Escola Cor de Roure de Santa Coloma de Queralt
Anna Costa Sendra // Oriol Duch Alberich

Generació Plurilingüe (GEP)
Year 2
2018-2019

PROJECT PLANNING TEMPLATE for CLIL and Content-Rich Environments

Identification of the GEP project:

Title	**A sustainable garden**
Authorship	**Oriol Duch Alberich & Anna Costa Sendra**
School	**Escola Cor de Roure**
Students' CEFR Level (A1, A2...)	**A1**
Grade	**4th – 5th – 6th grades of Primary**
Content area(s)	**Science**
Number of sessions (4, 6 or 9)	**6 sessions**
Teacher(s) involved	**Oriol Duch Alberich - Anna Costa Sendra – classes' tutors**
Key words	Gardening – Medicinal Plants – Culinary Plants – Saving water - Designing

1. OUR PROJECT

Introduction: Being aware of the fact we have a missed area in our school, we had the idea to turn it into a space where children can take benefit of it. As we already have a vegetable garden, we thought it would be interesting to create a sustainable garden now. Our idea is that our learners take care of it and they achieve the main goals we propose on this project.

Driving question: How can we turn a missed area of the school into a profitable one?

Final product :- Power point (oral presentation for the families)
- Posters
- Videos about gardening and the planting process

2. GOALS	2. HOW DO YOU KNOW STUDENTS ARE MAKING PROGRESS? (assessment criteria)
1.Promote a creative criteria	1.1. They can propose ideas about what to do to turn a missed area into a profitable one. 1.2. They can give useful and innovating ideas about what to do with the plants they grow in the garden 1.3. They can design a garden
2.Investigate different water saving resources	2.1. They can identify which plants need less water and less care. 2.2. They make experiments to save water.
3.Work cooperatively	3.1. They can manage working in group, sharing tasks and responsibilities
4.Develop a responsible conscience to keep a garden alive	4.1. They become responsible of taking care of a garden
5.Develop gardening skills	5.1. They can plant, water, and care the plants. 5.2.They can use the gardening tools properly
6.Interview people to gather information about the project	6.1.They write questions using correct linguistic structures 6.2.They show a proper attitude when they talk to a gardener

7.Investigate the healthy benefits of some plants	7.1. They can match images with definitions 7.2.They can use ICT tools to search and learn about medicinal plants
8.Create murals and signs to protect and respect the garden	8.1. They can write gardening rules.
9.Write cooking recipes	9.1. They can apply the correct vocabulary and the right structures in a written recipe.
10. Show and justify the importance of having a garden in the school	10.1. They achieve strategies to explain the audience what they have learned during the project.

3. CURRICULUM CONNECTIONS
SPECIFIC COMPETENCES AND KEY CONTENTS

Subject-matter curriculum		Foreign language curriculum	
Specific Competences	Key Contents	Specific Competences	Key Contents

ÀMBIT DE CONEIXEMENT DEL MEDI
  .ÀREA DE CONEIXEMENT DEL MEDI NATURAL
 	
  *Dimensió Món Actual
 	
  -Competència 1.Plantejar-se preguntes sobre el medi, utilitzar estratègies de cerca de dades i analitzar resultats per trobar respostes.
 	
  -Competència 3. Interpretar l'espai a partir dels elements del territori i de les seves representacions per situar-s'hi i desplaçar-se
 	
  *Dimensió salut i equilibri personal
 	
  -Competència 8. Prendre decisions sobre higiene i salut amb coneixements científics per a la prevenció i el guariment de malalties.
	- Fases d'una investigació.
	- Biodiversitat i sostenibilitat.
	- Canvi i continuïtat.
	- Sistema físic.
	- Espai geogràfic.
	- Ecosistema I paisatge.
	- Consum responsable.
	
	- Educació per la salut.
		ÀMBIT LINGÜÍSTIC
		  .ÀREA DE LLENGUA ESTRANGERA
		
		  *Dimensió comunicació oral
		
		  -Competència 3. Interactuar oralment d'acord amb la situació comunicativa utilitzant estratègies convencionals bàsiques
		
		  *Dimensió comprensió lectora
		
		  -Competència 5. Utilitzar els trets visuals, discursius i lingüístics bàsics d'un text d'estructura clara: per comprendre'l.
		
