

The school waste is in our hands!



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Generació Plurilingüe (GEP)

Year 2
2018-2019

PROJECT PLANNING TEMPLATE for CLIL and Content-Rich Environments

Identification of the GEP project:

Title	THE SCHOOL WASTE IS IN OUR HANDS!
Authorship	ROSA M ^a MELGOSA - M ^a DOLORES GIMENEZ
School	ESCOLA LLUIS PIQUER
Students' CEFR Level (A1, A2...)	A1
Grade	PRIMARY 6th
Content area(s)	NATURAL SCIENCE - MATHS - ART
Number of sessions (4, 6 or 9)	12
Teacher(s) involved	M ^a DOLORES GIMENEZ - ROSA M ^a MELGOSA
Key words	RECYCLING, ENVIRONMENT, WASTE

1. OUR PROJECT

Introduction: We really do have the whole world in our hands...it is up to us to take care of it! Our school has got some waste containers indoors and outdoors. Unfortunately, we realized they are not being well used. This project pretends to get our students thinking about the impact of recycling properly all their lifetimes. When we implement this project our students will create a guide of how to sort out our waste.

Driving question: How can we recycle properly in our school?

Final product:
Posters for the school on how to recycle properly.
Manipulative games for the classrooms to practice how to sort out waste.
 A formal presentation for the school leadership, city council and school community members in which they explain the proposals on how to recycle properly.
Leaflets about the project.

2. GOALS	2. HOW DO YOU KNOW STUDENTS ARE MAKING PROGRESS? <small>(assessment criteria)</small>
1. <u>Be aware</u> of the school's waste stream.	1. They can collect, record and represent data about the school's waste stream.
2. <u>Design</u> recycling strategies for the school.	2. They can design a recycling plan for the school.
3. <u>Advice</u> others on how to recycle properly.	3.1 They can create posters giving advice on how to recycle properly. 3.2 They can prepare and carry out a formal presentation including the research information and the recycling plan.



3. CURRICULUM CONNECTIONS SPECIFIC COMPETENCES AND KEY CONTENTS

Subject-matter curriculum		Foreign language curriculum	
Specific Competences	Key Contents	Specific Competences	Key Contents
<ul style="list-style-type: none"> - Plantejar-se preguntes sobre el medi, utilitzar estratègies de cerca de dades i analitzar resultats per trobar respostes. - Valorar problemes socials rellevants interpretant-ne les causes i les conseqüències per plantejar propostes de futur. 	<ul style="list-style-type: none"> - Fases d'una investigació. - Problemes socials rellevants. - Biodiversitat i sostenibilitat. 	<ul style="list-style-type: none"> - Obtenir informació bàsica i comprendre textos orals senzills. - Planificar i produir textos orals breus i senzills adequats a la situació comunicativa. - Interactuar oralment d'acord amb la situació comunicativa utilitzant estratègies bàsiques. - Aplicar estratègies per obtenir informació bàsica i comprendre textos escrits. - Planificar i produir textos senzills a partir de la identificació dels elements més rellevants de la situació comunicativa i amb ajut de suports. - Revisar el text per millorar-lo en funció de la situació comunicativa amb l'ajut de suports específics - Utilitzar estratègies plurilingües per a la comunicació. 	<ul style="list-style-type: none"> - Textos de tipologia diversa en diferents formats i suports. - Estratègies per a la comprensió. - Estratègies per a l'expressió: planificació, producció i revisió. - Estratègies i fórmules per a la interacció oral. - Lèxic: vocabulari usual i específic. - Fluidesa oral. - Gestió i comunicació de la informació. - Ús dels recursos digitals. - Fonts d'informació en suport paper i digital. - Estratègies i recursos per a l'expressió: planificació, producció i revisió. - Presentació formal.

4. 21st CENTURY COMPETENCES

Collaboration	✓	Information, media and technology	✓
Communication	✓	Leadership & Responsibility	✓
Critical Thinking and Problem Solving	✓	Initiative & Self-direction	✓
Creativity & Innovation	✓	Social & Cross-cultural	✓
Others:			

5. KEY COMPETENCES

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

6. CONTENT (Knowledge and Skills)

CONTENT-RELATED KNOWLEDGE

ÀMBIT CONEIXEMENT DEL MEDI

Matèria i energia

- Reducció, reutilització i reciclatge de residus.
- Criteris de separació i selecció.

ÀMBIT MATEMÀTIC

Comunicació i representació

- Obtenció, representació i interpretació de les dades estadístiques.
- Taules i gràfiques.

CONTENT-RELATED SKILLS

ÀMBIT CONEIXEMENT DEL MEDI

- Realització d'un treball d'investigació a partir del plantejament de qüestions i problemes rellevants de l'entorn, mitjançant el treball cooperatiu i a partir de l'experimentació i l'ús de diferents fonts d'informació i de les tecnologies digitals (programes específics, simulacions...).
- Argumentació oral i escrita de les propostes de solució del treball d'investigació.
- Comunicació de les informacions obtingudes utilitzant diferents llenguatges.
- Elaboració d'un informe per comunicar el procés i els resultats.
- Estratègies per al treball en xarxa.

ÀMBIT MATEMÀTIC

- Elaboració de gràfics i taules a partir del comptatge i la mesura.
- Ús del raonament espacial en la utilització de mapes, la planificació d'itineraris i el disseny de plànols, en suports físics i virtuals.
- Ús de la numeració i la geometria per recollir, descriure i interpretar dades.
- Comparació de conjunts de dades que tinguin alguna relació entre si.
- Descripció oral i escrita d'una situació a partir de l'anàlisi de les dades.

7. REFERENCES

Information:

<http://www.wastebuster.co.uk>

<http://www.recoup.org/>

<https://www.recyclenow.com>

“Busta and Pong’s recycling song” from:

<https://www.recyclenow.com/recycling-knowledge/getting-started/recycling-at-school/captain-busta/song>

“The making of Baby Busta” video from: <http://www.wastebuster.co.uk/teachers-bin/resources/video-library/play/introducing-wastebuster/349/How-is-Baby-Busta-Made#category>

Text adapted from:

<http://www.wastebuster.co.uk/downloads/WPEP2016.pdf>






8. COMMENTS (optional)

1. Heterogeneous distribution of the groups to attend diversity and foster collaborative work.
2. Role assignment when setting the groups.
3. Positive feedback to foster students’ learning process.
4. Teacher’s follow up of the group work.
5. Contribute to a collaborative work in a creative way using ICT tools.

