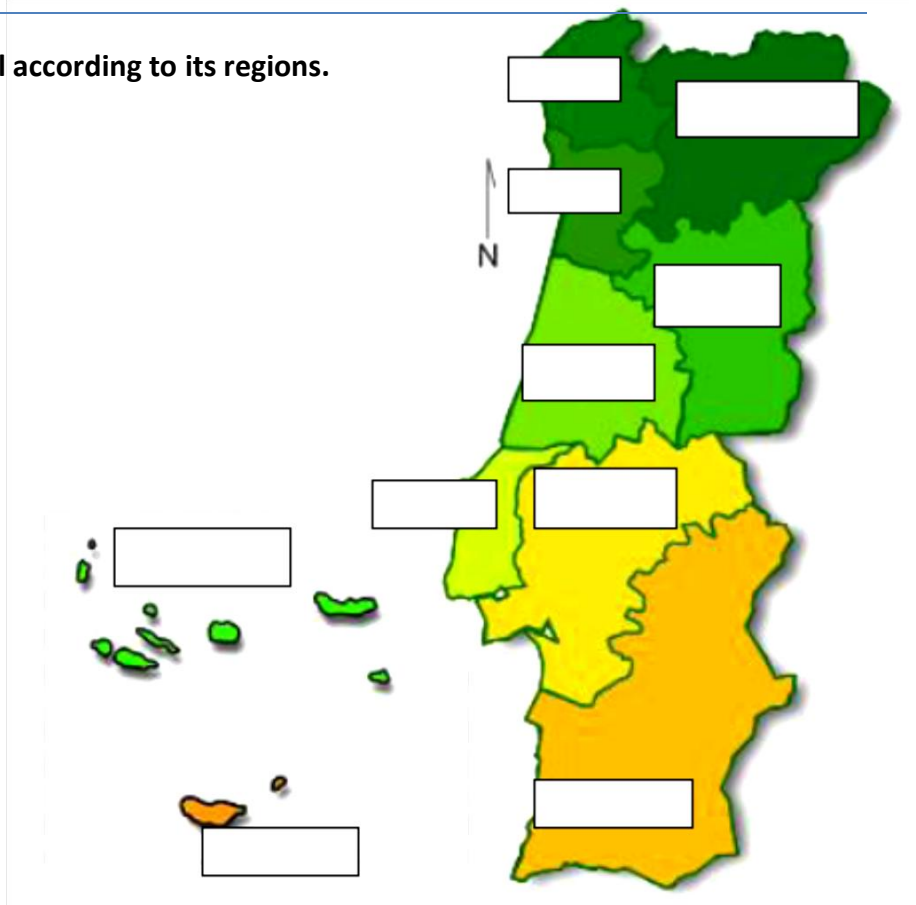
CANTEEN  
LIBRARY  
STATIONARY  
PLAYGROUND  
GYM  
LABS  
COMPUTERS  
WHITEBOARDS  
TOILETS  
BAR  
NOTEBOARDS  
LAKE  
TREES  
PRIMARYSCHOOL  
KINDERGARTEN  
LOCKERS



