

# Climate and Threats on Cultural Heritage CATCH



"Recycling Activity Book"



# Erasmus + KA 2 School Exchange Partnership

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#### **FOREWORD**

Dear young eco-warriors,

Welcome to a thrilling journey into the world of recycling! This foreword is the first step in an exciting exploration that will empower you, our bright and environmentally-conscious 11-14-year-old students, to become champions of sustainability.

Recycling isn't just a buzzword; it's a powerful solution to some of the most pressing environmental challenges we face today. From conserving precious natural resources to reducing pollution and conserving energy, recycling is your ticket to making a real difference in the world. Recycling is about more than just sorting paper and plastic; it's about building a sustainable future for ourselves and generations to come.

So, get ready to embark on this recycling adventure, armed with knowledge, enthusiasm, and a determination to make a positive impact. As you turn the pages and dive into the activities within, remember that every small action counts, and together, we can create a cleaner, healthier, and more sustainable world for all.

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#### **INTRODUCTION**

As it was stated in the project summary, The general aim of the project is to build student awareness on the cultural heritage of their city, the preservation of cultural heritage and a critical awareness of climate change problems related to them.

Other project objectives are;

- -To provide permanent behavioural changing on the pupils about saving our planet and preserving cultural heritage areas through project activities
- -Raising awareness on tangible and intangible cultural heritage safeguarding in schools
- -To sharing best practices on cultural heritage and climate education among partner schools
- -To raise awareness level of importance of cultural heritage areas at city level
- -To develop foreign language and teamwork skills of the pupils and staff
- -To promote cultural diversity and EU citizenship and respecting other countries culture
- -To feeling that they a valuable member of wide EU cultural family

We reached these benefits at the end of the project on the participants;

#### Students

- -Gaining permanent behavioural change on daily life routine to protect our planet
- -Willing volunteer to save cultural heritage areas
- -Knowing about importance of cultural heritage and hand down it to the next generations
- -Knowing partner countries cultures
- -Respecting to the cultural and linguistic diversity and human rights
- -Breaking the prejudices about other cultures and nations

- -Improving the English Language skills
- -Developing teamwork and ICT skills
- -Feeling as a part of European Cultural Family

#### **Educational Staff**

- -Breaking the pre-justices about other culture and nations
- -Developing professional skills and comparing the teaching methods with partner countries education systems
- -Gaining new methods of cultural heritage education
- -Making long-term transnational cooperation with European colleagues
- -Promoting cultural and linguistic diversity
- -Fighting xenophobia and racism
- -Carrying the ongoing activities of the school to the international area
- -Improving the teamwork, ICT and foreign language skills
- -To eager continue to the international partnership projects

#### **Project Period**

01.09.2020 - 31.08.2023

www.catcherasmus.eu

#### WHAT IS RECYCLING AND WHY IS RECYCLING IMPORTANT?

Unless you have been on another planet for the last century, then you have probably heard of it. Recycling is the process of breaking down and reusing materials that would otherwise be thrown away as trash. Many communities and businesses make it easy to recycle by placing labelled containers in the open for public use or providing bins for home and business owners who have curb side pickup.

There are numerous benefits of recycling, and with so many new technologies making even more materials recyclable, with everyone's help, we can clean up our Earth. Recycling not only benefits the environment but also have a positive effect on the economy. Recycling is reported throughout human history but has come a long way since the time of Plato when humans reused broken tools and pottery when materials were scarce.

Today, there is a multitude of benefits that come from recycling as well as tons of items that can be recycled. Wikipedia defines Recycling as,



"Recycling is the process of converting waste materials into reusable objects to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, energy usage, air pollution (from incineration) and water pollution (from landfilling) by decreasing the need for "conventional" waste disposal and lowering greenhouse gas emissions compared to plastic production. Recycling is a key component of modern waste reduction and is the third component of the "Reduce, Reuse and Recycle" waste hierarchy. "

#### WHY IS RECYCLING IMPORTANT?

The benefits are far-reaching, and everybody gains when people adopt recycling as an everyday habit. Whether it is a community effort to help beautify a dirty neighbourhood street or on a larger scale to help a business save hundreds to thousands of dollars on waste management, the advantages of a well-maintained recycling program are endless.



#### **ENVIRONMENTAL BENEFITS**

- 1. By recycling, people can prevent millions of tons of material from entering landfills, saving space for garbage that cannot be repurposed. Landfills not only pollute the environment but also hamper the beauty of the city.
- 2. Recycling reduces the need for extracting (mining, quarrying and logging), refining and processing raw materials, all of which create substantial air and water pollution. The pollutants that are released into the air and water can be greatly reduced with an increase in recycling.
- 3. As recycling saves energy, it also reduces greenhouse gas emissions, which helps to tackle climate change. Recent UK recycling is estimated to save more than 18 million tonnes of CO2 a year, equivalent to taking 5 million cars off the road. In short, recycling reduces greenhouse gas emissions into the atmosphere.
- 4. Using recycled materials in the manufacturing process uses considerably less energy than that required for producing new products from raw materials also when compared with all associated costs, including transport etc, as these are industry-ready materials. It greatly reduces the amount of energy used daily by not needing to produce new materials.