9. ACKNOWLEDGEMENTS (optional)

Skills: R: reading, S: speaking, L: listening, W: writing, I: Interaction
Interaction: T-S: teacher-student, S-S: student-student, SG: small groups, WG: whole group, S-Expert, S-World
Assessment: PA: Peer assessment, SA: Self-assessment, TA: Teacher assessment, AT: Assessment tools

10. UNIT OVERVIEW

Session	Activities	Timing 	Skills 	Interaction 	ICT 	Assessment 
1	LET'S BE RUBBISH COLLECTORS! WASTE COLLECTION	1h 30'	R-S	S-World	-	-
2	GO THROUGH THE RUBBISH! ENTRY EVENT: WHAT'S GOING ON? WASTE AUDIT: HOW MUCH WASTE IS IN OUR HANDS? EXIT CARD	1h 30'	S-W-I	T-S SG WG	Google Sheets Google Classroom	TA
3	ANALYSING DATA THE RECYCLING SONG GRAPHIC INTERPRETATION THE BASICS OF WASTE	1h 30'	R-S-L W-I	T-S S-S SG WG	-	TA PA

4	<p>SORTING OUT PROPERLY!</p> <p>THE RECYCLING SONG</p> <p>FLY SWATTER: INPUT VOCABULARY</p> <p>SORTING WASTE GAME</p> <p>SORTING WASTE ASSESSMENT</p>	1h 30'	R-L-W	T-S SG WG	Google Forms Google Classroom	AT
5	<p>ON THE SPOT!</p> <p>VISIT TO THE COMPOST AND ANAEROBIC DIGESTION PLANT</p>	2h	L-I	S-Expert S-World	-	-
6-7	<p>WHY RECYCLE?</p> <p>THE RECYCLING SONG</p> <p>VIDEO: THE MAKING OF BABY BUSTA</p> <p>READING: THE MAKING OF BABY BUSTA</p> <p>YOUR WASTE IS A RESOURCE</p> <p>LITTER: HOW LONG WILL IT BE HERE?</p>	2h	R-S-L W-I	T-S S-S S-G WG	Internet videos	SA TA PA
8	<p>HANDS ON WRITING!</p> <p>WRITING: LEAFLETS</p>					
9	<p>HANDS ON PRODUCTS!</p> <p>POSTERS</p> <p>MANIPULATIVE GAME</p>					

10	<p>ENJOY OUR FAIR!</p> <p>LET'S PREPARE A PROJECT FAIR</p> <p>INVITE YOUR VISITORS</p>	1h. 30'	<p>S- R- W</p> <p>R - W</p>	<p>T-S / S-G</p> <p>S-S / W-G</p>	CANVA	PA
11	<p>DRESS REHEARSAL!</p> <p>PREPARING ORAL PRESENTATION</p>					
12	<p>OFF WE GO!</p> <p>PRESENTATION</p>					

11. SESSION PLANNING

SESSION 1: LET'S BE RUBBISH COLLECTORS!

Objectives of the session:

To collect and label all the waste generated during one day in our school.

Content-obligatory language for the session:

PAPER, PLASTIC, ORGANIC, WASTE, BIN, RUBBISH BAG,

Activities

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



Waste Collection

We work in groups using the collaborative roles.

Each group is given a set of materials for collecting the rubbish.

Each group is going to a different area of the school with a teacher.

They enter the classrooms and other common spaces, remove the different rubbish bags, close them and label them (paper, plastic, organic and waste).

Students will replace new rubbish bags in the bins.

Once they have finished all the rubbish bags are kept in the lab.

1.1 All the school staff has been informed previously.

The activity will be carried out with half group in two turns of 45 minutes.

1h
30'

R-S

S-W

-

-

Material

labels

felt-tip pens

rubbish bags

boxes






soap

[School map to distribute the groups for collection](#)






[Instruction card for each group](#)

[Collaborative roles cards](#)






[Roles and tasks](#)

<h2>SESSION 2: GO THROUGH THE RUBBISH!</h2> <p>Objectives of the session: To analyse the type of waste and the amount of waste generated during one day in our school. To present the project, through an entry event and present the driving question.</p>									
<p>Content-obligatory language for the session: PAPER, PLASTIC, ORGANIC, WASTE, LOCATION, TYPE OF WASTE, WEIGHT, CONTAMINATED</p>									
<p>Activities <i>include : Name and description; Assessment tool (if any); Material (including language support)</i></p>									
2.1	<p>Entry event: What's going on? All the students enter the classroom and see all the volume of rubbish collected the previous day. We work in groups using the collaborative roles. They pick up three or four rubbish bags and open them to observe if the school members have classified the waste properly. Questions: - What is this bag for? - What can you find in there? - What is in there? - Is the waste in the right bag? - What happens if it is not in the right one? - What is the problem? - How can we recycle properly in our school?</p>				30'	S-I	T-S WG	-	-
<p>Material gloves overalls</p>					<p>What's going on language support Driving question</p>				






2.2	<p>Waste audit: How much waste is in our hands? Students weigh all the rubbish collected. They record data about: location, weight, type of waste and contaminated waste. Once we have obtained the data we calculate the diversion rate (it represents the amount of waste that is diverted from landfill for recycling) with the following formula:</p> $\frac{\text{Weight of Recycling}}{\text{Weight of Recycling} + \text{Weight of Garbage}} \times 100$ <p>Assessment tool: Exit card At the end of the class we ask students “What are the different types of waste?” they write their answers individually in small cards. We use that activity as formative assessment.</p> <p>Material: computers scales Data record spreadsheet Collaborative roles cards Roles and tasks Exit card</p>	1h	S- W-I	T-S SG	Goog Sheet Goog Classr	TA
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SESSION 3: ANALYSING DATA									
<p>Objectives of the session:</p> <p>To introduce a song about recycling.</p> <p>To interpret graphics about the recycling data recorded in the waste audit.</p> <p>To work on basic vocabulary and concepts related to recycling.</p>									
<p>Content-obligatory language for the session:</p> <p>WASTE, LANDFILL, LITTER, RECYCLE, TO SORT OUT, GREEN BIN, YELLOW BIN, BROWN BIN, GREY BIN, BLUE BIN</p>									
<p>Activities</p> <p><i>include : Name and description; Assessment tool (if any); Material (including language support)</i></p>									
3.1	<p>The recycling song</p> <p>The teacher spreads out keywords from the song all over the room. Students have to find and pick up the words they listen while walking around the room.</p> <p>We share the lyrics and the video song through Google Classroom so they can practice it at home.</p> <p>Material:</p> <p>The recycling song lyrics</p> <p>Recycling song</p> <p>Song activity cards</p>	10'	L	T-S	-	-			

3.2	<p>Graphic interpretation</p> <p>The teacher gives the students a graphic of the recorded data in the previous session. The graphic represents how much paper, plastic, organic and waste were well sorted out and how much was contaminated.</p> <p>Students, in small groups, have to answer several questions. The answers will help them to analyse and interpret the graphic.</p> <p>Finally, all the groups put in common their responses and they discuss about the conclusions. We also formulate hypothesis about the reasons why we are not recycling properly at the school.</p> <p>Material: Graphic interpretation Graphic interpretation Conclusions Graphic interpretation Language support Collaborative roles cards Roles and tasks</p>	50'	R-S W-I	T-S SG WG	-	TA
3.3	<p>The basics of waste</p> <p>Assessment tool: snowball technique</p> <p>Each student has a set of cards: words, pictures and meanings.</p> <p>1st - Individually they have to match the waste related words with their corresponding picture and meaning.</p> <p>2nd - In pairs they share and discuss their results, modifying if necessary their work.</p> <p>3rd - In small groups (4 students) they compare and discuss their results.</p> <p>Finally we ask the students about the meanings of the words, checking with the whole group. Do the words have positive or negative meanings?</p> <p>Material: The basics of waste The basics of waste Language support</p>	30'	R-I	T-S S-S SG WG	-	PA