		  *Dimensió expressió escrita
		
		  -Competència 8. Produir textos senzills amb adequació a la situació comunicativa amb l'ajut de suports específics.
			- Estratègies per la comprensió.
			- Estratègies per l'expressió.
			- Lèxic: vocabulari usual i específic.
			- Estratègies i fórmules per la interacció oral.
			Gestió i comunicació de la informació.
			-Ús de recursos digitals.
			- Textos de tipologia diversa en diferents formats i suports.
			- Lèxic: vocabulari usual i específic.
			-Estratègies de cerca.
			-Ús de recursos digitals.
			- Estratègies per la comprensió.
			- Textos de tipologia diversa en diferents formats i suports.
			- Estratègies per la producció i revisió.
			- Lèxic: vocabulari usual i específic.

4. 21st CENTURY COMPETENCES			
Collaboration	x	Information, media and technology	**X**
Communication	x	Leadership & Responsibility	**X**
Critical Thinking and Problem Solving	x	Initiative & Self-direction	**X**
Creativity & Innovation	x	Social & Cross-cultural	**X**
Others:			

5. KEY COMPETENCES			
Communicative, linguistic and audiovisual competence	x	Digital competence	x
Mathematical competence	x	Social and civic competence	x
Interaction with the physical world competence	x	Learning to learn competence	x
Cultural & artistic competence	x	Personal initiative and entrepreneurship competence	x

6. CONTENT (Knowledge and Skills)

CONTENT-RELATED KNOWLEDGE	CONTENT-RELATED SKILLS
- **Soil Conditions** - **Drainage systems** - **Types of fertilizers** - **Light preferences** - **Types of plants** - **Parts of a plant** - **Photosynthesis** - **Gardening boxes** - **Gardening tools** - **Temperature graphics** - **Rain graphics** - **Gardening process** - **Gardening rules** - **Invitations** - **ICT tools** - **Medicinal plants** - **Diseases** - **Healthy habits** - **Culinary recipes**	- **Formulating questions.** - **Predicting problems.** - **Researching information.** - **Measuring temperature and areas.** - **Designing a garden and a logo.** - **Documenting the project.** - **Graphing temperature and rain.** - **Interviewing a gardener.** - **Planting medicinal and culinary plants.** - **Creating postrers and murals.** - **Writing an invitation.** - **Explaining the project.** - **Justifying the project.**

7. REFERENCES

Clil Skills. Liz Dale,Wibo Van der Es, Rose Tanner
Website: ISLcollective.com
Essentials for Project-Based Learning: John Larmer, John R. Mergendoller, PhD. Buck Institute for Education
Curriculum educació primària
http://ensenyament.gencat.cat/web/.content/home/departament/publicacions/colleccions/curriculum/curriculum-educacio-primaria.pdf
Avaluar per aprendre, Neus Sanmartí (novembre 2010)
https://drive.google.com/file/d/1d8rHCPN7NzdkFkkpSzQeCEI_vzceNksk/view

8. COMMENTS (optional)

A "Sustainable Garden" is a long-term project around the topic of plants. The idea is clear, which helps the learners to focus while searching. They are given a considerable amount of freedom and choice in the project, so we can't state when it is going to finish or how many sessions we are going to devote on this. Even though we know which goals we want our students achieve and which is the final product, we find difficult to show the idea of the project in only six sessions.

9. ACKNOWLEDGEMENTS (optional)

GEP PROGRAMME: GEP1 Project

10. UNIT OVERVIEW

Session	Activities	Timing ⏱	Skills ⚛	Interaction	ICT	Assessment 🔍
1	Presentation of the driving question of the project in the class	5'	Listening Speaking	Teacher-student	----------	----------------------
	Analysis of the question. Brain storm with: https://answergarden.ch	15'	Listening Speaking	Student-student	Digital Board & tablets	A good score in the answergarden activity
	Venn Diagram	20'	Reading Speaking	Student-student	Digital Board	Rubric about the project
2	Creation of murals	20'	Listening Speaking	Student-student	----------	Small checkings **Fist to Five** technique
	Presentation of the project to other classes	20'	Listening Speaking	Student-student	---------	Peer-assessment
	KWL Grid	20'	Writing speaking	Teacher-student	----------	Participation of the students