- 5. When we recycle, used materials are converted into new products, reducing the need to consume natural resources. If used materials are not recycled, new products are made by extracting fresh, raw material from the Earth, through mining and forestry.
- 6. Recycling helps conserve the Earth's natural resources like raw materials, minerals, trees, etc. It protects natural habitats for the future and preserves natural resources for future generations.
- 7. In terms of energy, a single light bulb can be powered for up to four hours with the energy saved from one recycled glass bottle.

#### -ECONOMIC BENEFITS

- 1. Recycling contributes to a circular economy where everything is a resource rather than waste. Properly run recycling programs cost the government, taxpayers, and business owners less money than waste programs.
- 2. For every one job created in the waste management industry, recycling creates four.
- 3. People can even make money by collecting approved materials to a nearby recycling facility that will pay for the product.



- 4. It is cheaper than waste collection and disposal. So, the more you recycle, and the less you put in the bin, the more money is saved to use for households, businesses and local public services.
- 5. When materials are recycled locally, it boosts your local economy by creating more jobs in the recycling process and creates a better future for all. Your recycling efforts also create new businesses like collection, transportation, processing, manufacturing, packaging and selling of recycled products, paving the way for a greener future.
- 6. Recycling can boost the tourism industry of countries. A clean environment is welcoming and would attract environmental enthusiasts around the world. This influx of tourists would also contribute to the foreign exchange reserve of a country.



#### **COMMON RECYCLABLE ITEMS**

There are so many materials that can be recycled in today's society; it would take a book to go into detail about each and every one. Listed below, however, are a few of the most common recyclable items people come across in their everyday lives.

#### 1. Metal

-Metals that we use in our everyday life are often times recyclable. Being a very versatile material, recycling metal takes more than seventy percent less energy than it does to produce a completely new item.

-Aluminium foil – (As well as bakeware) can easily be recycled. By melting down the foil products and simply repurposing, the metal aluminium can be recycled almost infinitely.

-Aluminium cans — It would save immense amounts of energy to recycle and reuse them as opposed to making new ones.



#### 2. Paper and Cardboard

Most people can look around themselves at just about any point in the day and see paper or paper products. Paper is a material that has no limits in the recycling world. Studies show that people are recycling about 334 pounds of paper annually. Paper and cardboard materials that can be recycled are:

Corrugated cardboard – This makes up most of the cardboard in people's everyday lives. Over seventy percent of shipping boxes already having been repurposed from sawdust, woodchips, or other paper products. Other items recycled cardboard is used to make are things like cereal boxes, tissue paper, printing paper, and poster board.

Magazines and newspapers – Many people still get magazines and newspapers on their mailboxes and their front porches. Too frequently, these are junk ads or unwanted publications that go directly into the trash.



Office paper and poster board – Most people interact with at least one piece of paper a day. Papers are in the mailbox, printer, and briefcase next to the door, everywhere. Paper can be easily repurposed, saving high production costs and energy levels for new products.

#### 3. Glass

Glass bottles and jars are not quite as versatile as paper or metal products when it comes to recycling. Due to the various colours of glass, many items can only be repurposed into another of the same item. The different types of glass recycling typically pertain to the colour of the bottle or jar.

Flint glass – This is the term used to refer to clear glass items, which make up the largest part of the glass market at just over sixty percent. Usually, items bottled in clear glass containers are not light-sensitive, and people want to have seen.



Amber glass – One of the reasons glasses can be hard to recycle is due to the fact that the colours cannot be removed. For instance, amber, or brown, glass makes up less of the glass market than flint at thirty-one percent partially because it can only be made into other amber-coloured glass products when recycled. Generally, items that are sensitive to sunlight are stored in brown coloured glass bottles and jars.

Emerald glass – When one thinks emerald, or green, glass wine and beer bottles typically come to mind. This is because the items inside are sensitive to sunlight and temperature, however not quite as sensitive as products that need to be stored in brown glass containers.

#### 4. Plastics (PET)

The clear plastic water and beverage bottles or plastic make up about 95% of this category. Clear plastic cups and packaging, such as on retail products, accounts for the remaining 5%. It is a popular recycling program; however, plastics recycling is not as successful as the other leading materials.

PET (polyethylene terephthalate) is clear plastic water and beverage bottles.

HDPE plastic, (High Density Polyethylene), or PEHD is a thermoplastic polymer produced from the monomer ethylene, and non-clear plastic, such as those opaque milk jugs, shampoo bottles, or other coloured plastics. Other "coloured plastics" such as straws to bottle caps, plastic spoons to Red Solo cups, and Legos to rubber duckies.

#### 5. Electronic or "e-waste"

Electronic gadgets contain chemicals and metals that can be hazardous if they're thrown into a landfill. We can do a little research to determine which local facilities will accept and recycle them. These items can be

 Computers, Stereos, cell phones and batteries, old televisions, old household items



#### 6. Other Items

Concrete – It typically only comes from construction and demolition waste.