<h2>SESSION 4: SORTING OUT PROPERLY!</h2> <p>Objectives of the session: To learn how to sort out waste. To learn vocabulary related to school waste.</p>								
<p>Content-obligatory language for the session: ALUMINIUM FOIL, CARDBOARD BOXES, BREADCRUMBS, CANS, CARDBOARD, CARTON, CLING FILM, DUST AND DIRT, EGG BOX, FOOD WASTE, FRUIT PEEL, MAGAZINES, MARKERS, NEWSPAPER, PAPER, PENCILS, PENS, PLASTERS, PLASTIC BAGS, PLASTIC BOTTLES, RUBBER BANDS, TISSUES, TOILET ROLL, WRAPPERS</p>								
<p>Activities <i>include : Name and description; Assessment tool (if any); Material (including language support)</i></p>								
4.1	<p>The Recycling song: Fill in the gaps activity</p> <p>Students have to replace words missing from the song lyrics.</p> <p>Material: Fill in the gaps activity</p>	15'	R-L- w	WG	-	-		

4.2	<p>Fly Swatter: Input vocabulary</p> <p>We introduce the vocabulary (recyclable items) using the flashcards, and showing how to sort them out properly.</p> <p>We display all the items flashcards on the board.</p> <p>Students are divided into two teams.</p> <p>Each team is provided with a fly swatter.</p> <p>One student from each team will be the runner, taking turns. The teacher calls aloud a word from the list on the board and the players have to run and touch the word that has been said with the fly swatter. The first one to touch the word gets a point for their team.</p> <p>Material: Vocabulary flashcards</p>	20'	R-L	T-S	-	-
4.3	<p>Sorting waste game</p> <p>This game is intended to test students' knowledge of what can and can't be recycled as well as how to sort out waste. Students are divided into 2-teams. The aim is to sort as many of the flashcards items placed around the room into the right bin against the clock as possible. The winning team gets the most items in the correct bin. The game lasts exactly 2 minutes.</p> <p>Material: A timer Recycle bins 2 sets of Vocabulary flashcards</p>	25'	R	T-S SG WG	-	-
4.4	<p>Sorting waste Assessment</p> <p>We use Google Forms to assess if students have learnt how to sort out usual waste items generated at school.</p> <p>Material: Sorting waste assessment (Google Forms) Sorting waste assessment (paper version)</p>	30'	R	T-S	Goog Forms Goog Classr	AT

<h2>SESSION 5: ON THE SPOT!</h2> <p>Objectives of the session: To understand how a compost and anaerobic digestion plant works. To understand the process by which organic matter such as animal or food waste is broken down to produce biogas and biofertilizer. To make students aware of the importance of waste sorting.</p>						
<p>Content-obligatory language for the session: The visit will be carried out in Catalan.</p>						
<p>Activities</p> <p><i>include : Name and description; Assessment tool (if any); Material (including language support)</i></p>						
5.1	<p>Visit to a compost and an anaerobic digestion plant</p> <p>A guided visit to the compost and anaerobic digestion plant in the “Centre Comarcal del Tractament de residus del Vallès Oriental”. During the visit students will see the facilities and the process by which organic matter such as animal or food waste is broken down to produce biogas and biofertilizer.</p>	2h.	L-I	S-E S-W	-	-

<h2>SESSION 6-7: WHY RECYCLE?</h2> <p>Objectives of the session: To understand that waste items can be used as a resource instead of using raw materials. To be aware of how long it takes for commonly found litter items to biodegrade.</p>								
<p>Content-obligatory language for the session: RAW MATERIALS, RECYCLED MATERIALS, BIODEGRADE</p>								
<p>Activities <i>include : Name and description; Assessment tool (if any); Material (including language support)</i></p>								
6-7 .1	<p>Song We start the lesson listening to and singing the song.</p> <p>Materials Recycling Song</p>	5'	L-R	WG				
6-7 .2	<p>The Making of Baby Busta Students watch a video about how the Baby Busta is made. It is used to help pupils consider the process of how plastic bottles can be turned into different types of material, how this is possible and how different the new types of materials are. After watching the video the teacher gives each pair of students a set of sequencing cards about all the process to make the Baby Busta. Students have to try to put them in the right order. Once they are finished, in small groups, they compare their sequences and discuss their results modifying if necessary. Afterwards, students watch the video again. This time, the teacher stops the video several times in order to correct the sequences. Students act out the sequence using realia.</p> <p>Assessment: Fist to five.</p>	25'	L-R-I	S-S S-G			TA PA SA	

	<p>Materials</p> <p>Sequencing cards: Making Baby Busta</p> <p>Sequencing Language support</p> <p>Solution: Sequencing cards</p> <p>Video: The making of Baby Busta</p>					
<p>6-7 .3</p>	<p>Reading: The Making of Baby Busta</p> <p>In this activity, the teacher places the reading strips of the text “The Making of Baby Busta” in a bag for each group, and has each student draw 2 o 3 strips. Students practice reading the strips several times. Afterwards, in groups will try to put all the reading strips in the right order. Once all the groups are done, students listen to “The Making of Baby Busta” video and try to correct their texts. Finally, the teacher asks pupils to read it out loud to correct the order of the strips.</p> <p>Assessment:</p> <p>Thumbs up, Thumbs down</p> <p>Materials</p> <p>A bag per group</p> <p>Reading strips</p> <p>Solution: The making of Baby Busta</p> <p>Oral questions</p>	<p>30'</p>	<p>R-I</p>	<p>T-S S-S</p>		<p>SA TA</p>

6-7 .4	<p>Your waste is a resource</p> <p>This is a word matching activity where items of waste are matched to the item it can potentially be turned into. As a class, we discuss whether waste can be used as a resource. Everyday items we throw away can be used to make new things by recycling them. Can the pupils think of any examples e.g. a pencil made from a plastic cup or a ruler made an old CD case? We also discuss how recycling can conserve valuable raw materials and help the environment.</p> <p>Materials:</p> <p>Your waste is a resource</p> <p>Solution: Your waste is a resource</p>	25'	L-S- R-I	T-S S-S		
6-7 .5	<p>Litter: How long will it be here?</p> <p>This matching exercise requires students to match commonly littered items to the length of time it takes for them to biodegrade. Before the activity, we make sure everyone understands the definition of the word "biodegrade". This word will feature in the activity and explanation will help the class understand why certain items of litter damage our environment more than others.</p> <p><u>Homework:</u> Students have to find out the decomposition time for each item selected. This activity will be delivered by google classroom.</p> <p>Material:</p> <p>LITTER: How long will it be here?</p> <p>Solution: How long will it be here?</p> <p>Homework: Decomposition timeline</p>	35'	L-S- I-W	T-S S-G WG	Goog Classr	TA

SESSION 10: ENJOY OUR FAIR!