	Sharing tasks by groups	20'	Listening Speaking	Teacher-student	-----------	Participation of the students
3	Video clip: medicinal plants	10'	Listening	--------------------	PDI /computer	--------------------
	Think, pair, share Groups made using Class Dojo	15'	Speaking	Student-student	PDI /computer	Small checkings by the teacher
	Mind map	15'	Speaking Writing	Teacher-student	Tagul.com Popplet.com	Participation of the students
	Worksheet: Types of plants	20'	Reading	Pair work	Tablets	Rubric of the project
4	Dictogloss : Photosynthesis	20'	Reading	Group of 5	------------	Peer -assessment
	Experiment	15'	Listening Speaking	Teacher-student	------------	Small checkings
	Design the Gardening Logo for the project	25'	Listening	Teacher-student	------------	Students assessment

5	Excursion: visiting a garden	35'	------------ Catalan language	---------------------	---------------	------------------
	Worksheet: Draw five plants you see in the garden	20'	Writing	Student-student	-----------------	Rubric of the project
	Reading comprehension	5'	Reading	Individual work	-------------------	Self-assessment
6	Measuring the area	20'	Listening Speaking	Student-student	-----------------	Small checkings
	Worksheet: Design your garden	40'	Listening	Teacher-student	-----------------	Students assessment

11. SESSION PLANNING

SESSION 1: PRESENTATION OF THE PROJECT

Objectives of the session: - understand the meaning of the driving question.
- work collaboratively
- understand the vocabulary related to the soil, the water, the weather and the types of plants.
- use the correct vocabulary to give opinions and to solve the problem of the driving question.
- classify the words into 4 groups.

Content-obligatory language for the session:
 - sustainable environment/garden, missed area, soil, seasons, types of plants, properties of the soil, types of climate, water(sea, lake, …).
- oral linguistic structures: what's the soil like?
How can we turn a missed area into a profitable one?
What do you think about…?

Activities *include : Name and description; Assessment tool (if any); Material (including language support)*					

1.1	**Presentation of the driving question of the project in the class.** The teacher presents the box with the driving question of the project inside, along with a problem to solve.	5'	L/S	T/S	--	--
1.2	**Analysis of the question**. The teacher asks the children what they think about the driving question. The teacher makes sure that everybody understands the message using the fist to five technique. **Brain storm of ideas .** The students express their opinions in turns about what to do in the missed area and the teacher takes notes on the digital board.	15'	L/S	T/S	--	Fist to five
1.3	**Venn Diagram.** The teacher provides vocabulary support using the digital board. After this the learners complete the Diagram in groups of 5. They complete the rubric when they finish the Diagram	20'	L/S	T/S	PDI	Rubric
1.4	**Creation of the murals.** The learners are asked to create murals about the Diagram	20'	L/S	S/S	--	Small checkings

SESSION 2: ORGANISING THE PROJECT

Objectives of the session: Work cooperatively

Promote a creative criteria

Show and justify the importance of having a garden in the school

Content-obligatory language for the session: - sustainable environment/garden, missed area, soil, seasons, types of plants, properties of the soil, types of climate, water(sea, lake, …), cooperative roles (writer, spelling checker, speakers, time checker), first, then, later, finally

Oral linguistic structures: Do you understand?

What do you think about it? We think that….In our opinion…

Do you agree?

	Activities *include : Name and description; Assessment tool (if any); Material (including language support)*	⏱	⚛	🎴	💻	🔍
1.1	**Presentation of the project to other classes.** Students from 4th course should go to the other classes, 5th and 6th courses, to explain them what's the project about.	20'	L/S	T/S	--	Peer assessment
1.2	**KWL Grid.** About the sustainable garden students have to argue what they know, what they want to learn, and during the project, what they have learnt.	20'	W/S	T/S	--	Participation

1.3	**Sharing tasks by groups.** With all the information that we have, we have to bring tasks to all the classes, and concepts that they can learn according to the project.	20'	L/S	T/S	--	Participation

SESSION 3: GARDENING PLANTS

Objectives of the session: Understand the main ideas of a video

Investigate the healthy and culinary benefits of some plants

Argue the concepts learned through the video with a partner

Content-obligatory language for the session: - specific types of plants that they are going to learn, cooperative roles (writer, spelling checker, speakers, time checker), first, then, later, finally

Oral linguistic structures: This plant is used for...

I think that.../In my opinion...

