UNIDADE DIDÁCTICA

SECONDARY EDUCATION

fai clic ao teu bocata

As conservas do mar son a mellor compañía para o teu bocata!

ANFACO CECOPESCA

UNIÓN EUROPEA

FONDO EUROPEO MARÍTIMO Y DE PESCA (FEMP)

galicia

Xacobeo 2021

XUNTA DE GALICIA

INDEX

According to the general provisions of the Department of Education and University Planning, and as stated in Decree 86/2015, of June 25, which establishes the Secondary Compulsory Education and Baccalaureate in the Autonomous Community of Galicia curriculum, this didactic unit is designed to be used after the visit to the program's school center.

It is increasingly corroborated and accepted that the adoption of healthy habits is one of the most influential in the development of a healthy life. Preadolescence, Adolescence and youth are stages of special importance in the construction of the personality and in the adoption of uses and customs that will define our actions and decisions in adult life.

Among these habits, nutrition and eating stand out, whose role in our society becomes more decisive every day, through the idea that eating healthy and enjoying food are compatible actions.

Nutrition is an involuntary and unconscious process that our body does to transform food through 4 processes: digestion, respiration, circulation and excretion, so that its components can be used by cells. Feeding is, however, a voluntary and conscious process, educable therefore, which consists of the choice, preparation and ingestion of the food.

Choosing healthy and adequate foods is a good part of the basis of our health present and future.

This didactic unit aims to offer a set of activities that motivate Secondary Education students to acquire a set of healthy eating habits and present the consumption of canned seafood as an interesting, healthy and delicious culinary alternative.

1. OBJECTIVES

- Promote the consumption of canned seafood among teenagers.
- Know the benefits of canned seafood.
- Acquire adequate eating habits.
- Generate interest in the marine environment and its species.
- Know the origin of canned seafood and its classification.
- Know the transformation of raw material to processed food.
- Know the importance of the canning industry in Galicia.

2. BASIC SKILLS

Mathematical and science and technology Competences CMCT.

Origin and manipulation of food (seafood in preserves).
Nutritional properties of canned seafood.
Identification of different marine species.
Recognition and classification of different types of preserves.
Eating and hygiene habits.

Social and civic competence SCC.

Different types of packaging and their recycling for conservation and improvement of the environment.

Linguistic Communication competence LCC.

Understanding of different types of texts (expository texts, articles, press, leaderboards, etc). Basic vocabulary of different species of marine products in preserves and treatment processes of food. Search, collection and information processing.

Digital competence CD.

Information search and treatment on different media.

Sense of initiative and entrepreneurial spirit CSIEE.

Ability to work, both individually as within a team; participation, leadership ability and delegation.

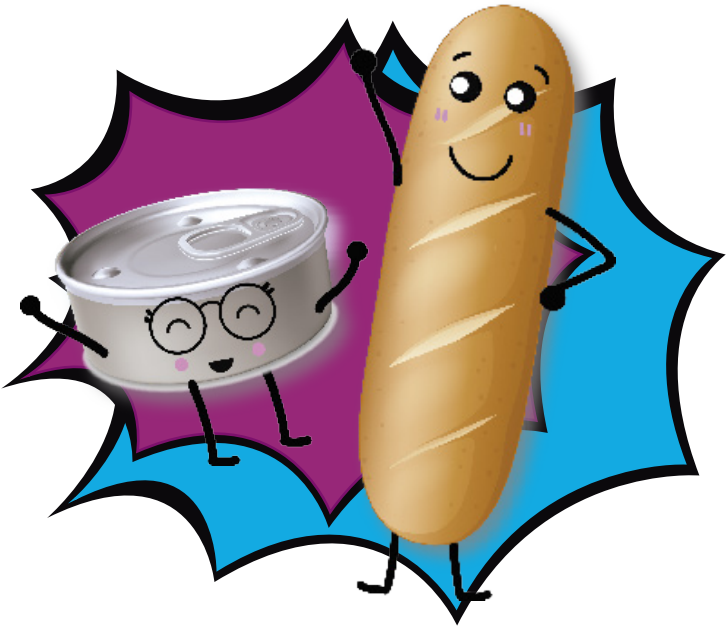
Awareness and cultural expressions CCEC.