Steel – Domestic steel scrap is used in the production of new steel.

Practicing good recycling habits is not difficult, nor is there a secret to being a "good recycler." There are lots of ways to help create and maintain a better community through recycling.

#### WAYS TO HELP IN RECYCLING

-Get involved with local recycling programs.

-Volunteer to educate a class at a local elementary school. Kids can be huge advocates for the war on trash easily holding everyone around them accountable for the things they throw in the garbage.

-Take some time to go around and pick up trash in your own neighbourhood or surrounding ones.

-If your job does not have a receptacle for recyclable products, ask if they wouldn't mind providing one, or if they mind you providing one yourself.

-Make sure to practice proper recycling habits in your own life; nothing works better than leading by example.

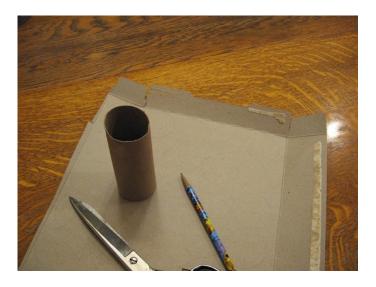
The benefits of recycling have only been just barely touched in this article. With so many more recyclable items (including electronics, plastics, batteries, light bulbs, and much more), it is easier than ever to help the environment in a plethora of ways.

Saving the world energy and money and helping people find jobs are the main points mentioned as far as economic benefits go, but there are far more advantages than this article has dug into.

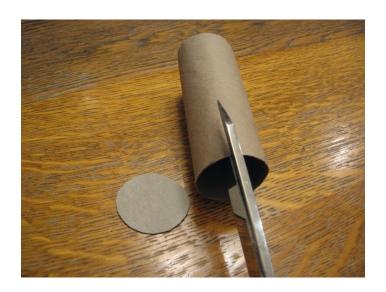
#### **ACTIVITIES**

#### I. CARDBOARD TUBES AND CIRCLES - HOMEMADE BUILDING SETS

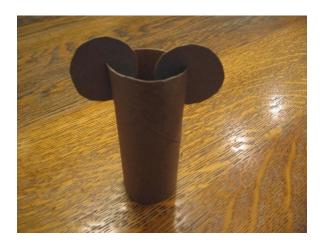
Trace around an empty cardboard tube, to cut circles out of thin cardboard (such as an empty cereal box).



Cut four, evenly spaced, slits into the top and bottom of the tube, about as long as the radius of the cardboard circles.



So the circles will slip nicely into the slits.



Add more circles and tubes. You might even want to cut some larger circles just for fun. Really, more than half the fun of a homemade building set is engineering the pieces in the first place. Then, you can build. Build to your heart's content, or until you run out of tubes and circles. Because the tubes are light and hollow, unlike wooden blocks, it's even easier to build with them on carpeted and bumpy floors.



And when they all fall down, they're much quieter than blocks too.



#### **II. MAKING EGG CARTON FLOWERS**

These colourful flowers will last longer than real ones and only a few materials are required (egg cartons included).

#### **Materials**

- Natural Egg Cartons
- Floral Wire
- Craft Paint Brushes
- Acrylic Paint
- Scissors
- Wire Cutters
- Utility Knife

#### **Directions for How to Make Egg Carton Flowers**

**Step 1:** Cut up the egg carton. Use a scissors to cut off the flap on the edge of the carton. Be sure to cut off the top as well.



**Step 2:** Make small cuts with a utility knife to remove the center columns. Cut the remainder of the carton for the egg "cups." Clean up the edges of the center columns with scissors.





**Step 3:** Begin designing the egg cups. Cut around the top of the egg cups for equal sizing. Feel free to rip the top edge for a rougher look.



**Step 4:** Paint the cups with thinned paint. If you want petals, cut down the four corners of the cup. Then you can paint the flower.



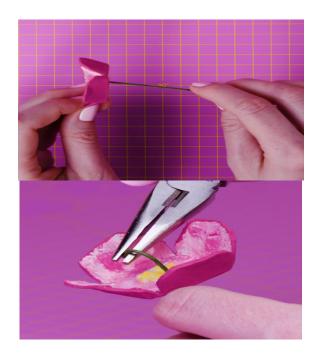
**Step 5:** Next, design the columns. Start by painting the columns inside and out. If you want a petaled look, cut down the four corners of the column.



**Step 6:** Assemble everything and let it all dry.



**Step 7:** Attach the wire by poking it through the middle of the flower. Slightly fold the wire with wire cutters to keep the stem in place.



Step 8: Enjoy!



#### III. TOILET PAPER ROLL BIRD FEEDER

#### Materials

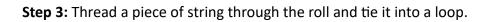
- toilet paper rolls (or use paper towel rolls or wrapping paper rolls!)
- peanut butter
- bird seed
- yarn or string

**Step 1:** Clean off any extra bits of paper from your toilet paper rolls, then cover them in a thin layer of peanut butter.



**Step 2:** Pour out some bird seed onto a plate, then gently roll the toilet paper roll over the plate to pick up the bird seed.