Do you agree?

| Activities
include : Name and description; Assessment tool (if any); Material (including language support)					

1.1	**Watch the video about medicinal plants: https://m.youtube.com/watch?v=Pmyn6trPpjo**	10'	L	---	PDI	--
1.2	**Think, pair, share.** After the video, the students have to complete the worksheet prepared for them, with different tasks.	15'	S	S/S	--	Small checkings
1.3	**Mind map.** With all the information that they have about the lesson, the learners have to create a mind map with all what they have learnt. The teacher will show the mind map on the digital board using the tool "TAGUL"	15'	S/W	T/S	Tagul.com Popplet.com	Participation
1.4.	**Worksheet: types of plants.** After this, they have to complete the worksheet prepared and also the rubric, to check if they did a good job or not.	20'	R	Pair work	Tablet	Rubric

SESSION 4: THE PLANT GROWING PROCESS/ VISITING A GARDEN / OUR SCHOOL GARDEN

Objectives of the session: - Investigate different water saving resources.
- Promote a creative criteria

Content-obligatory language for the session: - specific vocabulary like sunlight, carbon, dioxide…
Oral linguistic structures: Do you understand?
What do you think about it? We think that….In our opinion…
Do you agree?
What is going to happen?
Do you think that it will be better or worst?

	Activities *include : Name and description; Assessment tool (if any); Material (including language support)*	⏱️	⚛️	🟨🟥	💻	🔍
1.1	**Dictogloss: Photosyntesis.** Learners have to listen to the text about the photosynthesis process and put the words in order.	20'	R	Groups of 5	--	Peer assessments

1.2	**Experiment.** Learners will do some experiments related with photosynthesis. They will put two plant in front of the window, one covered with a card box and the other without.	15'	L/S	T/S	--	Small checkings
1.3	**Design the Gardening Logo for the project.** In this activity, students will draw the logo for our sustainable garden project. The winner will be chosen by the students.	25'	L	T/S	--	Student assessment

SESSION 5: VISITING A GARDEN Objectives of the session: - Interview people to gather information about the project. - Develop a responsible conscience to keep garden alive. - Develop gardening skills.

Content-obligatory language for the session: - sustainable environment/garden, types of plants.
Oral linguistic structures: Can you tell me your experience about…?
 	
                          Do you recommend us to do…?
                          What do you think about it? We think that….In our opinion…
                          Do you agree?

	Activities *include : Name and description; Assessment tool (if any); Material (including language support)*	⏱️	⚛️	🎴	💻	🔍
1.1	**Excursion: visit a garden.** Students will visit a garden in Tarragona, and they will ask the gardener some questions about the garden. It will be useful to create our own one.	35'	Catalan lang.	--	--	--
1.2	**Worksheet: draw five plants you see in the garden.** To be sure that they pay attention to the visit, students will draw 5 plants that they have seen during the visit.	20'	W	S/S	--	Rubric
1.3	**Reading comprehension** Reading comprehension about the sustainable garden topic.	5'	R	Indiv.	--	Self-assessment

SESSION 6: OUR SCHOOL GARDEN

Objectives of the session: - Work cooperatively
- Promote a creative criteria

Content-obligatory language for the session: - measure distances in meters or m2.

Oral linguistic structures: - According to what we know, do you think that this design is good? What will you change? How long is it?How wide is it?

|	Activities *include : Name and description; Assessment tool (if any); Material (including language support)*	⏱️	⚛️	🗨️	💻	🔍
1.1	**Measuring area.** With the teacher help, students will measure the area of our missed space. It will be done giving roles to the students by the teacher.	20'	L/S	S/S	--	Small checkings
1.2	**Worksheet: Design your garden.** According the knowledge that we had acquired during the project, students will design our garden. Students will vote the best one.	40'	L	T/S	--	Students assessment

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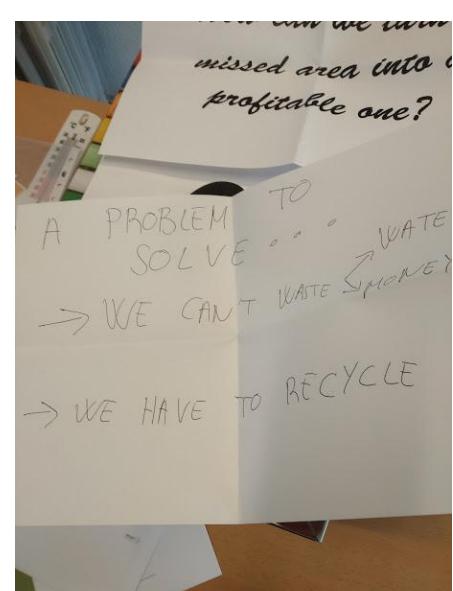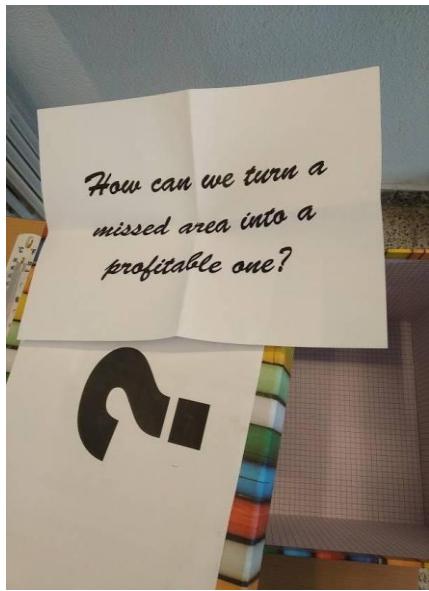
MATERIALS