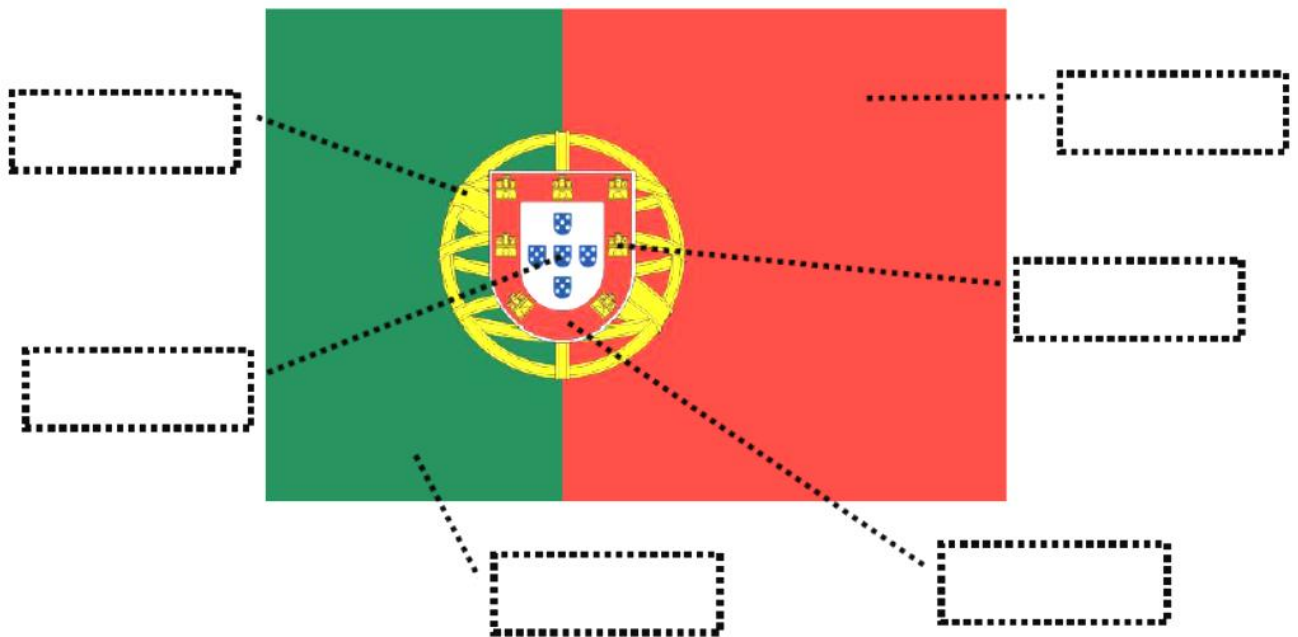
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K	O	L	A	B	S	L	S	C	A	L	C	I	R	C
S	I	B	W	H	V	Y	T	W	J	W	O	B	A	Z
C	W	N	C	A	N	T	E	E	N	P	N	R	Y	S
W	H	W	D	P	Z	J	L	K	C	O	V	A	V	R
B	I	O	H	E	N	N	I	A	Y	C	R	R	C	E
Y	T	Z	O	R	R	T	O	L	R	L	Z	Y	S	T
A	E	N	S	A	Q	G	T	B	R	Y	J	J	L	U
Q	B	R	Y	S	D	R	A	O	B	E	T	O	N	P
Q	O	G	N	B	C	J	S	R	O	B	C	R	N	M
B	A	R	C	T	Y	D	O	M	T	K	Y	Y	O	O
J	R	J	A	W	S	A	S	G	E	E	V	Q	H	C
O	D	Y	Y	Z	J	E	S	R	Z	O	N	A	M	S
P	S	E	E	R	T	T	S	O	R	B	W	A	Y	J
P	R	I	M	A	R	Y	S	C	H	O	O	L	G	Q

### Task 3 - Portugal

A. Label the map of Portugal according to its regions.



B. Every flag has a meaning. Find out about our flag!













## Task 4 - Guimarães



A. Match the pictures with the names



\*GUIMARÃES CASTLE \* PAÇO DOS DUQUES \* D. AFONSO HENRIQUES \* LARGO DO TOURAL  
 \*EUROPEAN CAPITAL OF CULTURE \* PENHA \*WALL TAPESTRY OF PASTRANA \* MEDIEVAL BODY  
 ARMOUR \*D. DUARTE, DUQUE DE BRAGANÇA \*COATS OF ARMS

## Task 5 - Porto



A. Do you think it is easy to cross the river?  
 Then order these bridges from east to west.



Ponte do Freixo



Ponte do Infante



Ponte Dona Maria



Ponte D. Luis



Ponte da Arrábida

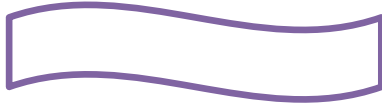


Ponte S. João



**B. STOP there! Are you in Ribeira? It is the most genuine part of Porto!**

Look attentively to the stone walls and find out the year of the highest flood in the city!