**Step 4:** Head outside and hang the feeder from a tree!



#### **IV. RECYCLED TIN CAN PLANTERS**

#### **Materials**

Pom Poms & Eyes Craft Pack, Power Punch, Recycled Tin Cans, Succulent, Cactus Soil, Hammer, Nail



**Step 1:** Before the soil and accessories can be added, you'll need to add a few holes to the bottom of the tin can with a large nail and hammer.



**Step 2:** Use the strong punch to create two small arm holes a little less than halfway down on both sides. Insert a pipe cleaner through the holes and fold ends to create hands.



Step 3: Fill the tin can with soil and add your plant. Don't forget to use a succulent soil if necessary!



**Step 4:** Now the fun part! Use the accessories to add some personality to the tin can. The googly eyes already had adhesive on the back but we had to use some strong double-sided tape for the pom-pom nose and pipe cleaner mouth.





Hope you have fun making these!

#### **V. MILK CARTON BIRDHOUSE**

#### **Materials:**

Clean and Dry Recycled Milk or Juice Carton, White Paint, Sheet of Chipboard or Recycled, Cardboard, School Glue, Foam Paintbrush, Tissue Paper Squares in Assorted Colours, Twine, Wooden Spoon, Utility Knife



To create our milk carton birdhouses, I started by giving the recycled milk and juice cartons a light coat of white spray paint so that the package lettering wouldn't bleed and show through the tissue paper.



Have the children coat the sides of the carton with school glue and apply the tissue paper squares in any arrangement that they'd like. After your child is done applying the tissue, gently brush the tissue squares with the sponge brush to ensure that all the edges are glued down and secure. Allow to dry.



To create the roof, fold a piece of chipboard (or recycled cardboard) in half width-wise. Cover the chipboard with glue and tissue paper squares. Set aside and let dry.



If necessary, remove the plastic pouring spout with a utility knife. You can also cut off any excess cardboard from the "roof ridge" if desired.



Cut an opening for the door — if you would like to make a birdhouse, use a smaller sized opening; for a bird feeder, cut a large rectangular opening as shown above. About an inch below the door, use the utility knife to cut two small slits in an "X" shape and insert the handle of a wooden spoon to create your perch. Before you push it all the way to the back of the carton, add a generous dab of glue to securely attach the end of the spoon to the interior back of the carton.



On your roof piece, cut two small slits about 2" apart, and thread through the ends of your twine. Tie a knot securely on the underneath side so it won't show. Using the school glue (or hot glue if you don't want to wait for school glue to dry!), attach the roof to your carton. Give the milk carton birdhouses a couple of coats of outdoor Mod Podge or spray varnish, and hang them up outside.



If you made a bird feeder, fill the bottom up with bird seed, hang from a tree, and wait for your feathered friends to discover it! These DIY milk carton bird feeders are such a fun and easy kids craft, and you can adapt this project to incorporate many different craft materials. It's a great way to use up excess supplies that you already have on-hand!

#### VI. RECYCLING WORKSHOP

The students are divided in international groups. They are offered some materials for recycling as plastic bottles and caps and some pictures to choose what they want to make are presented to them.

Some tools as scissors, water colours, brushes, tiny rope, an old CD, glue, felttip pens and markers, outlines of drawings and craft knife are put on each table for students to use.

Pictures of the recycled plastic bottles are put on the board, each group has to choose one picture, take it from the board and put it on the table. According to the picture put on the table, the teacher gives them as many plastic bottles as they need.

To those who chooses outlines of drawings, the teacher gives plastic cups in different colours, the students have to glue them on. They have the outlines of CATCH – the name of our project, recycling sign and a parrot.

The teacher warns the students to be careful when using hot glue, scissors or craft knives, so as not to injure themselves. The teacher also helps the students when they use them.



#### VII. WORKSHOP - DECOUPAGE TECHNIQUE

Decoupage technique is a decorative technique of cutting paper pieces and gluing them to a specific surface, that is, arranging them on a specific surface in a harmonious composition.

This work technique comes to us from Japan and China, and arrived in Europe in the 12th century. Decoupage technique can make beautiful any object of wood, glass, plastic, cloth, metal...

For work we will need:

- the item we want to decorate (glass jar, hat and coat stand, plastic container, wooden chair, glass bottle, soap, leader glass bottles ...)
- material for decoration napkins
- base acrylic paint + wood glue primer, acrylic-based varnish in the final stage

#### Work procedure

- Apply, by tapping, white acrylic paint and wood glue to the object with a sponge
- 2. We choose motifs of napkins to decorate a certain object
- 3. Cut the motif with your fingers and layer the napkin into three layers
- 4. We place the first layer of the motif on the base we stick it with glue in a thin layer
- 5. Paint over the motif with varnish
- 6. If necessary, we add another acrylic paint
- 7. Paint over the object with acrylic varnish

Motifs are exclusively applied on a white base to make them visible and clear, and other acrylic paint is applied for decoration.