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DRIVING QUESTION:

To present the driving question, we put it inside a magic box. When The students arrive in the class and they find the magic box and the teacher reads the question.
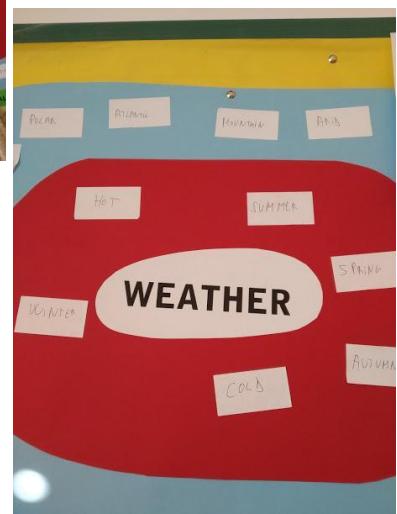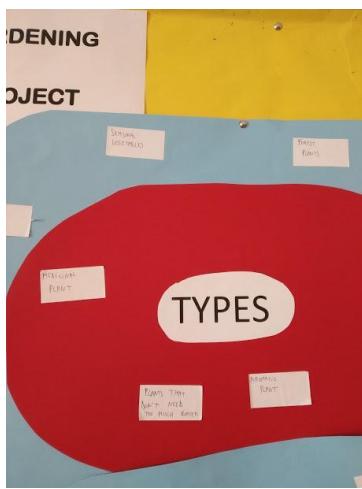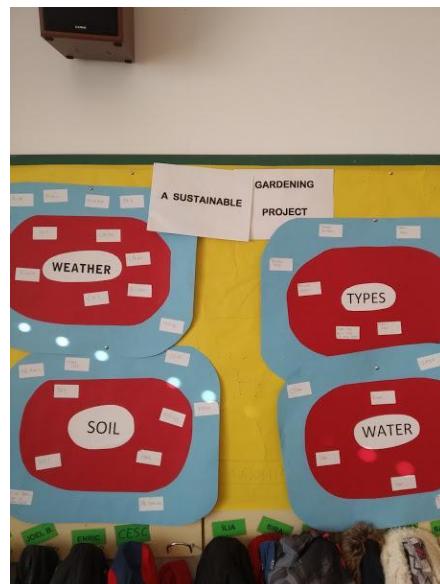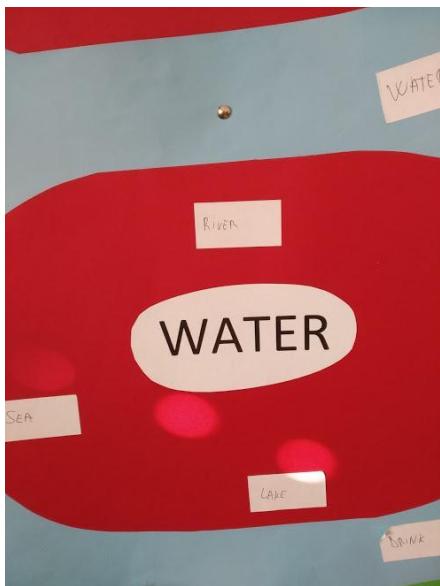
But inside the magic box, there is also another problem to solve...