Objectives of the session:

- To organize, in groups, the fair where the project about recycling is going to be exposed.
- To design and write an invitation to be sent by email to the future visitors.

Content-obligatory language for the session: FAIR, DISPLAY BOARDS, REFRESHMENTS, DECORATIONS, CLOTHES, EVENT, PLACE, AUDIENCE, STALLS, GOAL, PRESENTER, SPEAKER, DANCER, SINGER, LEAFLET DISTRIBUTOR.

Activities

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



10. 1	<p>Let's prepare a fair!</p> <p>One way to end a project is to prepare a Fair. In this activity students are going to organize the day of the fair. In groups they are going to fill-in a form.</p> <p>Material: Let's prepare a project fair!</p>	20	R- W-I	T-S S-G		
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10. 2	<p>Invite your visitors!</p> <p>In pairs, students design an invitation using Canva. They are provided with a sample and guidelines to write the invitation. Once they are all finished, students vote for the best invitation design. This one will be sent by email to the future visitors.</p> <p>Material: Tablets Invite your visitors</p>	40	R- W-I	S-S WG		
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MATERIALS

WRITER

TAKES NOTES
CHECKS OTHERS WORK
MAKES SURE EVERYONE HAS WRITTEN
DOWN EVERYTHING



MATERIAL MANAGER

COLLECTS SUPPLIES FOR THE TEAM
CARES FOR AND RETURNS THEM
ORGANIZES CLEAN UP



SPEAKER

TALKS WITH THE TEACHER
ASK DOUBTS
EXPLAINS WORK DONE



ORGANIZER

ORGANIZES THE TEAM WORK
MAKES SURE EVERYONE
UNDERSTANDS
ENCOURAGES TEAM TO WORK





Roles And Tasks

- Decide on the roles for each person in your team.

WRITER: _____

TAKES NOTES
CHECKS OTHERS WORK
MAKES SURE EVERYONE HAS WRITTEN
DOWN EVERYTHING



MATERIAL MANAGER: _____

COLLECTS SUPPLIES FOR THE TEAM
CARES FOR AND RETURNS THEM
ORGANIZES CLEAN UP



SPEAKER: _____

TALKS WITH THE TEACHER
ASK DOUBTS
EXPLAINS WORK DONE



ORGANIZER: _____

ORGANIZES THE TEAM WORK
MAKES SURE EVERYONE
UNDERSTANDS
ENCOURAGES TEAM TO WORK





Instruction Card

ORGANIZER

Use the map to go to your assigned area.

Organize the team to:

Enter the classrooms or common spaces.

Keep the bags in the lab.

Wash hands.

Remove the different rubbish bags and close them.

SPEAKER

Greet and explain you are collecting the rubbish.

Hello, we are collecting the rubbish.

Can we enter and remove the bags, please?

Remove the different rubbish bags and close them.

MATERIAL MANAGER

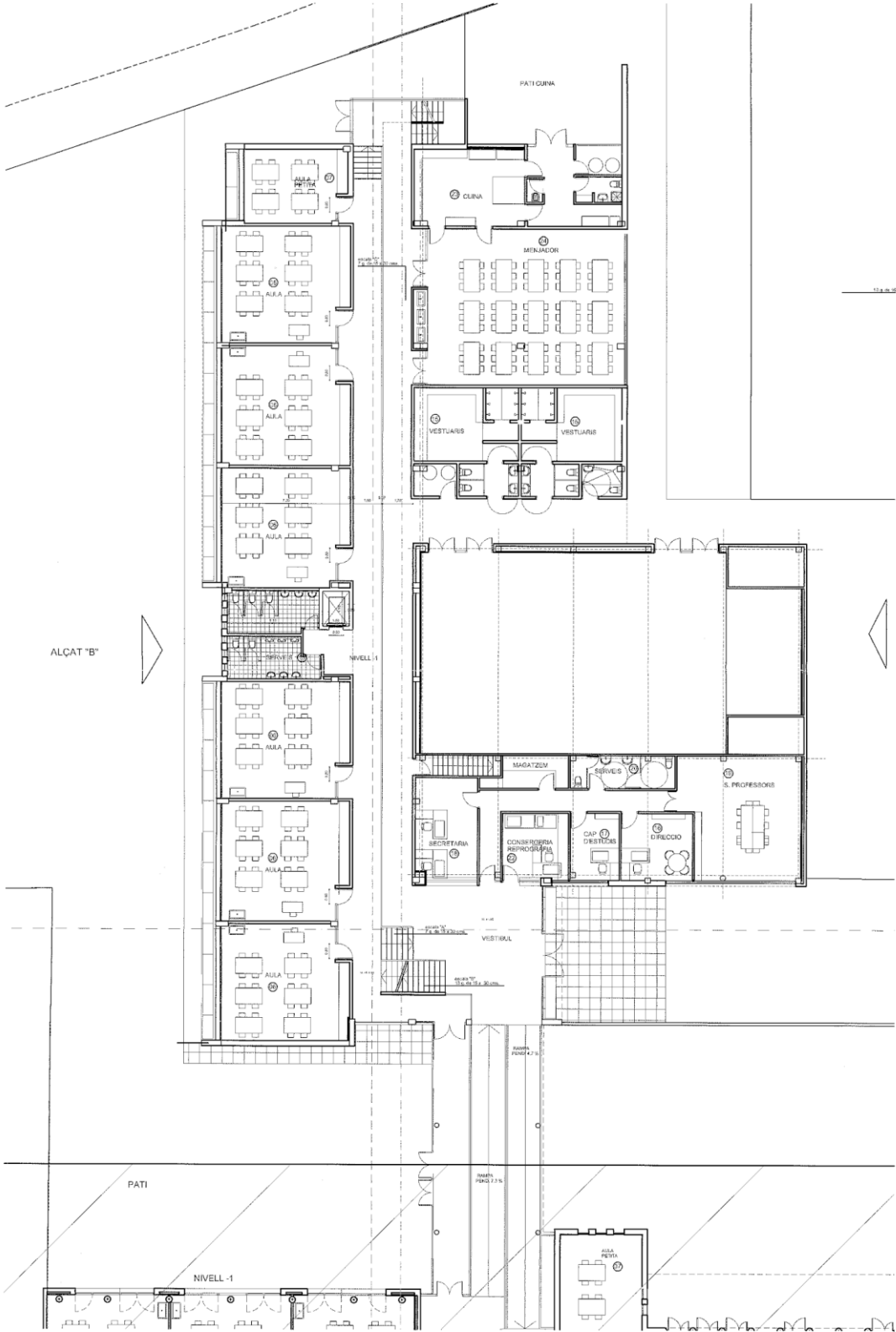
Replace new rubbish bags in the bins.

WRITER

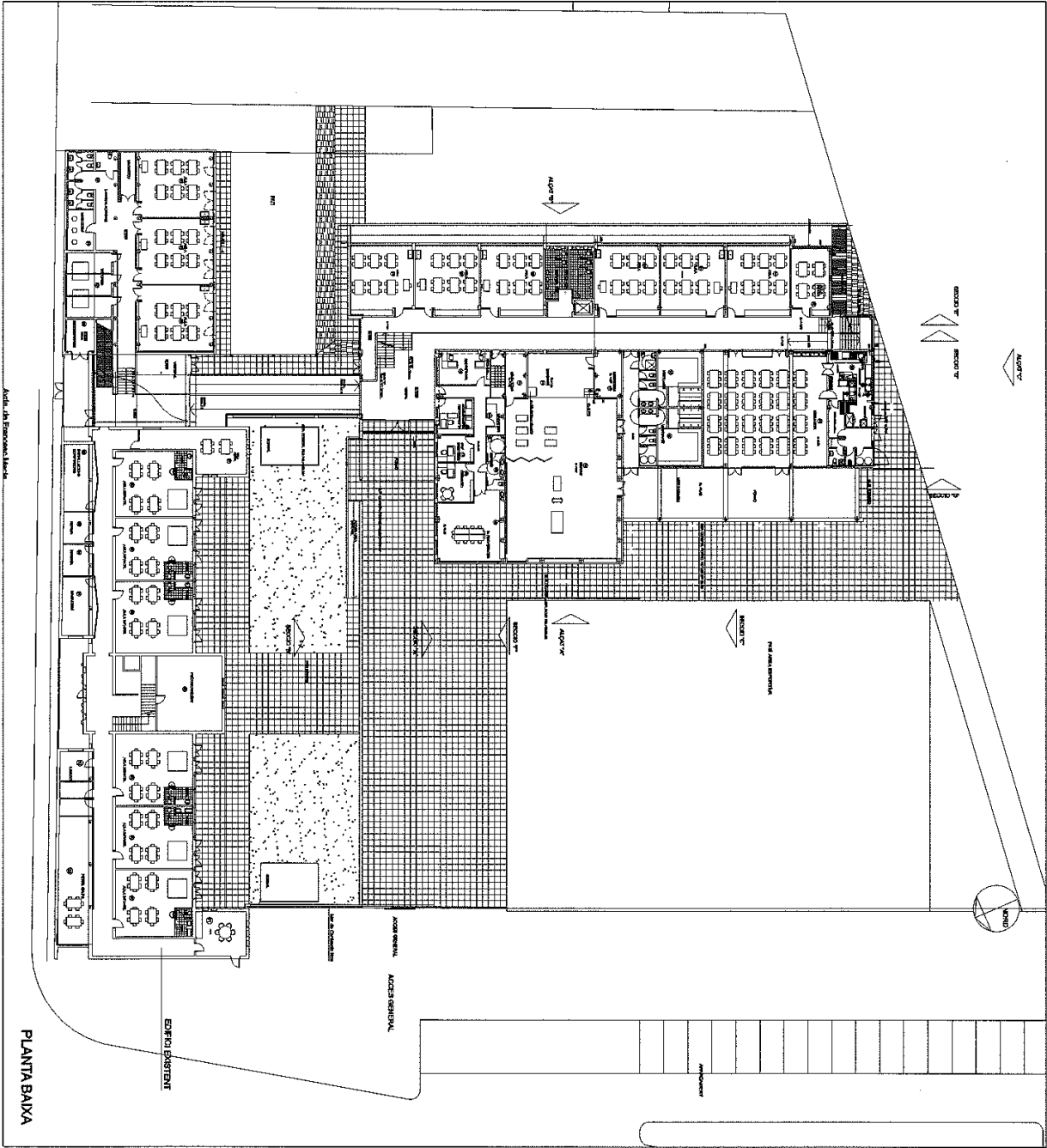
Label the bags with the room or space name and the type of rubbish (paper, plastic, organic and waste).

Eg: Teachers' room - paper

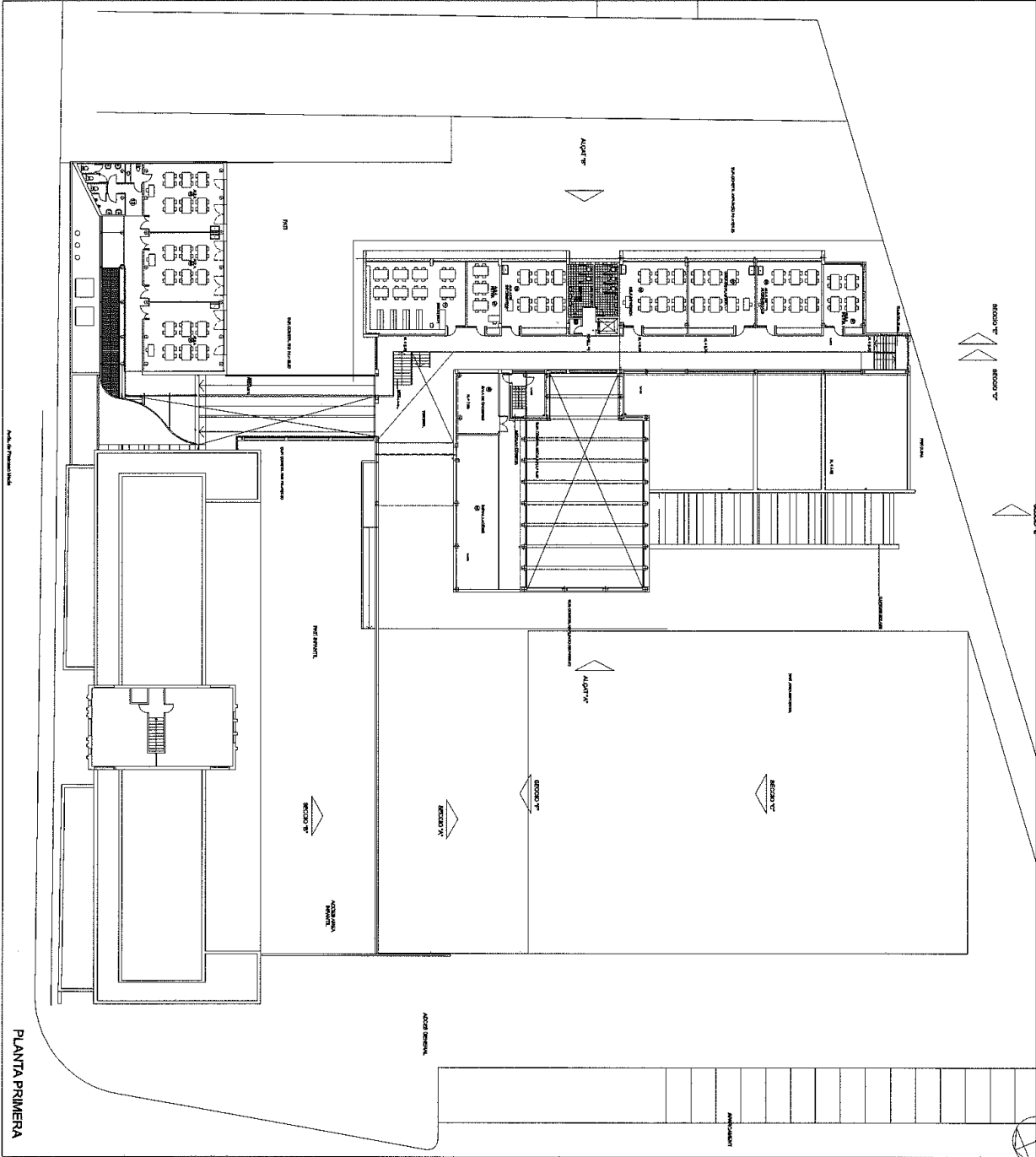
THE SCHOOL WASTE IS IN OUR HANDS!



THE SCHOOL WASTE IS IN OUR HANDS!



THE SCHOOL WASTE IS IN OUR HANDS!



THE SCHOOL WASTE IS IN OUR HANDS!



What's Going On?

- What is this bag for?	This bag is for <i>paper / plastic/ organic/ waste.</i>
- What can you find in there?	I think I can find ...
- What is in there?	There is ...
- Is the waste in the right bag?	Yes, it is. No, it isn't.
- What happens if it is not in the right one?	
- What is the problem?	

Paper: newspaper, notebook paper, magazines, boxes, wrappers, carton, cardboard

Plastic: product wrappers, food and beverage containers, markers, plastic bags

Metal: paper clips, staples, aluminum foil, food and beverage containers, cans

Food: classroom snacks, food waste.

Other: rubber bands, fabric, balloons, mixed material (e.g. plastic and metal) products, tissue papers, pencils

Archivo Inicio Insertar Diseño de página Fórmulas Datos Revisar Vista

Portapapeles Fuente Alineación Número Estilos Celdas Modificar

Formato condicional Dar formato como tabla Estilos de celda Insertar Eliminar Formato Autosuma Rellenar Borrar Ordenar y filtrar Buscar y seleccionar

	A	B	C	D	E
1	LOCATION	TYPE OF WASTE	WEIGHT	IT IS CONTAMINATED?	
2	Teacher's room	glass	500 g	no	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					



**HOW CAN WE RECYCLE
PROPERLY IN OUR SCHOOL?**

Exit Card

What are the
different types of
waste?

THE SCHOOL WASTE IS IN OUR HANDS!



The Recycling Song

It's Busta and Pong with the recycling song

And everyone can join in too...That means you!

Can recycle

Don't just use it once then throw it away

Things can be used again 'cos that's a cooler way

Let's recycle

Bottles and papers or plastic and card

We can all recycle it really isn't hard

It's Busta and Pong with the recycling song

And everyone can join in too...That means you!

Can recycle

It's really fun to be part of the plan

Just drop it in the right bin, even you can

Let's recycle

It's better this way

'Cos if we dump less

Less things are wasted and the Earth won't be a mess

THE SCHOOL WASTE IS IN OUR HANDS!



It's Busta and Pong with the recycling song

And everyone can join in too...That means you!

Can recycle

Go Pong!

What you throw away depends on you

But recycling means it will come back as something new

So what you throw away depends on you

But recycling means it will come back as something new

It's Busta and Pong with the recycling song

And everyone can join in too...That means you!

Can recycle

So when you put stuff in the bin, don't just fling it

Remember the song and remember how to sing it

It's Busta and Pong with the recycling song

And everyone can join in too

It's Busta and Pong with the recycling song

And everyone can join in too...That means you!

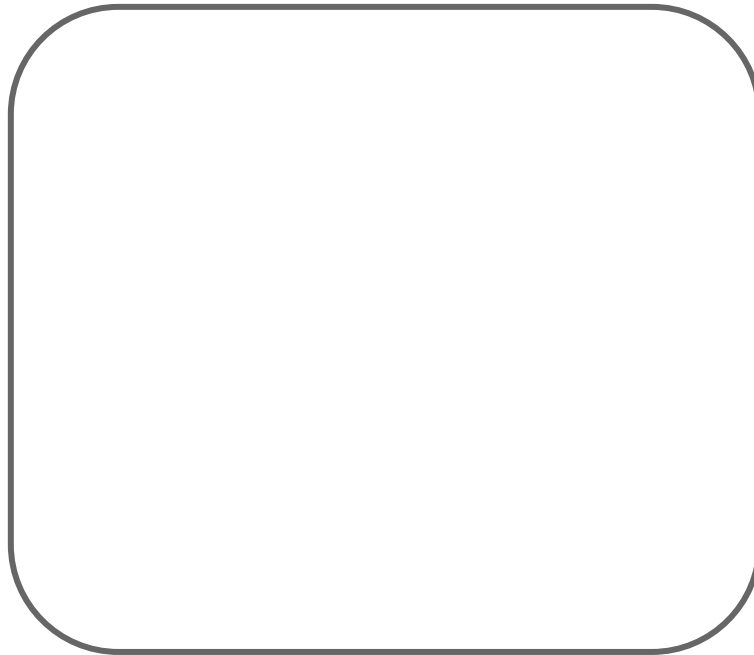


Song Activity Cards

Let's recycle	throw it away
bottles	paper
plastic	drop it in
the right bin	something new
depends on you	that means you!



Graphic Interpretation



1. Look at the diagram, what is this type of chart called?

- a) Pictogram b) Bar Chart c) Line Graph

2. How much paper can be recycled? _____

3. How much paper cannot be recycled? _____

4. How much plastic can be recycled? _____

5. How much plastic cannot be recycled? _____

6. How much organic can be recycled? _____

7. How much organic cannot be recycled? _____

8. How many grams of waste contain recyclable materials? _____

9. Which type of waste is the best recycled?

- a) Paper b) Plastic c) Organic d) Waste

10. Which type of waste is the worst recycled?

- a) Paper b) Plastic c) Organic d) Waste



Language Support

Which type of waste is the best recycled?	The best recycled is <i>paper/plastic/organic</i>
Which type of waste is the worst recycled?	The worst recycled is <i>paper/plastic/organic</i>
Which are the causes of not recycling properly?	I /we think the causes of not recycling properly are: -
Which could be the solutions?	I /we think the solutions could be the following: -



Conclusions

In our waste audit we found out that the best recycled waste was _____.

There were _____ grams of well recycled _____,

_____ grams of _____ and

_____ grams of _____.

In total, there were _____ grams of well recycled items.

The worst recycled waste was _____.

There were _____ grams of contaminated waste.

So, we realize that _____

We think there are several reasons because our school is not recycling properly:

Some of the solutions could be the following:



The Basics of Waste

PICTURE	WORD	MEANING
	WASTE	Things that people no longer want and wish to dispose of.
	LANDFILL	A large hole on the ground where rubbish can be buried.
	RECYCLE	Using waste items like glass and paper to make new products.
	YELLOW BIN	Where plastic is stored before it is collected.
	BLUE BIN	Where paper is stored before it is collected.