#### **VIII. CATCH THE GAME**

#### 1. Insert the cap



Each team has 8 members. Each team is made up of students from different countries (Italy, Spain, Poland, Türkiye, Slovakia and Serbia). There are 6 teams in total. The team's task is to insert as many plastic bottle caps as possible into the box. Each team member inserts one bottle cap into the box at the same time. The throwing distance from the box is 3 meters. The time limit for inserting the bottle cap into the box is 2 minutes. 3 teams play at the same time.

#### 2. Hit the basket



Each team has 8 members. Each team is made up of students from different countries (Italy, Spain, Poland, Türkiye, Slovakia and Serbia). There are 6 teams in total. The task

of the team is to insert as many paper balls into the basket as possible in a certain time. Paper balls are thrown alternately, one student at a time, from a distance of 3 meters (free throws). The time limit for putting paper balls into the basket is 1 minute. Students who are not currently throwing can collect the paper balls that have not been put into a bag that will be attached to the hoop of the basket. Collected paper balls are brought to the throwing line. Teams play one by one.

#### 3. Bowling



Each team has 8 members. Each team is made up of students from different countries (Italy, Spain, Poland, Türkiye, Slovakia and Serbia). There are 6 teams in total. The task of the team is to knock down all cones (plastic bottles) by rolling tennis balls from a distance of 10 meters. Students take turns shooting the cones one at a time. After the student shoots the cones, he quickly runs to get the tennis ball and returns to the end of the shooting column. The time limit for knocking down the cones is 1 minute. If the team knocked down all the cones before the end of one minute, the time for which the team knocked down all the cones is recorded. If a minute has passed and the team has not knocked down all the cones, the number of knocked down cones is recorded. Each team knocks down 10 cones. All teams play simultaneously.

#### 4. Be Nimble



Each team has 8 members. Each team is made up of students from different countries (Italy, Spain, Poland, Türkiye, Slovakia and Serbia). There are 6 teams in total. All teams play simultaneously. The goal of the game is for the team to transfer 8 plastic bottles over a distance of 10 x 2 meters in the shortest possible time and place them in a box as follows:

- At the start, the students are arranged in a column according to their own agreement and each have a bottle in their hands;
- The first student at the signal to start the game, with a bottle in his hands, in the shortest possible time covers a distance of 10 x 2 meters, going around the cone, returning to the starting position and handing his bottle to the next student;
- The second student, after taking the bottles, repeats the same procedure and hands over his two bottles to the next student;
- The third student, after taking the bottles, repeats the same procedure and hands his three bottles to the next student;
- The fourth student, after taking the bottles, repeats the same procedure and hands his four bottles to the next student;
- The fifth student, after taking the bottles, repeats the same procedure and hands over his five bottles to the next student;

- The sixth student, after taking the bottles, repeats the same procedure and hands over his six bottles to the next student;
- The seventh student, after taking the bottles, repeats the same procedure and hands over his seven bottles to the next student;
- The eighth (last) student, after taking the bottles, runs a distance of 10 x 2 meters and puts all eight bottles into the box. That's game over.

If a bottle is dropped during the game, the student who dropped it is obliged to pick up the bottle and continue the game. Scoring: The first team gets 4 points, the second team 3 points, the third team 2 points and the other teams 1 point each. All teams play simultaneously.

#### IX. MYSTERY ITEM

**Preparation:** Fill the bag with whatever random supplies you want. That's all the kids get to build an invention! Suggest they build something to solve a problem or meet a need.

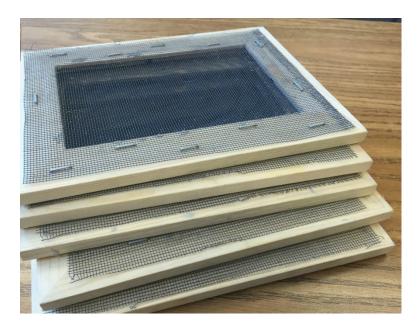
**Supplies:** Our bag includes pipe cleaners. Straws, a balloon, plastic bottle caps, plastic bottles, small cups, a Kleenex box, and random packaging items. Make sure to leave access to tape, string, scissors, and other essentials.



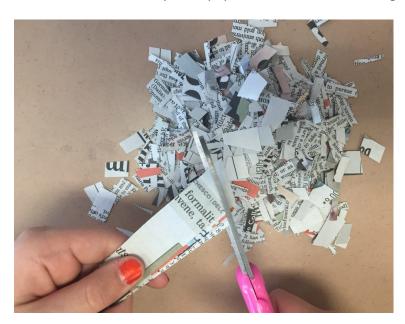


## X. RECYCLED PAPER IN THE CLASSROOM

Materials: Used paper or newspaper, gloves, frames, bowl, water



The students each cut another small pile of paper and added it to the big bowl.



Here is what that mixture looked like.



Then we added enough water to cover the shreds of paper. We mixed it up and let it sit. After one night, the paper started to break down, but we decided to wait a second night in order to get a nice, smooth pulp.



I do recommend the gloves if you use newspaper because the news print will leave black stains all over their hands. The paper pulp looked pretty gross at this point, but we sure did have a fun, sensory experience while mixing!



Then it was time to make the paper! This part was so much easier than I had anticipated. Our pulp was fairly thick, so I just had the students reach into the bowl and place globs of the pulp on the screen. They smoothed it out first with their fingers and covered all the holes, leaving a thin layer of pulp on the screen.



Then, they moved over to a large beach towel at a different table and began to press out the water. First, they pressed with a plastic bag to make the paper nice and smooth. Then, they pressed some more with absorbent paper towels until most of the liquid was removed.



This whole process only took about five minutes per group. I worked with five students at a time. After each student had finished pressing out the water, I simply turned their frame upside down and tapped it on the table. The paper fell right out. We let it sit there on the towel to dry. After one night, the paper was dry! We were all so pleasantly surprised by the results! To give you an idea of the texture, think about grey cardboard egg cartons. The recycled paper feels very much like that.



#### XI. RECYCLING OLD LIGHT BULBS

When a light bulb burns out in a household and is replaced by a new one, the old one is usually just thrown away. Unfortunately, not everyone takes the waste light bulbs to the nearest recycling bin. But there are so many ways to rethink the function of an old light bulb and turn it into something super creative. In art and technology lessons, you can make a cute Christmas decoration out of burnt-out light bulbs.

Winter penguins made from recycled burnt-out light bulbs

Materials needed:

- 4 burnt-out bulbs
- Acrylic primer
- Acrylic paint in black, white and orange
- Old socks for the cap and scarf
- Needle and thread
- 10 m yarn for pom pom
- 8 plastic eyes for crafts

Preparation time:

180 minutes

#### Preparation:

- 1. First apply two coats of foundation, then draw the body of the penguin on the white base.
- 2. Apply two coats of black colour using a thin brush for the penguin feathers.
- 3. Glue the eyes of the penguins onto the body.
- 4. Paint the beaks under the eyes with orange acrylic paint.

- 5. Once the paint is dry, cut the legs out of cardboard, paint them orange and glue them on the body.
- 6. Cut a rectangle from old socks and sew it to make a cap.
- 7. Make a pompom from old yarn and glue it to the cap with a glue gun.
- 8. Glue the cap on the penguin's head.





#### XII. RECYCLING OLD CRAYONS

Every household and school have a few old crayon pieces lying around that can no longer be used for art. These are great for making new crayons or creative decorations using a simple silicone mould. Since you can choose any pattern of silicone mould you like, you can make a great crayon set for any occasion, holiday or season. You can combine similar colours or even make rainbow-coloured crayons and gifts.

#### Materials needed:

- old crayon pieces
- silicone mould for oven

#### Preparation:

1. Collect the small, broken, unused crayons and organize them by colour. Remove the paper from them if necessary.



- 1. Take the silicone mould, but make sure it can be used in the oven.
- 2. If necessary, break the crayons into even smaller pieces so that you can easily arrange them in the mould.



3.Heat the crayons until melted, this should only take a few minutes at 200 degrees. Allow to cool until the sides of the crayons separate from the sides of the mould. If you wait patiently, they will be very easy to turn out of the moulds.



There are so many ingenious ways to recycle crayons, never throw them away. By melting white, blue and green crayons in a round silicone mould, you can also give them as gifts to your friends on Earth Day, and remind them to be more environmentally conscious in their everyday lives.

#### XIII. CATCH ME RECYCLING



## **HOW TO PLAY THE GAME**

### **Preparation stage:**

Print the question cards and cut them. Then print the board, or ask the students to make one. You also need pawns for each player and a dice.

### Gameplay:

The question cards are shuffled and placed in a pile.

Players roll the dice – the person who throws the most points starts the game.

Players draw a question card and answer the question. If they answer correctly, they roll the dice and advance by the number of points thrown. The question card is set aside in a separate pile.

The player who reaches the finish line first, i.e. the centre of the board – wins.

If all the question cards have been used up - mix them up and reuse them - this will help players to master recycling issues.

















## CATCH ME RECYCLING

www.catcherasmus.eu

## THE ANSWERS

- 1. [E] All of the above
- 2. [E] All of the above
- 3. [C] Styrofoam
- 4. [A] Saving on natural resources
- **5. [B]** Blue
- 6. [A] Collection and segregation, processing, production
- 7. [A] Process for converting organic waste into fertiliser
- 8. [A] Waste paper
- 9. [C] Paper
- 10. [A] PET
- 11. [D] All of the above
- 12. [D] All unnecessary electronic devices
- 13. [A] New bottles and jars
- 14. [A] Recycling symbol
- 15. [A] Plastic and cardboard
- **16. [C]** Polyethylene terephthalate
- 17. [B] An economic model in which raw materials are recovered and reused
- 18. [A] Energy saving
- 19. [D] All of the above
- 20. [B] Polyethylene
- 21. [A] Saving trees
- **22.** [A] PET, PE, PP, PVC
- **23.** [A] A container in which clothes are collected for distribution to the needy
- **24.** [B] Paper cup

- 25. [A] New bottles
- 26. [E] All of the above
- 27. [D] Food packaging
- **28.** [A] Breakdown of waste into different categories such as paper, plastic, glass
- 29. [D] All of the above
- 30. [C] Used batteries
- 31. [A] Waste incineration process
- **32. [D]** All of the above
- **33.** [D] In the entrance hall
- **34.** [B] Polystyrene
- 35. [D] All of the above
- **36.** [D] All of the above
- 37. [B] Waste Management
- 38. [C] Industrial waste
- 39. [B] New glasses frames (spectacles frames)
- 40. [A] Production of new bottles and jars
- 41. [D] Used cooking oils
- **42.** [A] The process by which raw materials are used to produce new products
- **43.** [A] Waste-to-energy process
- 44. [B] In the garden
- **45.** [**D**] All of the above
- **46.** [A] Metal recycling process
- **47. [D]** All of the above
- 48. [A] Energy from waste process



<ul> <li>1. Which materials can be recycled?</li> <li>[A] Paper and cardboard</li> <li>[B] Plastic</li> <li>[C] Glass</li> <li>[D] Metal</li> <li>[E] All of the above</li> </ul>	<ul> <li>2. Recycling is important for the environment because it</li> <li>[A] Reduces the amount of waste in landfills</li> <li>[B] Saves energy</li> <li>[C] Reduces greenhouse gas emissions</li> <li>[D] Reduces tree felling</li> <li>[E] All of the above</li> </ul>		
3. Which of the following items cannot be recycled?  [A] Plastic bottle  [B] Newspaper  [C] Polystyrene foam  [D] Aluminium can	4 What are the benefits of recycling?  [A] Saving on natural resources  [B] Improving air quality  [C] Creation of new products from recovered materials  [D] Reduction of water pollution		
5. What colour is usually the waste bin for plastic? [A] Green [B] Blue [C] Yellow [D] Red	<ul> <li>6. What are the three stages of recycling?</li> <li>[A] Collection and segregation, processing, production</li> <li>[B] Collection, incineration, deposition</li> <li>[C] Incineration, segregation, storage</li> <li>[D] Production, segregation, disposal</li> </ul>		
<ul> <li>7. What is composting?</li> <li>[A] Process for converting organic waste into fertiliser</li> <li>[B] The manufacturing process of plastic packaging</li> <li>[C] Incineration of waste in a landfill</li> <li>[D] The production process of paper from recovered paper</li> </ul>	8. What is the name of the material obtained from recycling old newspapers and paper?  [A] Paper  [B] Plastic  [C] Glass  [D] Metal		
9. Which of the following materials is biodegradable and can be composted?  [A] Plastic  [B] Glass  [C] Paper  [D] Metal	10. What is the most common type of plastic used for beverage bottles?  [A] PET  [B] PVC  [C] HDPE  [D] PP		
11. What can be made from recycled plastic?  [A] PET bottles  [B] PVC pipes  [C] Food packaging  [D] All of the above	12. What is 'electro-waste'?  [A] Defective televisions  [B] Unnecessary mobile phones  [C] Used batteries  [D] All unnecessary electronic devices		
<ul> <li>13. What products can be made from recycled glass?</li> <li>[A] New bottles and jars</li> <li>[B] Cardboard packaging</li> <li>[C] Car tyres</li> <li>[D] Plastic bags</li> </ul>	14. What is the 'green dot'?  [A] Recycling symbol  [B] Place for depositing organic waste  [C] Picnic-friendly venue  [D] Herbal shop		
15. What materials are most commonly used for food packaging?  [A] Plastic and cardboard  [B] Glass and paper  [C] Metal and rubber  [D] Wood and ceramics	16. What does the abbreviation 'PET' mean in the context of recycling?  [A] Polyethylene  [B] Polyamide  [C] Polyethylene terephthalate  [D] Polypropylene		
<ul> <li>17. 'Circular economy' is an economic model in which</li> <li>[A] waste is deposited in depositories</li> <li>[B] raw materials are recovered and reused</li> <li>[C] all products are destroyed after use</li> <li>[D] there is no recycling</li> </ul>	18. What are the benefits of recycling metal?  [A] Energy saving  [B] Reduction of CO2 emissions  [C] Reduced raw material extraction  [D] All of the above		

19. What waste can be taken to the separate collection centre?  [A] Used batteries  [B] Used light bulbs  [C] Food packaging  [D] All of the above	20. What does the abbreviation 'EP' mean in the context of recycling?  [A] Polypropylene  [B] Polyethylene  [C] Polyethylene terephthalate  [D] Polyamide		
<ul><li>21. What are the benefits of recycling paper?</li><li>[A] Saving trees</li><li>[B] Reduced water consumption</li><li>[C] Reduction of greenhouse gas emissions</li><li>[D] All of the above</li></ul>	22. What are the most common types of plastic? [A] PET, PE, PP, PVC [B] PVC, HDPE, LDPE, PP [C] PET, PVC, PP, PS [D] PE, PP, PS, ABS		
<ul> <li>23. What is a 'clothing charity container'?</li> <li>[A] A container in which clothes are collected for distribution to the needy</li> <li>[B] Used oil container</li> <li>[C] Electro-waste bin</li> <li>[D] Glass container</li> </ul>	<ul> <li>24. Which of the following products can usually be recycled?</li> <li>[A] Plastic card</li> <li>[B] Paper cup</li> <li>[C] Plastic bag</li> <li>[D] Chewing gum</li> </ul>		
25. What products can be made from recycled PET plastic?  [A] New bottles  [B] PVC pipes  [C] Food packaging  [D] All of the above	<ul> <li>26. Which materials should always be recycled?</li> <li>[A] Paper and cardboard</li> <li>[B] Plastic</li> <li>[C] Glass</li> <li>[D] Metal</li> <li>[E] All of the above</li> </ul>		
27. Which of the following things can usually be recycled?  [A] Paper bags  [B] Newspapers and magazines  [C] PVC pipes  [D] Food packaging	<ul> <li>28. What is 'waste segregation'?</li> <li>[A] Breakdown of waste into different categories, such as paper, plastic, glass</li> <li>[B] Disposal of waste for landfill</li> <li>[C] Incineration of waste</li> <li>[D] Collection of all waste in one container</li> </ul>		
29. What are the benefits of recycling paper and cardboard?  [A] Energy saving  [B] Reduction of tree felling  [C] Water treatment  [D] All of the above	30. Which of the following wastes can usually be taken to a separate collection point?  [A] Used tyres  [B] Organic waste  [C] Used batteries  [D] Furniture		
31. What is 'disposal' in the context of waste?  [A] Waste incineration process  [B] Processing of waste into new products  [C] Depositionof waste at waste disposal sites  [D] Recycling of plastic packaging	32. What products can be obtained from recycled metal?  [A] New cans  [B] New packaging  [C] New car components  [D] All of the above		
33. Where is the container for used batteries usually located in shops or offices?  [A] In the car park  [B] In the kitchen  [C] In the bathroom  [D] In the entrance hall	34. What is 'PS' in the context of a code denoting a type of plastic?  [A] Polyethylene  [B] Polystyrene  [C] Polyamide  [D] Polypropylene		
35. What are the benefits of recycling newsprint?  [A] Water saving  [B] Reduction of greenhouse gas emissions  [C] Water treatment  [D] All of the above	36. What can be made from recycled aluminium cans?  [A] Production of new cans  [B] Production of automotive components  [C] Food packaging  [D] All of the above		

37. What does the abbreviation 'WM' mean on drinks packaging?  [A] Weight Management  [B] Waste Management  [C] Water Management  [D] Waste Minimisation	38. What types of waste can be recycled at recycling facilities?  [A] Municipal waste  [B] Medical waste  [C] Industrial waste  [D] Hazardous waste			
39. What can be made from recycled sunglasses?  [A] Combustion for energy  [B] New glasses frames (spectacles frames)  [C] Deposition  [D] Shipment to shops as a recycled product	<ul> <li>40. What can be made from recycled glass?</li> <li>[A] Production of new bottles and jars</li> <li>[B] Manufacture of cardboard packaging</li> <li>[C] Electrical cable formation</li> <li>[D] All of the above</li> </ul>			
<ul> <li>41. Which of the following items can be recycled?</li> <li>[A] Expired medicines</li> <li>[B] Used batteries</li> <li>[C] Polystyrene foam</li> <li>[D] Used cooking oils</li> </ul>	<ul> <li>42. 'Closed-loop recycling' is a process in which</li> <li>[A] raw materials are used to manufacture new products</li> <li>[B] raw materials are lost and not reused</li> <li>[C] waste is deposited in depositories</li> <li>[D] the waste is incinerated</li> </ul>			
<ul> <li>43. What is 'energy recovery'?</li> <li>[A] Process for generating electricity from waste</li> <li>[B] Wind energy extraction process</li> <li>[C] Process of reducing energy consumption in buildings</li> <li>[D] Manufacturing process of recycled plastic packaging</li> </ul>	<ul> <li>44. Where are 'composters' usually located in homes?</li> <li>[A] On the balcony</li> <li>[B] In the garden</li> <li>[C] In the kitchen</li> <li>[D] In the bathroom</li> </ul>			
<ul> <li>45. Name the benefits of recycling paper and cardboard.</li> <li>[A] Reduction of tree felling</li> <li>[B] Energy saving</li> <li>[C] Improving air quality</li> <li>[D] All of the above</li> </ul>	<ul> <li>46. What is 'scrapping' in the context of recycling?</li> <li>[A] Metal recycling process</li> <li>[B] Composting process</li> <li>[C] Glass recycling process</li> <li>[D] Plastics to pellets process</li> </ul>			
<ul> <li>47. What are the benefits of recycling newspapers?</li> <li>[A] Water saving</li> <li>[B] Reduction of tree felling</li> <li>[C] Improving air quality</li> <li>[D] All of the above</li> </ul>	48. What is 'waste incineration'?  [A] Energy from waste process  [B] Landfill disposal process  [C] Waste treatment process  [D] Composting process			





# CATCH ME RECYCLING



## ONITOLOGIE BECACTINE