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VENN DIAGRAM:

The teacher introduces some key words that children need to know for the project. From these key words, there are a lot concepts that they might know and other that they need to learn. We spread all the words on the table, but obviously, some of them are a little bit difficult for our students. So they will need a visual support to know their meanings. (for example sow=llaurar)

KNOW

WANT

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LEARN

Generalitat de Catalunya
Departament d'Ensenyament

MARC PER AL
PLURILINGÜISME

A FAVOR
DE L'ÈXIT
ESCOLAR
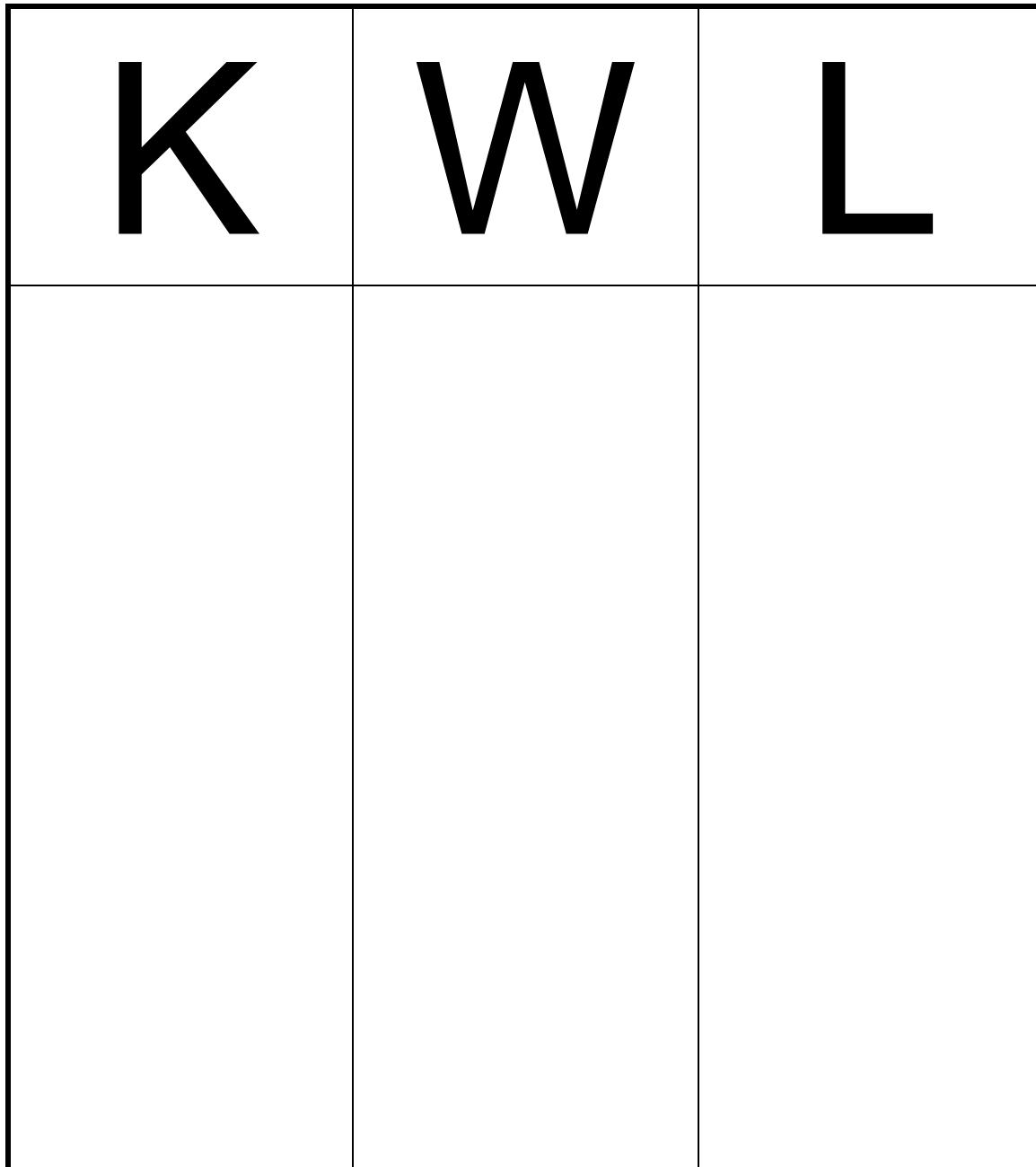
Generació Plurilingüe (GEP) – 2018-2021

- What do you *know* about **plants**? What do you *want to know* about how to grow plants in our school garden? What *have you learned* about plants?

K	W	L

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MARC PER AL
PLURILINGÜISME

A FAVOR
DE L'ÈXIT
ESCOLAR

Generació Plurilingüe (GEP) – 2018-2021
- What do you *know* about **designing gardens**? What do you *want to know* about how to design a garden? What *have you learned* about designing gardens?