	<p style="text-align: center;">GREY BIN</p>	<p>Where unrecyclable things are stored before they are collected.</p>
	<p style="text-align: center;">BROWN BIN</p>	<p>Where food waste is stored before it is collected.</p>
	<p style="text-align: center;">GREEN BIN</p>	<p>Where glass is stored before it is collected.</p>
	<p style="text-align: center;">TO SORT OUT</p>	<p>To tidy or organize things by separating them into categories.</p>
	<p style="text-align: center;">LITTER</p>	<p>Rubbish such as paper, cans, and bottles left lying in an open or public place.</p>



Language Support

<p>I think the meaning of litter/... is _____.</p> <p>What do you think?</p>	<p>+ I agree with you</p> <p>- I disagree with you</p>
<p>I think litter/... matches with this picture.</p> <p>What do you think?</p>	<p>+ I agree with you</p> <p>- I disagree with you</p>

THE SCHOOL WASTE IS IN OUR HANDS!



The Recycling Song - Fill In The Gaps

Away	Bin	Bottles	Depends	Drop
Let's	Means	New	Paper	Plastic
Recycle	Something	Things	Throw	You

It's Busta and Pong with the recycling song

And everyone can join in too...That _____ you!

Can recycle

Don't just use it once then _____ it away

_____ can be used again 'cos that's a cooler way

Let's recycle

_____ and _____ or _____ and

card

We can all _____ it really isn't hard

Chorus

It's really fun to be part of the plan

Just _____ it in the right bin, even you can

_____ recycle

It's better this way

'Cos if we dump less

Less things are wasted and the Earth won't be a mess

THE SCHOOL WASTE IS IN OUR HANDS!



Away	Bin	Bottles	Depends	Drop
Let's	Means	New	Paper	Plastic
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And everyone can join in too...That means you!

Can recycle

Go Pong!

What you throw _____ depends on you

But recycling means it will come back as something _____

So what you throw away _____ on you

But recycling means it will come back as _____ new

It's Busta and Pong with the recycling song

And everyone can join in too...That means you!

Can recycle

So when you put stuff in the _____, don't just fling it

Remember the song and remember how to sing it

It's Busta and Pong with the recycling song

And everyone can join in too

It's Busta and Pong with the recycling song

And everyone can join in too...That means _____!



Aluminium foil



Breadcrumbs



Cardboard box



Cans

Cardboard





Carton



Cling film



Dust and dirt



Egg box



Fruit peel



Food waste



Markers



Newspaper



Paper



Pencils



Pens



Plasters



Plastic bags



Magazines



Rubber bands



Toilet roll



Tissues



Plastic bottles







Wrappers

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Sorting Waste

What can you find in a... ?	paper bin	plastic bin	organic bin	waste bin
aluminium foil 				
cardboard boxes 				
breadcrumbs 				
cans 				
cardboard 				
carton 				
cling film 				
dust and dirt 				






THE SCHOOL WASTE IS IN OUR HANDS!



egg box					
food waste					
fruit peel					
magazines					
markers					
newspaper					
paper					
Pencils					
Pens					
plasters					
plastic bags					

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plastic bottles					
rubber bands					
tissues					
toilet roll					
wrappers					

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Sequencing Cards - Making Baby Busta

<p>MATERIAL SEPARATION BY DENSITY + DRYING PROCESS</p>	<p>SORTING BY COLOUR</p>	<p>PRE-SELECTION OF PET BOTTLES</p>
<p>CLEANING</p>	<p>CRUSHING AND CHOPPING INTO FLAKES</p>	<p>PET Bottle POLYETHYLENE TEREPHTHALATE IS NOWADAYS THE MAJOR POLYESTER TYPE</p>
<p>EXTRUDER PROCESSES FLAKES INTO GRANULES</p>	<p>OPTOELECTRONIC COLOUR SELECTION</p>	<p>AUTOMATIC COLOUR SEPARATION OF FLAKES FOR FURTHER PROCESSING</p>
<p>RECYCLED PET IS THE MATERIAL WHICH WAS USED TO PRODUCE BABY BUSTA</p>		<p>THREAD PRODUCTION</p>



Sequencing Language Support

<p>Do you think this is the right order?</p>	<p>+ Yes, I do. - No, I don't.</p>
<p>I think this card goes first (1st)/second(2nd)/ third(3rd)/fourth (4th)/ fifth (5th)/sixth(6th)/seventh (7th)/eighth(8th)/ ninth(9th)/tenth(10th)/eleventh (11th)/twelfth (12th)</p> <p>What do you think?</p>	<p>+ I agree with you - I disagree with you</p>

THE SCHOOL WASTE IS IN OUR HANDS!



Sequencing Cards - Making Baby Busta

<p>PET Bottle POLYETHYLENE TEREPHTHALATE IS NOWADAYS THE MAJOR POLYESTER TYPE</p> 	<p>PRE-SELECTION OF PET BOTTLES</p> 	<p>SORTING BY COLOUR</p> 
<p>CRUSHING AND CHOPPING INTO FLAKES</p> 	<p>CLEANING</p> 	<p>MATERIAL SEPARATION BY DENSITY + DRYING PROCESS</p> 
<p>OPTOELECTRONIC COLOUR SELECTION</p> 	<p>AUTOMATIC COLOUR SEPARATION OF FLAKES FOR FURTHER PROCESSING</p> 	<p>EXTRUDER PROCESSES FLAKES INTO GRANULES</p> 
<p>THREAD PRODUCTION</p> 	<p>RECYCLED PET IS THE MATERIAL WHICH WAS USED TO PRODUCE BABY BUSTA</p> 	



Busta is fabricated from the materials following a pattern.

Another **machine** heats and **melts** the **flakes** into a paste which is **squeezed** out through **a big shower head** to **make** a type of **plastic spaghetti**.

The **plastic spaghetti** are cooled and cut into pellets called "**chips**".

After plastic bottles are collected for recycling **they are sorted** into different types of plastic. Several processes are used for this, **some** items are **picked out by hand** but others are **sorted by different machines which identify** different properties of the bottles (e.g. size, density, colour and type of plastic). Typically the **type and colour** of the plastic is identified **by the light it reflects back to a scanner**. Different colours or types of plastic are then blown by air jets into different storage bins.

The next step of the process depends on what type of product is needed from the recycled plastic. In the case of Busta, a fine thread is needed therefore the **chips** undergo more heating, pressure and are **squeezed through a big shower head** by another machine, to make fine fibres thinner than a human hair!



The flakes are **cleaned** to separate the plastics and remove dirt and labels.

These **fibres can be combined to make** thicker fibre / **thread** and **coloured to make the cloth for Busta**, or fluffed up to make his stuffing.

The making of Baby Busta

One of the many items that plastic bottles are used to make are the **Busta soft toys**, by Wastebuster. Busta is **made using PET** (Polyethylene Terephthalate) bottles, these are usually marked with a number 1 inside a triangle stamped on them. The equivalent of **5 plastic bottles are used to make every Busta**.

So how is Baby Busta made?

The flakes are **blow-dried** and more **light sorters** help **separate** the **flakes** of plastic **into different colours**.

Even **after sorting**, some bottles will have parts made from different plastics or colours (like lids). To remove these the items are first **chopped into flakes**.

THE SCHOOL WASTE IS IN OUR HANDS!



The Making of Baby Busta

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So how is Baby Busta made?

1. **After plastic bottles are collected** for recycling **they are sorted** into different types of plastic. Several processes are used for this, **some items are picked out by hand** but others are **sorted by different machines which identify** different properties of the bottles (e.g. size, density, colour and type of plastic). Typically the **type and colour** of the plastic is identified **by the light it reflects back to a scanner**. Different colours or types of plastic are then blown by air jets into different storage bins.

2. Even **after sorting**, some bottles will have parts made from different plastics or colours (like lids). To remove these the items are first **chopped into flakes**.

3. **The flakes** are **cleaned** to separate the plastics and remove dirt and labels.

4. **The flakes** are **blow-dried** and more **light sorters** help **separate** the **flakes** of plastic **into different colours**.

5. Another **machine** heats and **melts** the **flakes** into a paste which is **squeezed** out through **a big shower head** to **make** a type of **plastic spaghetti**.



THE SCHOOL WASTE IS IN OUR HANDS!

6. The **plastic spaghetti** are cooled and cut into pellets called "**chips**".

7. **The next step** of the process depends on what type of product is needed from the recycled plastic. In the case of Busta, a fine thread is needed therefore the **chips** undergo more heating, pressure and are **squeezed through a big shower head** by another machine, to make fine fibres thinner than a human hair!

8. These **fibres can be combined to make** thicker fibre/**thread** and **coloured to make the cloth for Busta**, or fluffed up to make his stuffing.

9. **Busta** is **fabricated** from the materials following a pattern.

THE SCHOOL WASTE IS IN OUR HANDS!



Oral Questions

Start the activity asking the following questions:

1. Can waste be used as a resource?
2. Can everyday items we throw away be used to make new things by recycling them?
3. Can you think of any examples?
e.g. A pencil made from a plastic cup or a ruler made from an old CD case.

We also discuss how recycling can conserve valuable raw materials and help the environment.

On the whiteboard draw a simple recycling factory with 5 bottles going in and 1 Busta soft toy going out.



=



THE SCHOOL WASTE IS IN OUR HANDS!



Ask pupils to write their answers individually on writing support boards.

Some examples of questions:

1. How many plastic bottles are needed to make 1 baby Busta?
 2. How many plastic bottles are needed to make 5 baby Bustas?
 3. How many plastic bottles are needed to make 10 baby Bustas?
 4. How many plastic bottles are needed to make 20 baby Bustas?
 5. How many plastic bottles are needed to make a Busta soft toy for every pupil in the class?
 6. How many plastic bottles are needed to make a Busta soft toy for every pupil in the school?
 7. What might happen to plastic bottles if they don't get recycled into something like a Busta toy? (litter, landfill or incineration)
 8. Why recycling is better than these options? On average, every plastic bottle recycled saves 130cm³ of landfill space.
 9. Can you guess how long it takes for plastic to decompose? For a plastic item to degrade buried in landfill sites between 400-1000 years.
 10. How many 2 litre plastic bottles to make one average sized football shirt? **A:** 14
 11. What is the first step in the process of making a Baby Busta after plastic bottles are collected?
 12. What happens after the flakes of plastic are separated into different colours?
 13. Do you recycle the plastic bottles?
 14. How many plastic bottles do you recycle at home during a week?
 15. What can you do to reduce the use of plastic bottles?
- ...

THE SCHOOL WASTE IS IN OUR HANDS!



Your Waste Is a Resource

Did you know that it is much easier to make a product by recycling rather than making it from new materials?

Match each waste item to what it can be recycled to.

<p>1. Plastic bottle</p> 	<p>___ Toilet roll</p> 
<p>2. Tyre</p> 	<p>___ Paper clips</p> 
<p>3. Glass bottle</p> 	<p>___ Glass jar</p> 

THE SCHOOL WASTE IS IN OUR HANDS!



4. Paper



__ Pencil case



5. Cardboard



__ Egg box



6. Steel can



__ Fleece jacket





Solution -Your Waste Is a Resource

Did you know that it is much easier to make a product by recycling rather than making it from new materials?

Match each waste item to what it can be recycled to.

<p>1. Plastic bottle</p> 	<p>1. Fleece jacket</p> 
<p>2. Tyre</p> 	<p>2. Pencil case</p> 
<p>3. Glass bottle</p> 	<p>3. Glass jar</p> 

THE SCHOOL WASTE IS IN OUR HANDS!



4. Paper



4. Toilet roll



5. Cardboard



5. Egg box



6. Steel can



6. Paper clips






THE SCHOOL WASTE IS IN OUR HANDS!



LITTER: How Long Will It Be Here?

Once a piece of rubbish is dropped onto the ground it can stay there for a long time. Each of the items below could be a piece of litter. Think carefully about what each item is made from and decide how long it will take to biodegrade.

Match each item to a length of time on the right of the page. You may be surprised at the answers.

<p>1. Paper bag</p> 	<p>__ 2 years</p>
<p>2. Banana skin</p> 	<p>__ 10 years</p>
<p>3. Rolled up newspaper</p> 	<p>__ Never</p>

THE SCHOOL WASTE IS IN OUR HANDS!



4. Plastic bag



__ 1 month

5. Nappy



__ 15 years

6. Glass bottle



__ 500 years




THE SCHOOL WASTE IS IN OUR HANDS!



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THE SCHOOL WASTE IS IN OUR HANDS!



4. Plastic bag



15 years

5. Nappy



500 years

6. Glass bottle



Never



Let's Prepare a Project Fair

One way to end your project is to prepare a Project Fair. So, you have to take into account several aspects. In groups fill-in the form.

- . **Name of the event:** _____
- . **Date:** ___/___/___
- . **Time:** from ___ to ___
- . **Place:** _____
- . **Audience:** _____
- . **Number of stalls:** _____
- . **Goal of the fair:** _____

Decide which role you want to play in the fair.

1. **Presenter:** _____
2. **Dancer and singer:** _____
3. **Leaflet distributor:** _____
4. **Speaker:** _____

Think about the following aspects:

1. **Clothes:** _____
2. **Decorations:** _____
3. **Number of chairs:** _____
4. **Number of tables:** _____
5. **Refreshments:** _____
6. **Material:** _____

Other aspects we have to bear in mind:

THE SCHOOL WASTE IS IN OUR HANDS!



Invite Your Visitors!

Sample Text for Inviting Visitors

The students of <CLASSROOM> are pleased to invite you to our <NAME OF FAIR>, to be held on <DATE> from <TIME> to <TIME> in <PLACE>.
Come and see <NUMBER OF GROUPS> exciting display boards about our project. We are looking forward to explaining our project!

In pairs fill in the gaps:

INVITATION

The students of _____ are pleased to invite you to our _____,
to be held on _____ from _____ to _____ in _____.
Come and see _____ exciting display boards about our project. We are
looking forward to explaining our project!

Design an invitation using Canva. Here you have an example:

