

SENSE	TITLE	TIMING
	El Código Binario	 55 minutes
AUTHORS	KEY WORDS	LANGUAGE
Daniel Ruiz Belmonte	Código Binario, uno, cero, matemáticas	English
LEVEL	TARGET GROUP	AGE
A1	Secondary Students	12 - 13

COMPETENCES			
☐	Global	☒	Oral Production
☒	Oral Comprehension	☐	Written Expression
☒	Oral Expression	☐	Written Comprehension

OBJECTIVES	
COMMUNICATIVE	- Communicate information encoded in binary code using words written in English. - Understand and decode messages and words. - Interact with a partner to exchange information effectively using an alternative communication code..
FUNCTIONAL	- Understand the basic principles of binary code and how it works. - Learn English vocabulary, especially words related to animals. - Apply mathematical knowledge related to binary encoding in a practical activity. - Encode and decode information using different sensory channels. - Promote cooperative learning through pair work.
CULTURAL	- Understand the importance of binary code - Learn about the origin and historical development of binary code through an audiovisual resource. - Recognise the importance of communication systems and shared codes in facilitating interaction between people.

METHODOLOGY	- Student-centred - Interdisciplinary Approach - Task-Based Learning
TECHNIQUES	- Guided discovery of binary code concepts - Cooperative learning through pair and small-group work - Gamification using a decoding challenge - Oral interaction and peer communication - Learning through sensory experience (hearing and movement) - Formative assessment through observation, questioning, and feedback
RESOURCES	- Abecedario en binario: https://www.facebook.com/ElCerebrit0/posts/letras-en-c%C3%B3digo-binario-/1340586237732655/ - Nombres de animales en inglés: https://ar.pinterest.com/pin/ingles-nombres-de-animales-en-ingles-en-2022--861946816200566112/ - Vídeo sobre el código binario: https://www.youtube.com/watch?v=wqbV6DLVezo
ICT TOOL	- Interactive whiteboard or digital projector. - Computer connected to the display. - Online educational video about the history and use of binary code. - Online reference materials for the binary alphabet and English vocabulary.

DESCRIPTION OF ACTIVITIES		
Starter	5'	Activity 1 Introduce binary code and its different uses (encoding). To do this, the teacher will explain how to convert a number into binary code and will present a table showing the letters of the alphabet in binary code.
Salad	15'	Activity 2 Introduce some English words that will be used to encode them into binary. For example, vocabulary related to animals can be used.
Main Dish	25'	Activity 3 Working in pairs, students will sit back-to-back. The student facing forward will produce sounds by clapping (representing the number 1) and tapping on the desk (representing the number 2) to transmit words in the target language to the student facing away, who must guess them. The student facing away must say the word and its Spanish translation. The pair that guesses the most words correctly will win the game.
Dessert	10'	Activity 4 The class will review the vocabulary covered during the session. The teacher will go over the words, ask who the winners were, and discuss whether there were any difficulties during the activity. Finally, the concept of binary code will be reviewed, and the students will watch a video about its history.

ASSESSMENT

Students' understanding of binary code and their ability to transmit it using claps and desk taps will be assessed. Particular attention will be paid to whether students understand the ability of numbers to encode information. Finally, it will be assessed whether students have understood and learned the English vocabulary introduced during the lesson.



Attribution: Original activity from Erasmus + LANSEN Project

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ANNEXES

ANNEX 1

Las letras en código binario

A	65	01000001	N	78	01001110
B	66	01000010	O	79	01001111
C	67	01000011	P	80	01010000
D	68	01000100	Q	81	01010001
E	69	01000101	R	82	01010010
F	70	01000110	S	83	01010011
G	71	01000111	T	84	01010100
H	72	01001000	U	85	01010101
I	73	01001001	V	86	01010110
J	74	01001010	W	87	01010111
K	75	01001011	X	88	01011000
L	76	01001100	Y	89	01011001
M	77	01001101	Z	90	01011010

ANNEX 2



ANIMALES

en Inglés

Presentado por: **como digo**

SELVA

SABANA

GRANJA

DOMÉSTICOS

tiger

lion

pig

dog

monkey

zebra

horse

cat

toucan

gazelle

donkey

fish

crocodile

hyena

sheep

rabbit

macaw

ostrich

goat

hamster

panther

meerkat

hen

snake

sloth

giraffe

rooster

bird

frog

elephant

chick

turtle

gorilla

rhinoceros

cow

parrot

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