K	W	L

- What do you *know* about **medicinal herbs**? What do you *want to know* about medicinal herbs? What *have you learned* about medicinal herbs?

K	W	L

- What do you *know* about **culinary herbs**? What do you *want to know* about culinary herbs? What *have you learned* about culinary herbs?

K	W	L

<u>THINK – PAIR – SHARE</u>

➢ **First watch the video, then think about the following questions:**

1- **What do think about the garden of the video?**

2- **Does the gardener grow different types of plants?**

3- **Have the plants medicinal or culinary uses?**

4- **Do you think can we plant them in our school garden?**

➢ **Now it's time you discuss with your partner about the questions above.**

➢ **Finally share your opinions with the class-group.**

INTERVIEW TO A GARDENER

.**What** does the soil need to be productive?

.**What** is it better for our garden:

-to grow plants on the ground or in big boxes?

.**How** can we water the plants?

.**How** can we save water?

.**How many times** a day do we have to water the plants in summer? And in winter?

.**What** types of plants can we plant in our garden?

.**What** types of plants need more carefulness?

.What types of plants survive in low temperatures?

.What types of plants survive in hot temperatures?

# .Can the medicinal plants live during the year?
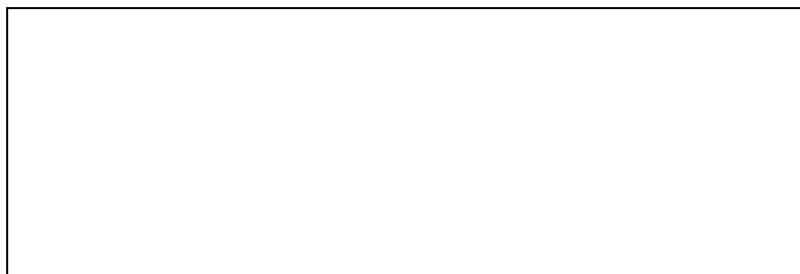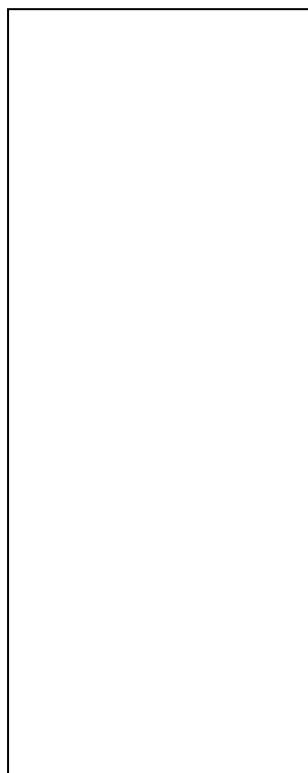
. Which plants do we need to plant to have a "*Healing garden*" ?

. Which plants do we need to plant to have a "*pizza garden*" ?

. Which tools do you recommend us to have in our garden?

DESIGN YOUR GARDEN

TYPES OF PLANTS

Match the images with the plants. You can use the tablets if you need information.

LET'S VISIT A GARDEN
"Hort de la Sínia"

- **After the visit of the garden do the reading activity. You have to circle the correct answer.**
- ➢ **The garden looks…**
- a) **Nice**
- b) **Awful**
- c) **Dirty**

- ➢ **There are different types of plants**
- a) **Yes, there are**
- b) **No, there aren't**

- ➢ **All the plants need a lot of water**
- a) **Only some**
- b) **None of them**

- ➢ **Some plants have got healing properties**
- a) **True**
- b) **False**

- ➢ **The soil is well drained**
- a) **True**
- b) **False**

- ➢ **All the plants need**
- a) **Morning sun**
- b) **Afternoon sun**
- c) **Light shade**
- d) **Sun and shade**

- ➢ **Do the plants need fertilizer supplement?**

- a) **Yes, they do**
- b) **No, they don't**

DRAW FIVE PLANTS YOU SEE IN THE GARDEN

NAME:	**NAME:**	**NAME:**	**NAME:**	**NAME:**
Soil Conditions:	**Soil Conditions:**	**Soil Conditions:**	**Soil Conditions:**	**Soil Conditions:**
Light preference:	**Light preference:**	**Light preference:**	**Light preference:**	**Light preference:**
This herb can help:	**This herb can help:**	**This herb can help:**	**This herb can help:**	**This herb can help:**

PHOTOSYNTHESIS

Plants need food, but can't take it.
Instead they have to bake it.
It's in their leaves they make it
In PHOTOSYNTHESIS!