**C. What about if....**



- .. If you owned one of Vila Nova de Gaia's Wine Cellars,
- .. If you used the upper level of Ponte D. Luis,
- .. If you want to taste the typical dish of Porto,
- .. If you need to take the tram to Matosinhos,

- .. You would have to take the underground
- .. You would produce Port Wine
- .. You catch nr.1
- .. You'll ask for "Tripas à moda do Porto" at the restaurant.



## Task 6 - Tormes

Order the instruction according to the correct procedure.

- Stir in 1 tablespoon olive oil.
- Proof for 30 minutes, or until it doubles.
- Stir until smooth.
- Bake in the middle of oven for 40 minutes, or until top is golden.
- Coat the bottom and sides of a 9 inch pie pan with remaining 1 tablespoon olive oil.
- Stir yeast into the cornmeal mixture.
- Gradually add 1/2 cup cornmeal and flour.
- Gather the dough into a ball, and place it in a greased bowl. Cover.
- Let it rise in a warm place for another 30 minutes
- In a large mixing bowl, combine 1 cup cornmeal, salt, and boiling water.
- Turn the dough out into pie pan, and cover.



## Task 7 - Sports




### Who is Who?




...Great stars in the sports world!






a) James Naismith

b) Michael Phelps

c) Usain St. Leo Bolt (Usain Bolt)

d) Néelson Évora

e) William Morgan

f) Johann Guts-Muths

g) Cristiano Ronaldo

h) Pierre de Coubertin

i) Kall Schellenz e Maximillian Heiser

j) Roger Federer

k) Larisa Semyonovna Latynina






## Task 8 - Maths

### A. Trigonometry: ratio and proportion

Use measurement tools to answer the following questions:

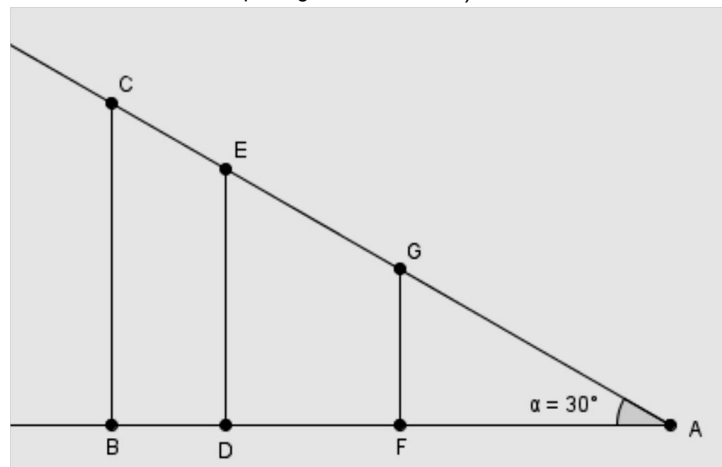
(Utiliza instrumentos de medição e desenho para responder às seguintes questões)

- Observe the figure below, where CB, DE and GF are perpendicular to AB. (Observe a figura abaixo, em que CB, ED e GF são perpendiculares a BA)
- How many right-angled triangles are represented? (Quantos triângulos retângulos estão representados na figura)
- Measure the length of the sides of the various triangles and complete the table. Round to one decimal.

(Mede o comprimento dos lados dos diferentes triângulos e completa a tabela. Arredonda a uma casa decimal).

- Attempt to draw conclusions from the analysis of the results you registered in the table.

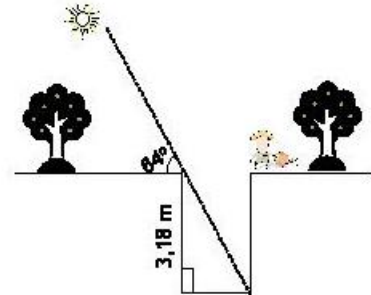
(Tira conclusões a partir da análise dos resultados que registaste na tabela)



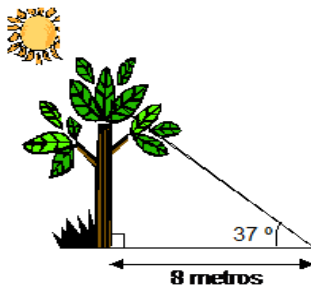
$\alpha = 30^\circ$	Triangle [ABC]	Triangle [ADE]	Triangle [AFG]
$\frac{\text{length of the opposite cathetus to } \alpha}{\text{length of the adjacent cathetus to } \alpha}$	$\frac{CB}{AB} =$		
$\frac{\text{length of the opposite cathetus to } \alpha}{\text{length of the hypotenuse}}$			
$\frac{\text{length of the adjacent cathetus to } \alpha}{\text{length of the hypotenuse}}$			

$$\frac{(\text{comprimento do cateto oposto}) \text{length of the opposite cathetus to } \alpha}{(\text{comprimento do cateto adjacente}) \text{length of the adjacent cathetus to } \alpha}$$

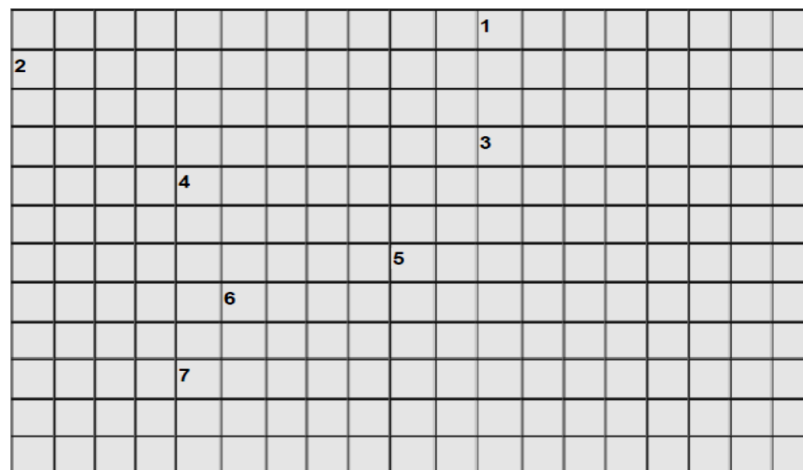
B. How deep is the well? (Qual é a altura do poço)



C. How height is the tree? (Qual é a altura da árvore)



D. Complete the crossword. (Completa o crucigrama. Com as letras assinaladas  $\square$ , forma uma palavra)



**Across (Horizontais):**

- 2 Field of mathematics that studies the relationship between sides and angles of a right triangle  
(Campo da Matemática que estuda as relações entre os lados e os ângulos num triângulo retângulo)
- 3 The leg in front of an acute angle (Cateto que está em frente ao ângulo agudo considerado)
- 4 Leg that is beside an acute angle (Cateto que está junto ao ângulo agudo considerado)
- 6 Smaller side of a righth triangle (Lado menor de um triângulo retângulo)
- 7 Geometrical figure with three sides (Figura geométrica com 3 lados)

**Down (verticais)**

- 1 The longest side of a righth triangle (Lado maior de um triângulo retângulo)
- 5 Word related to trigonometry (Palavra relacionada com a trigonometria)

## Task 9 - Science

Study of accumulations in the line of a high tide.

A. Which of these did you spot at the beach?

### Sea origin

					
<input type="checkbox"/> Conchas de bivaldes	<input type="checkbox"/> Conchas de gastrópodes	<input type="checkbox"/> Restos de ouriços-do-ar	<input type="checkbox"/> Restos de caranguejos	<input type="checkbox"/> Penas de aves marinhas	<input type="checkbox"/> Algas

### Human action

					
<input type="checkbox"/> - Plástico	<input type="checkbox"/> - Calçado	<input type="checkbox"/> - Brinquedos	<input type="checkbox"/> - Vidro	<input type="checkbox"/> -Madeira	<input type="checkbox"/> - Materiais de pesca

## Task 10 - English

Study of accumulations in the line of a high tide

A message from us to you all with love,

Ana Cristina Neves  
&  
Paula Caravelas



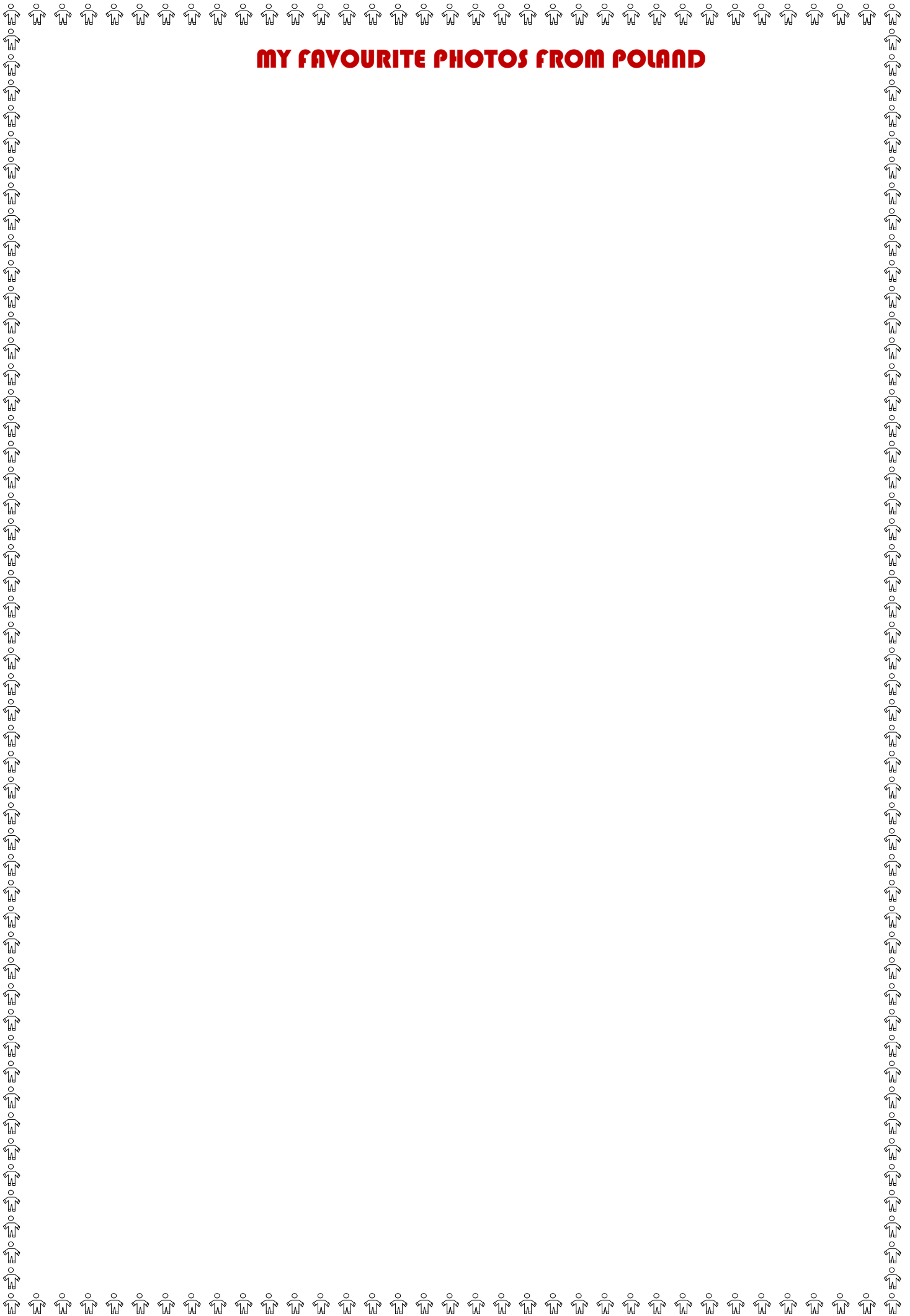
twas gr8 fun 2hv u hre. h2 CU sn. we'll alw av FB

In English it should be...

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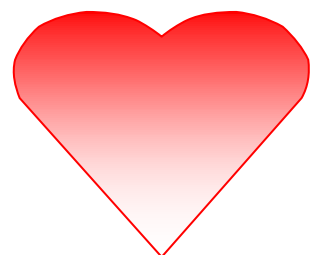
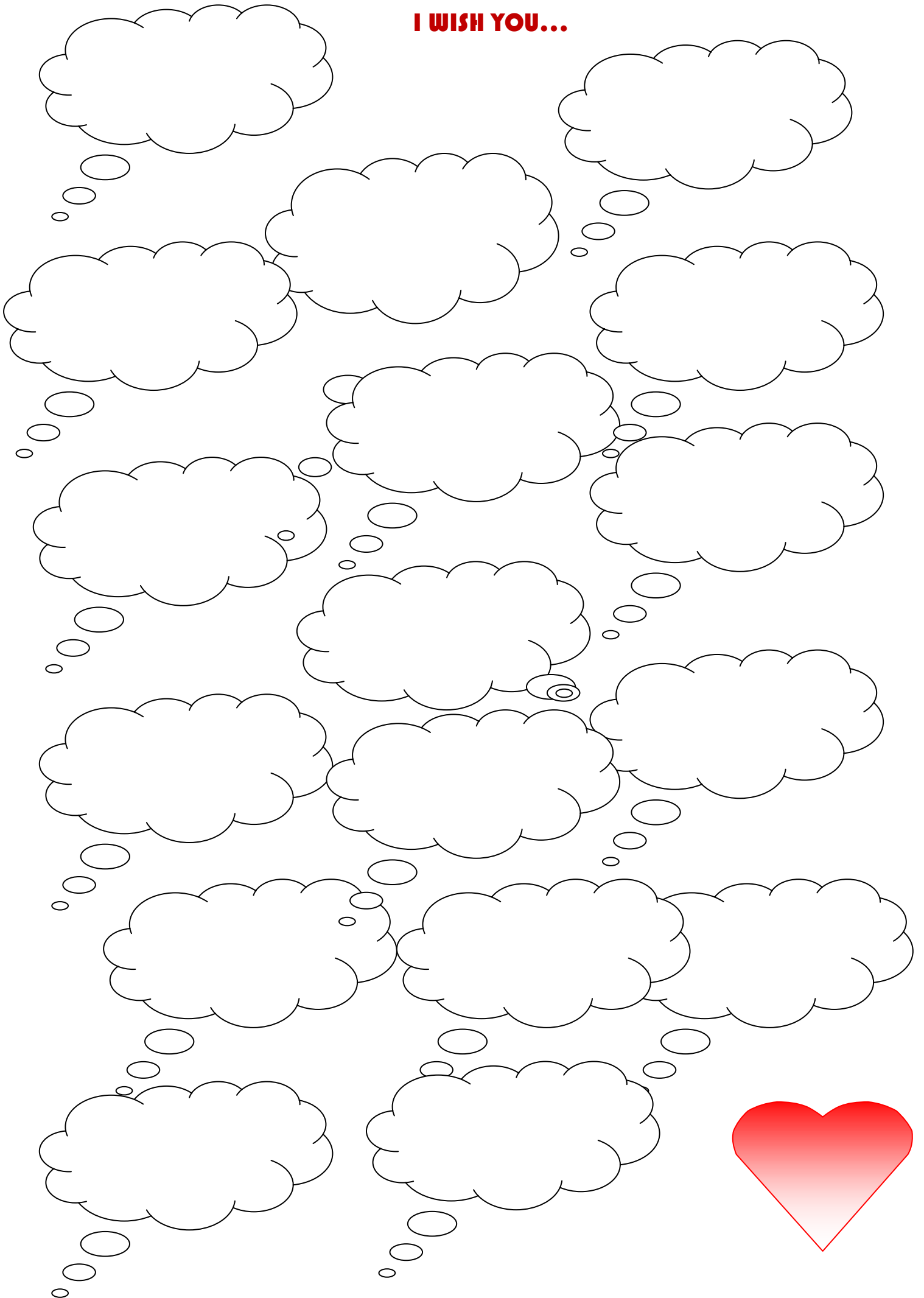


# MY FAVOURITE PHOTOS FROM POLAND



**MY FAVOURITE PHOTOS FROM PORTUGAL**

**I WISH YOU...**



*Comenius Project*  
*live Europe - feel Europe*