Different types of packaging and their recycling for conservation and improvement of the environment.

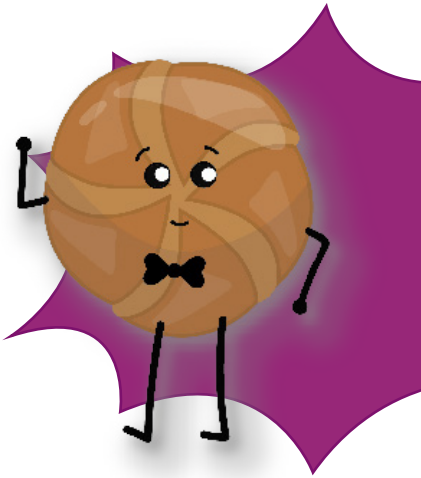
3. CURRICULAR CONTENTS

Compulsory Secondary Education aims to ensure that students acquire the basic elements of culture in its humanistic, artistic, scientific and technological aspects; unwrap and consolidate in study and work habits; prepare them for their incorporation to further studies and for their labor insertion, and train them to exercise their rights and responsibilities in life as citizens.

Although the contents of the didactic unit can be treated from a point of view of different knowledge areas, we collect below those related to natural, social and cultural areas because it is the area of greatest involvement and most directly related.



4. CONTENTS



Biology and Geology Block

- B3.1 Concept of biodiversity.
- B3.2 Classification systems for living beings.

Healthy Lifestyle Block

- B2.1. Food as a healthy lifestyle habit.
- B2.3 Design of simple dietary proposals.

Gender Equality Block

- Recognition of different professions avoiding sexist stereotypes.

OTHERS

- Different fish preservation processes.
- History and recognition of the main canning industries of your town, city, nearby cities, province or community.
- Tracking and labeling of fishery products.
- Personal and collective responsibility in the conservation of the environment and sustainable development: reuse of materials.
- Packaging recycling processes.

5. CLICK ON YOUR SANDWICH - COMIC

SEA

THE SCIENTIST SPECIALIZED IN MARINE BIOLOGY

Investigate the nutritional properties of canned seafood, and after discovering important improvements in our body through its regular consumption in different kitchen dishes, he wants to continue investigating these improvements and make them known among the population, especially among children, youth and adolescents.

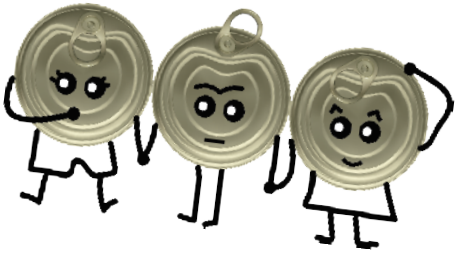
ROI

THE SCIENTIST SPECIALIZING IN CHEMISTRY

Male character, who investigates the canning process, the types of containers, the foods that help preserve the product, its expiration date ... Roi is convinced that canned seafood can be very far, so far that they reach the planet of the comic.

LATA AND HIS FAMILY

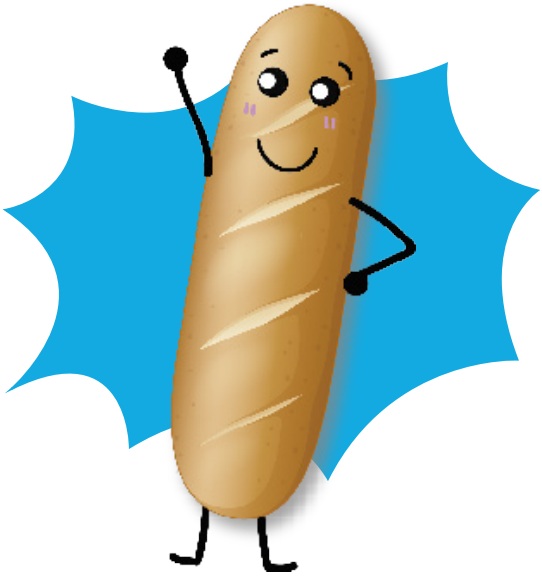
She is one of our protagonists, an expert in new technologies, who through a simple "CLICK" of her mouse, and together with **BOTE** and their daughters in common, the **TRILATAS**, travel to the virtual world of comics. There they meet PAN, co-star of the program.



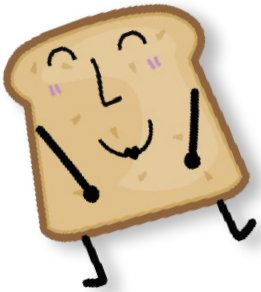
Lata and his family are in charge of helping Pan and his brothers discover the world of the sea and, therefore, of the sandwiches.

LATA, Bote and Trilatas represent the set of canned marine products, expanding the packaging methods and humanizing these objects so characteristic of this field, promoting their integration as facilitators of relevant information of the informative part of the program.

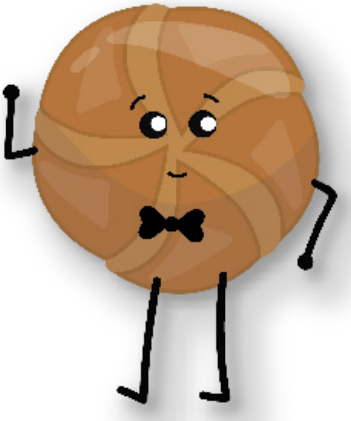
PAN AND HIS FAMILY



Pan is the other protagonist of the show. He and his brothers, **MILLO and MOLDE**, live in the virtual world of the comic, and there they are happy, until Lata and his family appear, and they discover that there is a whole world - the marine - that they are completely unaware of.

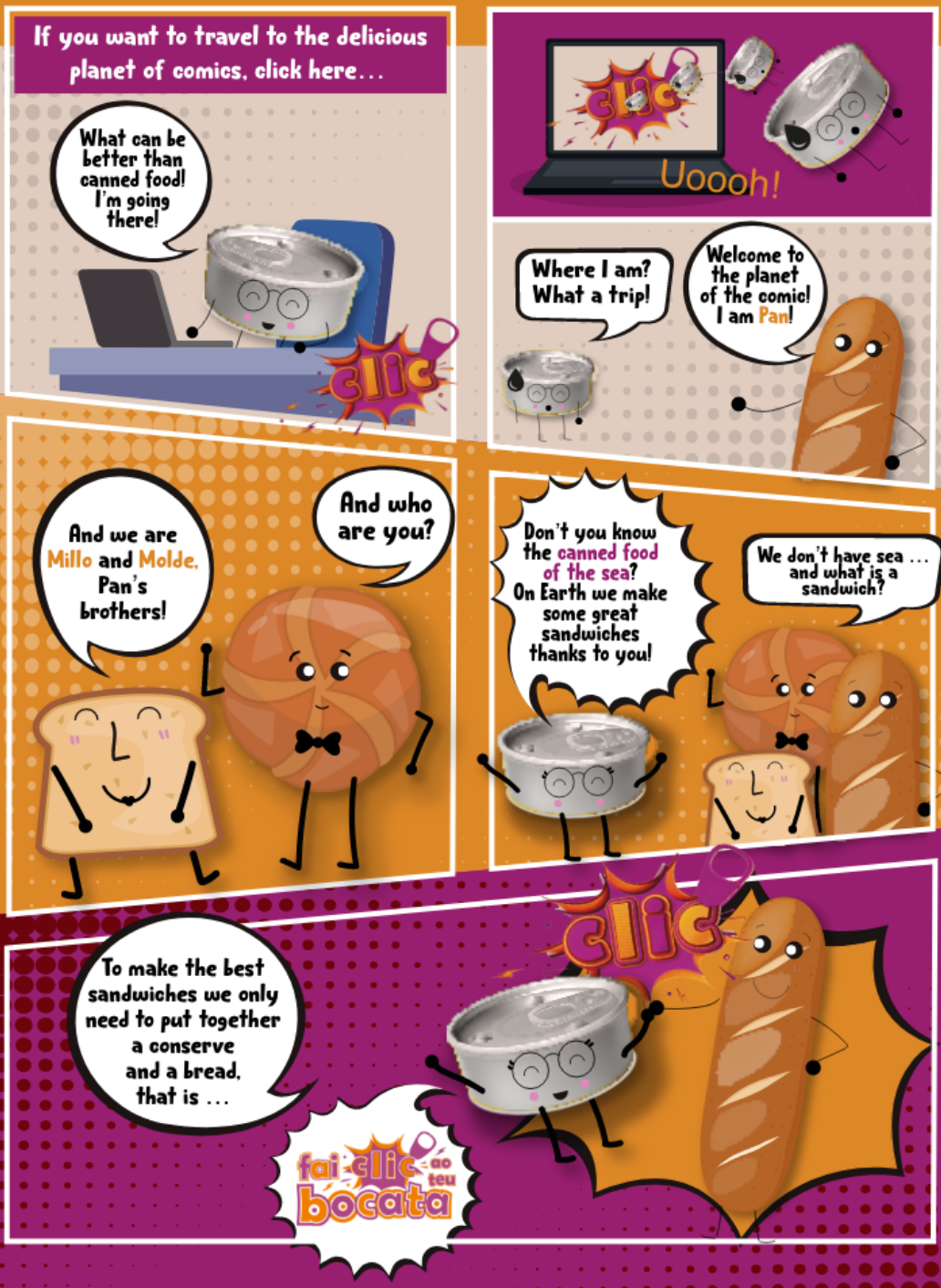


They also discover that they are a very important piece of a famous food in the real world ... the sandwiches! Thanks to the explanations of Lata and doing a "Click" together they can create the most delicious and appetizing sandwiches.



PAN, Millo and Molde represent the set of products from the bakery world, expanding the variety of breads with which to make sandwiches. The humanization of these characters, making them unfamiliar with the main theme (preserves), and characterizing them as receptors of said information, facilitates the informative part of the program.

"FAI CLIC AO TEU BOCATA" COMIC… PAN AND LATA MEET!



ANFACO CECOPESCA
UNIÓN EUROPEA
FONDO EUROPEO MARÍTIMO E DE PESCA (FEMP)
galicia
Xacobeo 2021
XUNTA DE GALICIA

Pan and Lata created a tuna canned sandwich!

clic

ÑAAMM!

Lata connects with the Earth to bring her family thanks to new technologies!

We are going to send more preserves to your comic plate so you can try new sandwiches!

These are my friends the scientists!

clic

I'm Bote, Lata's boyfriend!

We are the Trilatas, daughters of Lata!

fai clic co teu bocata

clic

We have to bring more preserves and make the best sandwiches!

The scientists Mar and Roi, with the children of the Earth will help us...

...to "click" on your sandwich!

WILL CONTINUE...

ANFACO CECOPESCA

UNIÓN EUROPEA

FONDO EUROPEO MARÍTIMO E DE PESCA (FEMP)

galicia

Xacobeo 2021

XUNTA DE GALICIA

6. DATA SHEETS

Anchoas en aceite de oliva 100g

Calorías	253 kcal
Graxa	15,20 g
Colesterol	70,60 mg
Sodio	3,93 mg
Carbohidratos	0,37 g
Fibra	0 g
Azucre	0,37 g
Proteínas	28,620 g

Vitamina A	67,40 ug	Vitamina C	0 mg
Vitamina B12	3,40 ug	Calcio	273 mg
Ferro	4,20 mg	Vitamina B3	9,13 mg

Atún ao natural 100g

Calorías	99,40 kcal
Graxa	0,60 g
Colesterol	51 mg
Sodio	320 mg
Carbohidratos	0 g
Fibra	0 g
Azucre	0 g
Proteínas	23,50 g

Vitamina A	60 ug	Vitamina C	0 mg
Vitamina B12	4 ug	Calcio	28 mg
Ferro	1 mg	Vitamina B3	18,78 mg

Mexillóns ao natural 100g

Calorias	82,10 kcal
Graxa	2,90 g
Colesterol	100 mg
Sodio	296 mg
Carbohidratos	2 g
Fibra	0 g
Azucre	2 g
Proteinas	12 g

Vitamina A	53,10 ug	Vitamina C	0 mg
Vitamina B12	7,70 ug	Calcio	80 mg
Ferro	4,50 mg	Vitamina B3	3 mg

Berberechos ao natural 100g

Calorias	48 kcal
Graxa	9,5 g
Colesterol	40 mg
Sodio	3,52 mg
Carbohidratos	0 g
Fibra	0 g
Azucre	0 g
Proteinas	90,5 g

Vitamina A	250 ug	Vitamina C	0 mg
Vitamina B12	0 ug	Calcio	128 mg
Ferro	124 mg	Vitamina B3	4,1 mg

Cabala en aceite de oliva 100g

Calorias	217 kcal
Graxa	13,80 g
Colesterol	66,90 mg
Sodio	382 mg
Carbohidratos	0,60 g
Fibra	0 g
Azucre	0,60 g
Proteinas	22,50 g

Vitamina A	125 ug	Vitamina C	0,09 mg
Vitamina B12	9,80 ug	Calcio	17,20 mg
Ferro	1,01 mg	Vitamina B3	17,10 mg

Calamares en salsa americana 100g

Calorias	195 kcal
Graxa	15,20 g
Colesterol	169,60 mg
Sodio	110 mg
Carbohidratos	1,50 g
Fibra	0 g
Azucre	1,50 g
Proteinas	13,12 g

Vitamina A	302,10 ug	Vitamina C	0 mg
Vitamina B12	1,30 ug	Calcio	45,53 mg
Ferro	0,85 mg	Vitamina B3	7 mg

Atún en aceite de oliva 100g

Calorias	208 kcal
Graxa	12,10 g
Colesterol	39,80 mg
Sodio	291 mg
Carbohidratos	0 g
Fibra	0 g
Azucre	0 g
Proteinas	24,80 g

Vitamina A	62,20 ug	Vitamina C	0 mg
Vitamina B12	5 ug	Calcio	27,70 mg
Ferro	1,20 mg	Vitamina B3	18,20 mg

Sardiñas en aceite de oliva 100g

Calorias	218 kcal
Graxa	13,60 g
Colesterol	65 mg
Sodio	366 mg
Carbohidratos	0 g
Fibra	0 g
Azucre	0 g
Proteinas	23,93 g

Vitamina A	49 ug	Vitamina C	0 mg
Vitamina B12	29,60 ug	Calcio	314 mg
Ferro	2,90 mg	Vitamina B3	12,57 mg

ACTIVITY 1. WHAT DO YOU KNOW?

Divide the group / class into 4 teams and appoint a member in each of them.

Write the series of questions set out below on the blackboard and ask the students to answer them in teams for 5 minutes. The members must collect on a sheet of paper the main ideas presented by their classmates.

Do a pooling: each member, in turn, must present the ideas of the team in relation to each question without repeating the information that was presented by other groups.

BATTERY OF QUESTIONS

- What native marine species do you know?
- What do they eat?
- Give an example of white, semi-fat, blue, crustacean and mollusk fish.
- Do you know of any traditional or homemade fish preservation process?
- What steps of the industrial conservation process do you know?
- List some Galician canning industries that you know.

ACTIVITY 2. LAPBOOK SESSION 1

Preparation of a common project, a lapbook, by teams.
A lapbook is made from a cardboard base that will allow us to develop or present a topic. It is a kind of large triptych, in which folding parts, folds, removable materials are placed...

Inside we are collecting drawings, photos, objects, activities, diagrams... related to the theme..
It is an exhibition, research and creative manipulation. On the internet we can find a multitude of models to add moving parts, dropdowns, etc.

The teacher will divide the group into 4 teams. Each team will prepare a different lapbook. Teacher will explain what the elaboration of a lapbook consists of and will show some photos.
Also distribute the topics that will be covered in each of the lapbooks, which are exposed at the end of this section and include the sketch design.

TOPICS TO TREAT ON EACH LAPBOOK:

TEAM 1:
Galician native marine species. Trophic chain of thes
TEAM 2:
Classification of autochthonous species based on their fat content.
TEAM 3:
Homemade, traditional and industrial conservation processes.
TEAM 4:
Canning industries of the town, city, province or Galicia.

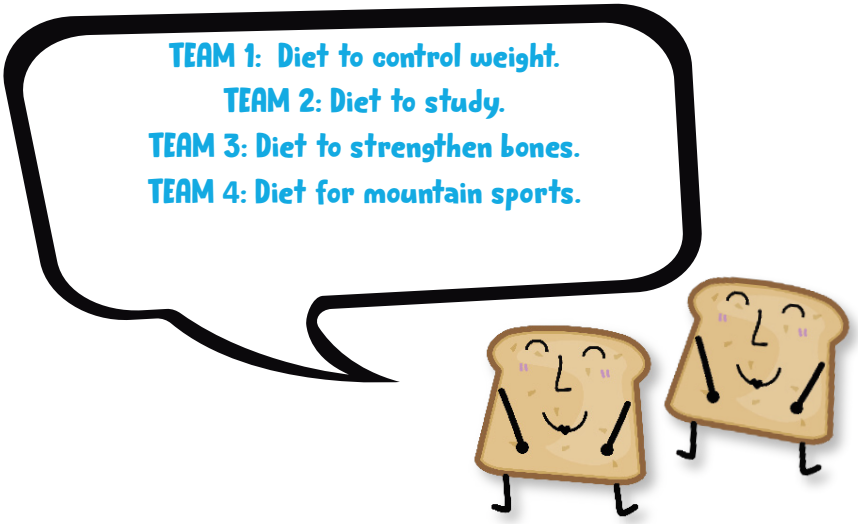
ACTIVITY 3. KEEP YOUR DIET

Teamwork: through debate and argumentation, each team will have to develop a 7-day diet in which seafood will be included in preserves.

DESCRIPTION:
Exposure in the class of the function that different foods perform in our body. For this, the research material carried out in class by the teacher and by anyone that the students can collect will be available.

Explain in class what characteristics a balanced diet must have depending on the objective that you want to achieve with it.

Each group has to develop a different diet:



ACTIVITY 4. TAKE THE CAN

Individual work. Each student will have to make a lamp with a can of preserves following the teacher's guidelines.

MATERIALS:

- Can of preserves
- Acrylic paint
- Decorative papers
- Brushes
- Manual punch
- A candle

Pierce the can to allow the candle light to escape.

Paint and decorate the perforated can with acrylic paint, decorative papers or with graffiti spray.

Place some lighted candles on the lid of the can that was separated when opened, or on a plate, and cover it with the can.

You already have a lamp made with your own hands!

ACTIVITY 5. EXPERIMENT ON MIXING MASSES OF WATER IN THE OCEANS

Teamwork. Each group will have to carry out an experiment and participate in a later debate.

MATERIALS:

- 500mL glass beakers (if possible have transparent wall aquariums of 10L, the experiment will be better shown).
- Food coloring.
- Pasteur pipettes (50 mL glass beakers, if required the experiment is carried out in aquariums).
- Spoons.
- Water solutions of different densities (20%, 34% and 60%), numbered for identification.
- Hot fresh water.
- Fresh water at room temperature.
- Cold water (4°C) supersaturated with salt.

The experiment begins with a brief explanation of the distribution of the water masses in the stratified layers of the ocean as a function of their density, with examples like estuaries, melting glaciers of the cold regions of the planet, etc.

1. Describe the experiment to be performed and its goals.
2. Distribute the participants into groups of up to 4 people.
3. Distribute the material to each group: solutions, water at different temperatures, Pasteur pipettes (or glasses if aquariums are used), food coloring food and a spoon.
4. The participants have to pour the fresh water at room temperature, previously dyed with food coloring, over the different solutions and observe the dynamics of the water.
5. Repeat the process by pouring fresh water at 4°C, tinted with the dye, over hot water.
6. Finally, the participants will present the conclusions reached and will open a discussion in the classroom.

fai clic ao teu bocata

XUNTA DE GALICIA