In the leaves you cannot see,
The CHLOROPLASTS
so tiny making food for energy.
And here's their recipe:

SUNLIGHT
CARBON   DIOXIDE
WATER
When it's finally done,
There's SUGAR and OXYGEN.
From WATER, AIR, and SUN,
That's PHOTOSYNTHESIS!

DICTOGLOSS

● Listen to the text about the photosynthesis process and put the words in order.

PHOTOSYNTHESIS
CARBON DIOXIDE
OXYGEN
CHLOROPLASTS
WATER
SUN
SUGAR
AIR
SUNLIGHT
PHOTOSYNTHESIS
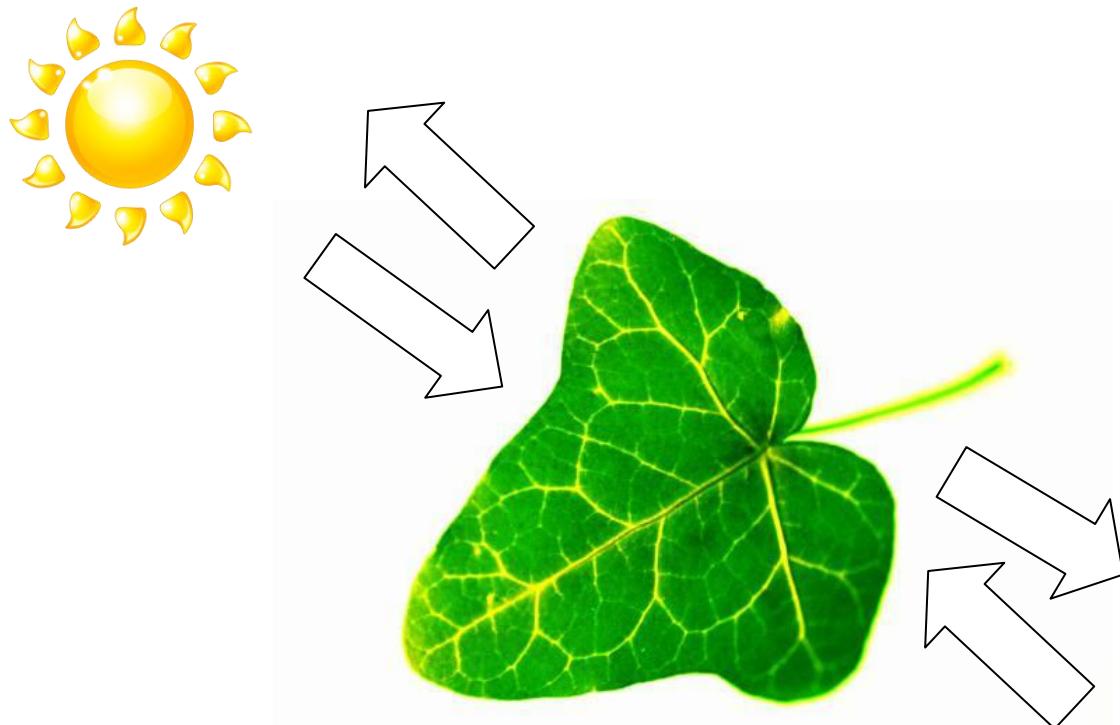
Photosynthesis

Directions: label the picture with the correct energy flow descriptions below.

Water enters from the roots

Carbon dioxide enters from the air

Sunlight hits the leaf and is taken in Chlorophyll

Oxygen is made and goes to the air

Sugar is made

VISUAL SUPPORT

DRAINAGE SYSTEM

LIGHT PREFERENCE

Full sun

Afternoon shade

VISUAL SUPPORT

Healing Herbs

Garden boxes

Planting on the ground

Sow

Dry

Take care

Wet

Arid

Forest plants

Cor de Roure
Escola d'educació infantil i primària

Name:

Term:

Course:

Self-assessment			
How did I do the activity? VENN-DIAGRAM			
How did I work in group? VENN-DIAGRAM			
How did I do the activity? TABLET ACTIVITY (searching about plants)			
How did I work with my peer? TABLET ACTIVITY (searching about plants)			
How did I do the activity? DRAW FIVE PLANTS ACTIVITY			
How did I work with my peer? DRAW FIVE PLANTS ACTIVITY			

Observations of the teacher: