



Co-funded by  
the European Union



KA220-SCH-Cooperation partnerships in school education

# ECO-FUTURE TOOLKIT

Teaching Circular ECONomy to the FUTURE generations

PROJECT CODE: **2022-1-FI01-KA220-SCH-000089395**

DURATION: **01/09/2022 – 31/08/2024**





Co-funded by  
the European Union



## ACKNOWLEDGMENTS

The ECO-FUTURE Consortium would like to extend a warm ‘thank you’ to all the people and who took part to the implementation and success of this project.

Starting with the stakeholders of the project, whose opinion, efforts, and experiences has been more than valued for the construction of this manual, to the entities, public and private who contributed in any way to supporting our activities.

We would also like to express our gratitude to the European Commission for the opportunity to implement such an ambitious transnational initiative for training the future generations to the values of Circular Economy in such a particular historical period.

Finally, we want to thank all the internal staff who committed for the co-creation of the project results: trainers, collaborators and, especially, the partners of this consortium, without which, the project would not even have existed.





Co-funded by  
the European Union



## INDEX

Introduction to the ECO-FUTURE TOOLKIT	6
Waste Audit Scavenger Hunt	7
Upcycling Art Workshop	9
Recycle Relay Race	11
Upcycled Fashion Show	13
Circular Economy Board	15
Eco-Friendly Cleaning Products Workshop	18
Waste Paper Recycling	20
Junk Sculptures	22
Upcycled Plastic Bottle Greenhouse and Planters	24
DIY Musical Instruments	26
Circular Economy Bingo Game	28
TRASH TO TREASURE – RECYCLED ART WORKSHOP	30
ECO-CYCLE SORTING GAME	31
CREATIVE RECYCLING BINS	33
RECYCLED MASK	34
SPROUTING LEGUMES	36
ECO-BIRDHOUSE	38
FROM WASTE TO USEFUL DESIGN	40
A PLATE FOR TWO	41
NATIVE SCAVENGER HUNT	42
RECYCLE BINGO CARD GAME	43
COLLAGE ABOUT REDUCING CARBON FOOTPRINT	44
ARRANGING CIRCULAR ECONOMY DISPLAY	45
RECYCLING LIST GAME	46
FUTILE GADGETS / ITEMS	47
MAKE A STICK OF CHALK FROM EGGSHELLS	48
SEWING A SOCK SNAKE	49
CROCHETING CHAIR COVERS FROM BROKEN CLOTHES	50
MAKING PLANT POTS FROM METAL CANS	51





Co-funded by  
the European Union



BUILDING A BALL TRACK / A MARBLE RUN	52
UPCYCLED FASHION DESIGN WORKSHOP	53
RECYCLED SCULPTURE TINKERING WORKSHOP	54
UPCYCLED TOY TINKERING WORKSHOP	56
ECO-FRIENDLY SCULPTURE GARDEN	57
WASTE SORTING RELAY RACE	59
TIN CAN LANTERN CRAFTING WORKSHOP	60
RECYCLING SORTING RELAY RACE	62
WASTE WIZARD VS. RECYCLE QUEEN: BATTLE AGAINST TRASHZILLA - RECYCLING ROLE-PLAYING GAME	63
QUIZ-STYLE GAME	65
ECO EXPLORERS: DISCOVERING THE MAGIC OF RECYCLING	66
WE TRIED THE ACTIVITIES AND HAD A GREAT TIME DOING THEM!	68
CONCLUSIONS	81
CARTOONS	84
KEY EPISODES	86
CARTOON LINKS	89
DISCLAIMER	91







Co-funded by  
the European Union



# INTRODUCTION TO THE ECO-FUTURE TOOLKIT





Co-funded by  
the European Union



The Eco-Future Toolkit belongs to the *Teaching Circular ECONOMy to the FUTURE generations* (ECO-FUTURE) project, a 24-month KA220 SCH-Cooperation partnership in school education. The project involved organisations and schools from Finland, Italy and North Macedonia with the common aim of promoting a successful and supportive scheme for teachers to educate children on the values of the Circular Economy.

The ECO-FUTURE Toolkit is a practical resource that collects workshops and activities on sustainability, circular economy, and eco-responsible citizenship that will be implemented in the local activities phase, as well as a description of the tinkering methodology.

ECO-FUTURE cartoons. It is a collection of four cartoons. After the local activities, teachers developed a storyboard/story idea on the cycle of different materials (paper, plastic, aluminium, and glass). Partners selected a story for each material and developed it into a short cartoon to educate young pupils on the circular economy (according to the 4Rs approach).





## Waste Audit Scavenger Hunt

<p><b>Learning Outcomes</b></p>	<ul style="list-style-type: none"> <li>• <b>To develop a hands-on understanding of waste production:</b> By conducting a waste audit, students will actively collect and categorise different types of waste. This will give them a practical understanding of how waste is generated within their school or community.</li> <li>• <b>To emphasize the importance of responsible disposal:</b> Through this activity, students will learn about the proper disposal methods for different types of waste. They will recognize the significance of responsibly managing waste to protect the environment and promote sustainability. Overall, the purpose of this activity is to educate students about waste production and disposal practices, promoting environmental awareness and responsible behavior.</li> </ul>
<p><b>Group Size</b></p>	<p>Medium groups of 5-10 participants.</p>
<p><b>Duration</b></p>	<p><b>Total Duration:</b> Approximately 2 hours</p> <p><b>Phase 1:</b> Preparation (30 minutes) - Brief participants, distribute gloves and bags, explain waste categories.</p> <p><b>Phase 2:</b> Scavenger Hunt (1 hour) - Participants collect and categorize waste in the school or community.</p> <p><b>Phase 3:</b> Analysis and Discussion (30 minutes) - Review findings, discuss waste impact, and emphasize responsible disposal.</p>
<p><b>Materials</b></p>	<ol style="list-style-type: none"> <li>1. Gloves for each participant</li> <li>2. Bags or containers for waste collection</li> <li>3. Labels or markers for categorizing different types of waste</li> <li>4. Clipboards and paper for recording observations</li> <li>5. Educational materials or guides on waste categorization (optional)</li> <li>6. First aid kit (as a precaution)</li> <li>7. Trash bins or disposal facilities for the final disposal of collected waste.</li> </ol>
<p><b>Preparation</b></p>	<p>Ensure students are equipped with the materials written above for a waste audit. Provide educational materials, safety guidelines, obtain location permissions, organize a collection plan, and prepare for a follow-up discussion.</p>





<b>Description/Steps</b>	<ol style="list-style-type: none"><li>1.Preparation: Obtain school permissions and coordinate with custodial staff.</li><li>2.Briefing: Introduce waste audit goals and safety.</li><li>3.Materials: Distribute gloves, bags, labels, and clipboards.</li><li>4.Collection: Assign groups to collect waste in designated areas.</li><li>5.Categorization: Use a sorting station to categorize waste types.</li><li>6.Data Recording: Students record waste observations.</li><li>7.Reflection: Brief discussion on waste impact and disposal responsibility.</li><li>8.Reporting: Compile data for reference.</li><li>9.Disposal: Properly dispose of waste in school bins.</li><li>10. Feedback: Collect student feedback and evaluate outcomes.</li></ol>
<b>Learning Check/ Evaluation</b>	Facilitate a group discussion for students to share experiences from the waste audit, emphasizing key learnings and challenges. In small groups, students compile reflections and develop action plans for responsible waste disposal within the school. Each group presents their plan to the class, receiving feedback. Conclude with a broader discussion on sustainable practices and assign a brief individual reflection task. Collect reflections and action plans for evaluation, assessing the depth of understanding and feasibility of proposed actions. This activity promotes critical thinking, collaboration, and the application of waste audit learnings to real-world scenarios.





Co-funded by  
the European Union



## Upcycling Art Workshop

<b>Learning Outcomes</b>	<p><b>Creativity:</b> Develop creative thinking skills by transforming discarded materials into new, useful items.</p> <p><b>Environmental Awareness:</b> Increase awareness of upcycling as a sustainable practice, promoting environmental responsibility.</p> <p><b>Problem-Solving:</b> Enhance problem-solving abilities by finding innovative uses for materials that would otherwise be considered waste.</p>
<b>Group Size</b>	Medium groups of 10 participants.
<b>Duration</b>	<p><b>Total Duration:</b> Approximately 2 hours</p> <p><b>Phase 1:</b> Preparation (15 minutes) - gather materials, set up space, organize supplies.</p> <p><b>Phase 2:</b> Workshop (60 minutes) - introduce and show examples, participants select and create, facilitate discussion, showcase and clean up.</p> <p><b>Phase 3:</b> Evaluation &amp; Conclusion (5 minutes) - assess creations, express gratitude.</p>
<b>Materials</b>	<ol style="list-style-type: none"> <li>Discarded materials (various items for upcycling)</li> <li>A variety of waste materials like cardboard, plastic bottles, fabric scraps, etc.</li> <li>Art supplies (paints, brushes, markers, glue, scissors, etc.)</li> <li>Work surfaces or tables</li> <li>Protective coverings or aprons</li> <li>Examples or samples of upcycled projects for inspiration</li> <li>Discussion prompts or guides on upcycling concepts</li> <li>Containers for organizing materials</li> <li>Cleanup supplies (wipes, trash bags)</li> <li>Optional: Additional decorations or embellishments for finished projects.</li> <li>Theoretical materials: Prepare clear instructions (hand written or printed) to introduce the concept of upcycling and guide participants on the art-making process.</li> </ol>
<b>Preparation</b>	<p>·<b>Material Collection:</b> Gather a diverse range of discarded materials in advance.</p> <p>·<b>Workshop Setup:</b> Arrange the workshop space with tables, chairs, and art supplies.</p>





<p><b>Description/Steps</b></p>	<p>This activity encourage creativity by organizing an art session where students transform discarded materials into new, useful items. This hands-on activity teaches the concept of upcycling and highlights how items can have a second life.</p> <p><b>Step 1: Introduction and Inspiration</b></p> <ul style="list-style-type: none"> <li>·Introduce upcycling, emphasizing its environmental benefits.</li> <li>·Showcase examples of upcycled projects for inspiration.</li> </ul> <p><b>Step 2: Material Selection and Planning</b></p> <ul style="list-style-type: none"> <li>·Provide a variety of discarded materials.</li> <li>·Encourage participants to choose items and plan their projects.</li> </ul> <p><b>Step 3: Hands-On Creativity</b></p> <ul style="list-style-type: none"> <li>·Provide art supplies and let participants transform materials into new items.</li> <li>·Offer guidance and encouragement as needed.</li> </ul> <p><b>Step 4: Group Discussion and Reflection</b></p> <ul style="list-style-type: none"> <li>·Facilitate a discussion on the upcycling process and its environmental impact.</li> <li>·Encourage participants to reflect on their experiences.</li> </ul> <p><b>Step 5: Showcase and Cleanup</b></p> <ul style="list-style-type: none"> <li>·Provide a platform for participants to showcase their creations.</li> <li>·Ensure proper cleanup of materials.</li> </ul> <p><b>Conclusion:</b> Express gratitude, highlighting the importance of applying upcycling principles in daily life.</p>
<p><b>Learning Check/Evaluation</b></p>	<p>Facilitate a group discussion for students to share experiences from the waste audit, emphasizing key learnings and challenges. In small groups, students compile reflections and develop action plans for responsible waste disposal within the school. Each group presents their plan to the class, receiving feedback. Conclude with a broader discussion on sustainable practices and assign a brief individual reflection task. Collect reflections and action plans for evaluation, assessing the depth of understanding and feasibility of proposed actions. This activity promotes critical thinking, collaboration, and the application of waste audit learnings to real-world scenarios.</p>





## Recycle Relay Race

<p><b>Learning Outcomes</b></p>	<p><b>Teamwork:</b> Enhance teamwork and collaboration as participants engage in a collective effort to sort recyclables.</p> <p><b>Environmental Education:</b> Increase awareness of the importance of recycling and proper waste management practices.</p> <p><b>Critical Thinking:</b> Develop critical thinking skills by requiring participants to quickly and accurately sort different types of waste items.</p>
<p><b>Group Size</b></p>	<p>Big groups of 15-30 participants</p>
<p><b>Duration</b></p>	<p><b>Total Duration:</b> Approximately 40 minutes</p> <p><b>Phase 1:</b> Introduction and team formation (8 minutes)  <b>Phase 2:</b> Passing the Baton - materials distribution (7 minutes)  <b>Phase 3:</b> First half of the race (10 minutes)  <b>Phase 4:</b> Midpoint check and snappy tips (5 minutes)  <b>Phase 5:</b> Second half of the race and victory lap (5 minutes)</p>
<p><b>Materials</b></p>	<p><b>1.Bins:</b> Labeled bins for plastic, paper, and glass.  <b>2.Disposal Materials:</b> Recyclable items like plastic bottles, paper, and glass containers.  <b>3.Timer:</b> A timer or stopwatch.  <b>4.Team Formation Cards:</b> Cards or markers for team assignment.  <b>5.Rules Sheet:</b> Simple sheet outlining the purpose and rules.  <b>6.Awards or Certificates:</b> Small awards for teams.  <b>7.Teacher's Guide:</b> Guide for the teacher/facilitator.</p>
<p><b>Preparation</b></p>	<p><b>1. Material Setup:</b> Arrange recyclable items and recycling bins in designated areas.</p> <p><b>2. Instructions:</b> Prepare clear and concise instructions for the relay race, emphasizing the importance of correct sorting.</p> <p><b>3. Safety Briefing:</b> Provide a brief safety overview, especially if the activity involves movement or competition.</p>







<p><b>Description/Steps</b></p>	<p>Organize a relay race where students gather various waste items (plastic, paper, glass) and swiftly sort them into recycling bins by passing disposal materials (like a baton). This interactive activity reinforces the significance of recycling and proper waste management.</p> <p><b>Introduction and Team Formation:</b></p> <ul style="list-style-type: none"> <li>·Welcome participants and explain the purpose of the race.</li> <li>·Form teams and distribute labeled bins.</li> <li>·Briefly introduce the types of waste to be sorted (plastic, paper, glass).</li> </ul> <p><b>Passing the Baton - Materials Distribution:</b></p> <ul style="list-style-type: none"> <li>·Start the timer.</li> <li>·Teams create a fun and quick strategy for passing disposal materials (like a baton).</li> <li>·Emphasize the importance of teamwork in passing the materials smoothly.</li> </ul> <p><b>First Half of the Race:</b></p> <ul style="list-style-type: none"> <li>·Resume the timer.</li> <li>·Teams race to collect and sort items into the designated bins.</li> <li>·Encourage creative strategies for passing materials during the race.</li> </ul> <p><b>Midpoint Check and Snappy Tips:</b></p> <ul style="list-style-type: none"> <li>·Pause briefly.</li> <li>·Provide quick tips for improvement.</li> <li>·Share a fun recycling fact or challenge to keep the energy high.</li> </ul> <p><b>Second Half of the Race and Victory Lap:</b></p> <ul style="list-style-type: none"> <li>·Resume the timer.</li> <li>·Teams continue the race, aiming for a strong finish.</li> <li>·Conclude with a victory lap where each team proudly showcases their sorted materials.</li> </ul> <p><b>Debrief, Awards, and Cheers:</b></p> <ul style="list-style-type: none"> <li>·Gather participants</li> <li>·Discuss the importance of recycling and proper waste management.</li> <li>·Award teams for creativity, speed, and accuracy.</li> <li>·End with cheers, applause, and positive reinforcement.</li> </ul> <p>This breakdown ensures a dynamic and entertaining "Recycle Relay Race" with each step contributing to the overall fun experience. Adjustments can be made based on the group's dynamics and preferences.</p>
<p><b>Learning Check/Evaluation</b></p>	<p>Facilitate a collective evaluation moment focused on participants' understanding of the activity's purpose, teamwork, and comprehension of the importance of proper waste management. Encourage open discussion rather than evaluating individual performance, fostering a collaborative reflection on the educational goals of the activity.</p>





## Upcycled Fashion Show

<b>Learning Outcomes</b>	<p><b>Creative Expression:</b> Transform discarded materials into unique fashion pieces.</p> <p><b>Understanding Sustainable Practices:</b> Grasp the importance of upcycling for reducing environmental impact.</p> <p><b>Communication and Reflection:</b> Communicate design inspirations, reflecting on the environmental implications of fashion choices.</p>
<b>Group Size</b>	Big groups of 10-20 participants.
<b>Duration</b>	<p><b>Total Duration:</b> Approximately 2,5 hours</p> <p><b>Phase 1:</b> Sorting material (20 minutes)  <b>Phase 2:</b> Introduction and brainstorming (15 minutes)  <b>Phase 3:</b> Upcycling session (40 minutes)  <b>Phase 4:</b> Fashion piece finalization (30 minutes)  <b>Phase 5:</b> Upcycled fashion show (30 minutes)  <b>Phase 5:</b> Recording and documentation (15 minutes)  <b>Phase 5:</b> Discussion and reflection (15 minutes)</p>
<b>Materials</b>	<p><b>Discarded Materials:</b></p> <ul style="list-style-type: none"> <li>Collect a variety of recyclable or discarded materials (old clothing, plastic bottles, cardboard, fabric scraps, etc.).</li> </ul> <p><b>Crafting Supplies:</b></p> <ul style="list-style-type: none"> <li>Provide glue, scissors, tape, markers, and any other basic crafting supplies.</li> </ul> <p><b>Runway Setup:</b></p> <ul style="list-style-type: none"> <li>Arrange tables, chairs, and a designated area for the fashion show runway.</li> </ul> <p><b>Recording Devices:</b></p> <ul style="list-style-type: none"> <li>Have cameras or smartphones ready for recording the fashion show.</li> </ul> <p><b>Description Cards:</b></p> <ul style="list-style-type: none"> <li>Prepare small cards for students to write brief descriptions of their upcycled creations.</li> </ul> <p><b>Communication Tools:</b></p> <ul style="list-style-type: none"> <li>Ensure clear communication with students about the event and encourage them to bring additional materials if desired.</li> </ul> <p><b>Introduction Materials:</b></p> <ul style="list-style-type: none"> <li>Prepare a brief introduction on upcycling and sustainable fashion, potentially including visuals for inspiration.</li> </ul> <p><b>Facilitator Support:</b></p> <ul style="list-style-type: none"> <li>Have facilitators or volunteers available to assist students during the activity.</li> </ul> <p><b>Discussion Prompts:</b></p> <p>Plan prompts for post-fashion show discussions to encourage reflection and open dialogue.</p>





<p><b>Preparation</b></p>	<p><b>Resource Setup:</b> ·Collect discarded materials and organize crafting supplies.</p> <p><b>Communication:</b> ·Inform students about the event and encourage material contributions.</p> <p><b>Space Arrangement:</b> ·Set up dedicated space with tables, chairs, and a runway.</p> <p><b>Introduction:</b> ·Prepare a brief introduction on upcycling and sustainable fashion.</p> <p><b>Crafting Materials:</b> ·Provide a variety of materials for crafting.</p> <p><b>Runway Setup:</b> ·Arrange the runway area for the fashion show.</p> <p><b>Facilitator Support:</b> ·Have facilitators or volunteers available for assistance.</p> <p>Documentation Tools: ·Prepare recording devices and cards for descriptions.</p> <p><b>Discussion Points:</b> ·Plan discussion prompts for post-fashion show reflection.</p> <p><b>Awards:</b> ·Prepare any certificates or recognition for peer voting awards.</p>
<p><b>Description/Steps</b></p>	<p><b>Material Gathering</b> ·Students collect discarded materials from provided resources or bring their own.</p> <p><b>Introduction and Brainstorming</b> ·Briefly explain the concept of upcycling and sustainable fashion. ·Facilitate a short brainstorming session for design ideas.</p> <p><b>Upcycling Session</b> ·Students actively engage in creating their upcycled fashion pieces.</p> <p><b>Fashion Piece Finalization</b> ·Students put finishing touches on their pieces, ensuring they are ready for the showcase.</p> <p><b>Fashion Show Preparation</b> ·Students prepare and put on their upcycled outfits, arranging themselves for the fashion show.</p> <p><b>Upcycled Fashion Show</b> ·Host the fashion show, allowing each student to showcase their unique creations on the runway.</p> <p><b>Recording and Documentation</b> ·Record the fashion show and take photos of each student in their upcycled outfits.</p> <p><b>Discussion and Reflection</b> ·Facilitate a discussion on the creative process, challenges faced, and the importance of upcycling in fashion.</p>
<p><b>Learning Check/Evaluation</b></p>	<p>Encourage open discussion among students to share insights gained from the Upcycled Fashion Show. Emphasize collaborative reflection on the creative process, sustainability concepts, and the impact of their collective efforts. Foster a supportive environment where everyone can express thoughts and ideas freely, contributing to a shared understanding of the value of upcycling in fashion.</p>





## Circular Economy Board

<p><b>Learning Outcomes</b></p>	<p><b>Circular Economy Understanding:</b> Develop a comprehensive understanding of the circular economy concept through active participation in-game activities related to production, consumption, recycling, and upcycling.</p> <p><b>Strategic Decision-Making:</b> Enhance strategic decision-making skills as players make choices that impact their scores, encouraging thoughtful consideration of the environmental consequences.</p> <p><b>Collaboration:</b> Foster collaboration and discussion among players as they navigate the circular economy simulation together.</p>
<p><b>Group Size</b></p>	<p>At least 2 players</p>
<p><b>Duration</b></p>	<p><b>Total Duration:</b> Approximately 90 minutes</p> <p><b>Phase 1:</b> Making the board game (60 minutes) <b>Phase 2:</b> Playing the game (30 minutes)</p> <p><b>Note:</b> The game duration can be more or less than 30 minutes because it goes in the flow of throwing the dice; going back and forth can determine the flow of the game, and with that, the duration of the game.</p>
<p><b>Materials</b></p>	<ol style="list-style-type: none"> <li>1.Cardboard or Game Board Material</li> <li>2.Illustrated Graphics (printed or hand-drawn)</li> <li>3.Six-sided Dice</li> <li>4.Tokens (upcycled or handcrafted)</li> <li>5.Writing Tools</li> <li>6.Cardstock (optional)</li> <li>7.Laminating Sheets (optional)</li> <li>8.Graphics Software or Hand-drawn Illustrations</li> <li>9.Printer</li> <li>10. Scoring Sheet/Board</li> <li>11. Box (maybe some old shoe box)</li> <li>12. Game Manual/Instructions</li> </ol> <p>Prototyping Tools (during development)</p>
<p><b>Preparation</b></p>	<ol style="list-style-type: none"> <li><b>1. Game Design:</b> Develop the game board layout, design game cards, and integrate the dice-rolling mechanic into the circular economy simulation.</li> <li><b>2. Rules:</b> Clearly articulate gameplay rules, including how dice rolls influence player actions and decisions.</li> <li><b>3. Testing:</b> Playtest the game to ensure a balanced and engaging experience, considering adjustments to rules or mechanics as needed.</li> </ol>





<p><b>Description/Steps</b></p>	<p><b>Game Board</b> - A visually engaging game board with sections representing different stages of the circular economy process.</p> <ol style="list-style-type: none"> <li>1. Players take turns rolling the dice to move across with tokens or markers for players to navigate the board and track their progress.</li> <li>2. The circular economy board.</li> <li>3. When landing on a space with words, the player reads and follows the instructions aloud.</li> <li>4. <b>Example 1:</b> "You toss a wrapper in the bushes, it won't bin itself. Go back 2 spaces."</li> <li>5. <b>Example 2:</b> "You rinse the soda from the bottle before throwing it in the bin. Bravo! Jump ahead 4 spaces."</li> <li>6. Drawing a <b>Scenario Card</b>: Presents choices with corresponding consequences or rewards.</li> <li>7. Drawing a <b>2nd Chance Card</b>: Offers players a redemption opportunity or a strategic advantage.</li> <li>8. Drawing a <b>Fact Card</b>: Provides educational insights or facts related to the circular economy, promoting learning during gameplay.</li> <li>9. Collaborative elements involve discussions and joint decision-making to optimize scores.</li> <li>10. The game continues until the first player or pair finishes.</li> </ol> <p><b>Winning:</b> The game concludes when a player or pair reaches the finish line. The winner is determined based on the highest overall score, considering points and penalties.</p> <p><b>Note:</b> The example of the game is in the References box</p>
<p><b>Learning Check/Evaluation</b></p>	<p>Evaluate players based on their strategic choices, collaboration with others, and understanding of the circular economy concepts demonstrated during the game. Encourage post-game discussions to explore the environmental impact of different decisions and promote reflection on sustainable practices.</p>





Co-funded by  
the European Union



References



PDF of the board game:

[https://www.toogoodtowaste.co.nz/\\_data/assets/pdf\\_file/0016/15370/TGTW-Boardgame.pdf](https://www.toogoodtowaste.co.nz/_data/assets/pdf_file/0016/15370/TGTW-Boardgame.pdf)







## Eco-Friendly Cleaning Products Workshop

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Understanding the importance of reducing chemical exposure;</li> <li>• Learning about natural cleaning ingredients;</li> <li>• Acquiring skills in making eco-friendly cleaning products.</li> </ul>
<b>Group Size</b>	Small groups of 4-8 participants.
<b>Duration</b>	<p><b>Total Duration:</b> Approximately 30-45 minutes.</p> <p><b>Phase 1:</b> Introduction to eco-friendly cleaning, hazards of conventional products, and demonstration of basic solutions: (15 minutes)</p> <p><b>Phase 2:</b> Participants make their own eco-friendly products, following provided recipes and experimenting with scents: (45 minutes)</p> <p><b>Phase 3:</b> Group discussion on benefits of eco-friendly cleaning, integration into daily routines, and reflection on workshop experience: (20 minutes)</p>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Empty spray bottles or containers</li> <li>• White vinegar</li> <li>• Baking soda</li> <li>• Castile soap</li> <li>• Essential oils (e.g., lavender, lemon, tea tree)</li> <li>• Distilled water</li> <li>• Funnel</li> <li>• Mixing bowls and spoons</li> </ul>
<b>Preparation</b>	<p><b>Gather Materials:</b></p> <ul style="list-style-type: none"> <li>• Collect all needed ingredients and equipment.</li> </ul> <p><b>Set Up Workstations:</b></p> <ul style="list-style-type: none"> <li>• Arrange stations with labeled ingredients and tools.</li> </ul> <p><b>Prepare Resources:</b></p> <ul style="list-style-type: none"> <li>• Create handouts with eco-friendly cleaning info and recipes.</li> </ul>







<b>Description/Steps</b>	<ol style="list-style-type: none"><li>1.Introduce the concept of eco-friendly cleaning and its benefits for personal health and the environment.</li><li>2.Discuss common household chemicals found in conventional cleaning products and their potential hazards.</li><li>3.Present natural ingredients such as vinegar, baking soda, and essential oils as effective alternatives.</li><li>4.Demonstrate how to make basic cleaning solutions using these ingredients (e.g., all-purpose cleaner, glass cleaner, bathroom scrub).</li><li>5.Provide recipes and guidelines for participants to create their own eco-friendly cleaning products.</li><li>6.Encourage experimentation with different scents and concentrations based on personal preferences.</li></ol>
<b>Learning Check/Evaluation</b>	<ul style="list-style-type: none"><li>• Assess participants understanding of eco-friendly cleaning principles by observing their engagement in the workshop and their ability to follow recipes.</li><li>• Facilitate a discussion on the advantages of using natural cleaning products and how participants can implement these practices in their daily lives.</li></ul>
<b>References</b>	<p><a href="https://keeperofthehome.org/homemade-all-natural-cleaning-recipes/">https://keeperofthehome.org/homemade-all-natural-cleaning-recipes/</a></p>





## Waste Paper Recycling

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Understanding the importance of recycling paper waste</li> <li>• Learning about the paper recycling process</li> <li>• Develop practical skills in paper recycling.</li> </ul>
<b>Group Size</b>	Small groups of 4-6 participants.
<b>Duration</b>	<p><b>Total Duration:</b> Approximately 45-60 minutes.</p> <p><b>Phase 1:</b> Introduction and Demonstration: (15 minutes) - Introduce paper recycling, explain the process briefly, and demonstrate shredding and pulping.</p> <p><b>Phase 2:</b> Paper Preparation: (20 minutes) - Participants shred or tear waste paper into small pieces and soak them in water to create pulp.</p> <p><b>Phase 3:</b> Paper Formation: (30 minutes) - Participants blend or further shred paper to create smooth pulp, transfer pulp onto mesh screen to drain water, and press paper using frames and towels.</p> <p><b>Phase 4:</b> Drying Phase and Conclusion: (15 minutes) - Allow recycled paper to dry completely, remove from frames, and conclude with a brief discussion on the importance of waste reduction and recycling.</p>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Waste paper (newspapers, magazines, office paper);</li> <li>• Blender or paper shredder;</li> <li>• Large basin or tub;</li> <li>• Mesh screen or strainer;</li> <li>• Sponge or cloth</li> <li>• Wooden frames;</li> <li>• Towels;</li> <li>• Rolling pin or flat object.</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>• Collect a sufficient amount of waste paper</li> <li>• Set up workstations with all necessary materials</li> </ul>





<b>Description/Steps</b>	<ol style="list-style-type: none"><li>1. Introduce the concept of paper recycling and its environmental benefits.</li><li>2. Explain the paper recycling process, including shredding, pulping, and drying.</li><li>3. Demonstrate how to shred or tear the waste paper into small pieces and soak them in water to create pulp.</li><li>4. Guide participants in blending or further shredding the paper to create a smooth pulp.</li><li>5. Show participants how to transfer the pulp onto a mesh screen or strainer to drain excess water and form a sheet of recycled paper.</li><li>6. Assist participants in pressing the paper using wooden frames and towels to remove more water and shape the paper.</li><li>7. Allow the recycled paper to dry completely before removing it from the frame.</li></ol>
<b>Learning Check/Evaluation</b>	<ul style="list-style-type: none"><li>• This activity provides a hands-on experience in recycling waste paper into new usable sheets, promoting environmental awareness and sustainable practices.</li><li>• Assess participants understanding of paper recycling principles by observing their engagement in the activity and the quality of the recycled paper produced.</li><li>• Facilitate a discussion on the importance of waste reduction and recycling in conserving natural resources and reducing environmental pollution.</li></ul>
<b>References</b>	<p><a href="https://www.instructables.com/Homemade-Paper/">https://www.instructables.com/Homemade-Paper/</a></p>





## Junk Sculptures

<b>Learning Outcomes</b>	<ul style="list-style-type: none"><li>• Foster creativity and imagination by repurposing everyday materials;</li><li>• Develop fine motor skills through cutting, bending, and assembling materials;</li><li>• Promote environmental awareness by recycling and reusing materials.</li></ul>
<b>Group Size</b>	Small groups of 2-4 participants.
<b>Duration</b>	<p><b>Total Duration:</b> Approximately 60 minutes.</p> <p><b>Phase 1:</b> Material Selection &amp; Planning: (10-15 minutes)</p> <p><b>Phase 2:</b> Construction &amp; Assembly: (25-30 minutes)</p> <p><b>Phase 3:</b> Decorating &amp; Finishing Touches: (10-15 minutes)</p>
<b>Materials</b>	<ul style="list-style-type: none"><li>• Assorted recyclable materials (e.g., cardboard boxes, plastic bottles, egg cartons, bottle caps etc.);</li><li>• Glue;</li><li>• Scissors;</li><li>• Markers or paint (optional).</li></ul>
<b>Preparation</b>	<ul style="list-style-type: none"><li>• Collect a variety of recyclable materials.</li><li>• Provide glue, scissors, and optional decorative materials.</li></ul>





<b>Description/Steps</b>	<ol style="list-style-type: none"><li>1. Show examples of sculptures made from recycled materials.</li><li>2. Encourage students to use their imagination to create their own sculptures using the provided materials.</li><li>3. Guide students in cutting, folding, and assembling the materials to bring their sculptures to life.</li><li>4. Allow time for students to add details and decorations to their sculptures.</li></ol>
<b>Learning Check/Evaluation</b>	<p>·Have students describe their sculptures and explain the materials they used.</p> <p>-Discuss the importance of recycling and reusing materials in art and everyday life.</p>
<b>References</b>	<p><a href="https://letsdosomethingcrafty.com/10-craft-activities-for-kids-that-are-made-using-old-junk/">https://letsdosomethingcrafty.com/10-craft-activities-for-kids-that-are-made-using-old-junk/</a></p>





Co-funded by  
the European Union



## Upcycled Plastic Bottle Greenhouse and Planters

<p><b>Learning Outcomes</b></p>	<ul style="list-style-type: none"> <li>• Understanding the environmental impact of plastic waste</li> <li>• Learning about alternative uses for plastic bottles</li> <li>• Gaining practical skills in constructing a greenhouse</li> <li>• Exploring creativity through upcycling as they repurpose plastic bottles into planters.</li> </ul>
<p><b>Group Size</b></p>	<p>Small groups of 3-5 participants.</p>
<p><b>Duration</b></p>	<p><b>Total Duration:</b> Approximately 2.5-3 hours.</p> <p><b>Phase 1:</b> Preparation and Construction: (1 hour) - Introduce the concept, prepare plastic bottles, construct the greenhouse structure, and plant seeds or seedlings.</p> <p><b>Phase 2:</b> Upcycling and Decorating: (45 minutes) - Creatively upcycle additional plastic bottles into planters, decorate them with stones, tiles, hemp, etc., fostering individual expression and experimentation.</p> <p><b>Phase 3:</b> Planting Seeds in Upcycled Pots: (45 minutes) - Fill prepared plastic bottle planters with soil or potting mix, plant seeds or seedlings, and discuss proper care and maintenance techniques for the plants.</p>
<p><b>Materials</b></p>	<ul style="list-style-type: none"> <li>• Plastic bottles (cleaned and with caps removed)</li> <li>• Wooden or metal rods</li> <li>• Soil or potting mix</li> <li>• Seeds or seedlings</li> <li>• Scissors or utility knife</li> <li>• Twine or zip ties</li> <li>• Decorative materials (stones, tiles, hemp, etc.)</li> </ul>
<p><b>Preparation</b></p>	<ul style="list-style-type: none"> <li>• Collect plastic bottles and decorative materials</li> <li>• Set up a workspace with all necessary materials.</li> </ul>





Co-funded by  
the European Union



<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. Introduce the concept of plastic pollution and its environmental impact, emphasizing the importance of upcycling as a solution.</li> <li>2. Discuss the benefits of repurposing plastic bottles for eco-friendly projects like greenhouse construction and upcycled planters.</li> <li>3. Demonstrate how to prepare plastic bottles by cutting them in half, removing labels and caps, and creating drainage holes in the bottom for the planters.</li> <li>4. Guide participants in constructing the greenhouse by arranging the plastic bottle halves in rows and securing them to wooden or metal rods with twine or zip ties.</li> <li>5. Assist participants in filling the bottom halves of some bottles with soil or potting mix and planting seeds or seedlings to create a green space within the greenhouse.</li> <li>6. Encourage creativity by inviting participants to upcycle additional plastic bottles as planters, decorating them with stones, tiles, hemp, or other materials to add aesthetic value.</li> <li>7. Provide guidance and assistance as participants decorate their upcycled planters, fostering individual expression and experimentation.</li> </ol>
<p><b>Learning Check/Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Assess participants understanding of plastic waste reduction and upcycling through observation of their engagement in the activity and the quality of their greenhouse and planters.</li> <li>• Facilitate a discussion on the dual benefits of upcycling—both reducing waste and creating unique, personalized items—and its role in promoting sustainable practices.</li> </ul>
<p><b>References</b></p>	







<b>DIY Musical Instruments</b>	
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Exploring the sound production and musical principles</li> <li>• Developing creativity and fine motor skills</li> <li>• Gaining appreciation for music and innovation.</li> </ul>
<b>Group Size</b>	Small groups of 4-8 participants.
<b>Duration</b>	<p><b>Total Duration:</b> Approximately 1,5-2 hours.</p> <p><b>Phase 1:</b> Design and Planning: (20 minutes) - Introduce the concept of sound production and musical instruments. Guide participants in brainstorming ideas and sketching out designs for their instruments.</p> <p><b>Phase 2:</b> Construction: (45 minutes) - Provide participants with materials and assist them in assembling their instruments. Encourage experimentation with different shapes and materials.</p> <p><b>Phase 3:</b> Testing and Adjustment: (20 minutes) - Invite participants to test their instruments and make adjustments as needed to improve playability and sound quality.</p> <p><b>Phase 4:</b> Jam Session and Showcase: (25 minutes) - Facilitate a jam session where participants showcase their instruments and play music together, fostering collaboration and creativity.</p>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Recycled materials (cardboard tubes, empty cans, plastic bottles, plastic spoons, straws...anything that can mimic the sound of some instruments).</li> <li>• Rubber bands</li> <li>• Rice or dried beans</li> <li>• Balloons</li> <li>• Tape</li> <li>• Scissors</li> <li>• Markers or paint (optional)</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>• Gather recycled materials</li> <li>• Set up a workspace with access to crafting supplies.</li> </ul>





<b>Description/Steps</b>	<ol style="list-style-type: none"><li>1. Introduce the concept of sound production and musical instruments, discussing different types of instruments and their characteristics.</li><li>2. Provide participants with a variety of recycled materials and challenge them to design and build their own musical instruments.</li><li>3. Guide participants in brainstorming ideas and sketching out designs for their instruments before beginning construction.</li><li>4. Assist participants in assembling their instruments using the provided materials, encouraging experimentation with different shapes, sizes, and materials to achieve desired sounds.</li><li>5. Encourage participants to test their instruments and make adjustments as needed to improve playability and sound quality.</li><li>6. Optional: Offer markers or paint for participants to decorate their instruments, adding personalization and creativity.</li><li>7. Facilitate a jam session where participants can showcase their instruments and play music together.</li></ol>
<b>Learning Check/Evaluation</b>	<ul style="list-style-type: none"><li>• Evaluate participants understanding of sound production through ordinary items and musical principles through observation of their engagement in the activity and the creativity and functionality of their instruments.</li><li>• Facilitate a discussion on the diversity of musical instruments and the role of creativity and innovation in music-making.</li></ul>
<b>References</b>	



Co-funded by  
the European Union



## CIRCULAR ECONOMY BINGO GAME

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Familiarise with key terms and concepts related to Circular Economy.</li> <li>• Stimulate critical thinking skills as children consider the relevance and importance of each Circular Economy concept mentioned in the game.</li> <li>• To increase awareness of sustainable practices such as recycling, reducing waste, using eco-friendly materials, and adopting circular economy principles in everyday life.</li> </ul>
<b>Group Size</b>	This workshop can accommodate groups of various size.
<b>Duration</b>	60 minutes
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Paper or printables</li> <li>• Little rewards for Bingo card winners</li> </ul>
<b>Preparation</b>	Prepare bingo cards for different concepts, such as: "Recycling", "Reuse", "Zero Waste", "Plastic", "Carbon Footprint", "Reduce", "Pollution", "Linear Economy", "Circular Economy", etc.
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Give each participant a bingo card which contains in its boxes different Circular Economy terms.</li> <li>2. Explain how the Bingo game rules. The goal is to mark off a line vertically, horizontally, or diagonally by identifying and discussing circular economy concepts as they come up.</li> <li>3. Call out the terms related to the Circular Economy, one at a time. You can use scenarios, definitions, or short explanations to help children understand the concepts.</li> <li>4. Children mark off the terms on their bingo cards as they are called out.</li> <li>5. Encourage children to briefly discuss each term, stimulate to relate it with their personal, family and community experience and how they relate to the Circular Economy. This enhances understanding and helps engagement.</li> <li>6. The first participant to complete a line (vertical, horizontal, or diagonal) shouts "Bingo!" and shares how they achieved it.</li> <li>7. If time allows, you can continue the game for multiple rounds or start with new cards for additional learning.</li> </ol>





Co-funded by  
the European Union



<b>Learning Check/Evaluation</b>	The instructor can evaluate the knowledge level of the participants by observing their correct order in the game and their active participation in the activity. You can also assess participants' understanding by starting a debriefing session with students after the activity or leading a discussion on basic concepts of recycling, reusing, reducing waste or circular economy, discussing what they have learned during the group activity.
<b>References</b>	<u>Some suggestions for materials:</u> <a href="https://www.twinkl.co.uk/resource/t-tp-5162-ks1-recycling-bingo">https://www.twinkl.co.uk/resource/t-tp-5162-ks1-recycling-bingo</a>





Co-funded by  
the European Union



## TRASH TO TREASURE – RECYCLED ART WORKSHOP

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Learn how to reuse waste materials in a creative way.</li> <li>• Valorising waste materials and understanding the intrinsic value of objects in the Circular Economy.</li> <li>• Create new useful objects or games, have fun with otherwise discarded materials.</li> <li>• Knowing how to distinguish and recover household waste materials.</li> </ul>
<b>Group Size</b>	This workshop can accommodate groups of various size.
<b>Duration</b>	60 minutes
<b>Materials</b>	<p>- Depending on the activity, you can choose here: <a href="https://www.goodhousekeeping.com/home/craft-ideas/g39561047/recycled-crafts-for-kids/">https://www.goodhousekeeping.com/home/craft-ideas/g39561047/recycled-crafts-for-kids/</a>.</p> <p>- Depending on the project you choose, materials can include:</p> <ul style="list-style-type: none"> <li>• Old magazines/newspaper</li> <li>• Egg carton</li> <li>• Toilet paper rolls</li> <li>• Food tin</li> <li>• Bottle cap</li> <li>• Wine Cork</li> <li>• Yogurt cups</li> <li>• Scissors</li> <li>• Markers</li> <li>• Glue</li> <li>• Tape</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>• Prepare the necessary tools</li> <li>• Ensure safety</li> <li>• Introduction presentation</li> <li>• Demonstration materials</li> </ul>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Begin the workshop with a brief introduction to the concepts of recycling and sustainability. Explain the idea which is at the base of the workshop (10–15 minutes).</li> <li>2. Choose the activity to do depending on the materials available and provide step-by-step instructions.</li> <li>3. Allow the children to start crafting. Circulate around the room to aid, encourage and guide.</li> <li>4. Stimulate creativity and self-expression, allowing participants to personalise their projects.</li> <li>5. Allocate time for children to showcase their finished projects to the group.</li> </ol>





Co-funded by  
the European Union



<b>Learning Check/Evaluation</b>	Engage the children in a discussion about the new value the waste materials have acquired. Stress the importance of reusing materials with creativity and reducing waste
<b>References</b>	<a href="https://www.streetstylesurgery.co.uk/workshops/trash-to-treasure-recycled-art-workshop-86/">https://www.streetstylesurgery.co.uk/workshops/trash-to-treasure-recycled-art-workshop-86/</a> <a href="https://www.goodhousekeeping.com/home/craft-ideas/g39561047/recycled-crafts-for-kids/">https://www.goodhousekeeping.com/home/craft-ideas/g39561047/recycled-crafts-for-kids/</a>

## ECO-CYCLE SORTING GAME

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>Understanding which items can be recycled, composted or thrown away.</li> <li>Promoting environmentally friendly behaviour and encouraging responsible waste disposal.</li> <li>Encourage repeated participation to reinforce knowledge on recycling and composting.</li> </ul>
<b>Group Size</b>	4-6 groups of 6 people (24-36 students) Also: The game can be played by individuals or groups. It can also be used as a fun and educational activity for families. Group size can be easily adapted depending on the context.
<b>Duration</b>	Informative session (waste types and composting): 15-20 mins Game play: 40-45 mins
<b>Materials</b>	<ul style="list-style-type: none"> <li>A computer or device to run the game.</li> <li>Internet access.</li> <li>Projector or screen to show the game to a larger audience.</li> </ul> <p>Optional: Materials or visual aids to provide additional information.</p>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>Set up the necessary equipment, computer, projector or display, ensure internet access and open the program from the website.</li> <li>If you are going to support waste types education with visuals, prepare the visuals.</li> <li>Divide the students into groups of 6.</li> </ol>





<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. Introduce the students to the types of waste (Hazardous materials, recyclable waste, non-recyclable -landfill- waste, plant and animal waste and hard to recycle waste, etc.) and talk about composting. There is also a resource for this on the website where the game is located (<a href="#">website link</a>).</li> <li>2. Introduce the game to students. In the game, the player is expected to throw the waste shown on the screen into the correct trash can.</li> <li>3. Let the 6 people in the first group start playing the game. Let each student continue playing until they put a piece of waste into the correct bucket.</li> <li>4. Since the goal is not to win or lose, mistakes made in the game are not punished and the waste remains on the screen until the correct choice is made.</li> <li>5. Let all other students follow this process and learn the classification of waste. Since new waste items arrive in each game, each student will see how to put as much waste as possible into the correct bin.</li> <li>6. Since the game is in English, the teacher may need to translate each part. Also The rules for recycling changes from region to region, city to city and country to country, so teacher also needs to inform students about this.</li> <li>7. The completed group will write their group name on the screen that appears at the end of the 30 questions answered correctly and receive their online certificates.</li> </ol> <p>Let the teacher share all students' online certificates with the class.</p>
<p><b>Learning Check/Evaluation</b></p>	<p>The instructor can evaluate the knowledge level of the participants by observing their correct order in the game and their participation in the activity.</p> <p>You can also assess participants' understanding by starting a conversation with students after the activity or leading a discussion on basic concepts of recycling and composting.</p>
<p><b>References</b></p>	<p><u>Game:</u> <a href="https://ecocycle.org/guides-and-resources/popular-tools/sorting-game/">https://ecocycle.org/guides-and-resources/popular-tools/sorting-game/</a></p>







## CREATIVE RECYCLING BINS

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Raising awareness on recycling and environmental sustainability.</li> <li>• Improving cooperation and communication skills within the group.</li> <li>• Arranging reusable materials to be used for different purposes.</li> <li>• Gaining knowledge about recycling organic waste.</li> </ul>
<b>Group Size</b>	4 groups of 5-7 students
<b>Duration</b>	40-60 minutes
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Large empty cardboard boxes (4 to separate paper, plastic, glass and organic waste)</li> <li>• Thick papers that have been previously used and will be thrown away to prepare covers.</li> <li>• Scissors</li> <li>• Glue or tape</li> <li>• Colored paints (or old magazines to be cutted in order to decorate)</li> <li>• Brush</li> <li>• Writing materials (pencils, crayons)</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Find large cardboard boxes from places such as markets, stationery, canteens. Don't let them throw the boxes away, let us recycle them!</li> <li>2. Arrange the materials in the classroom in advance.</li> <li>3. Create groups and assign a concept/material (paper, plastic, glass, organic) to each group.</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. The teacher gives a brief training on the importance of recycling, types of waste and which waste can be recycled and in what way (10-15 min).</li> <li>2. Gives all necessary materials to all groups.</li> <li>3. Students should first make covers for the boxes. For this, you can watch the video or follow a simpler method.</li> <li>4. Each group colors their boxes in order to distinguish between the material assigned (paper, plastic, glass, organic).</li> <li>5. They personalize it by making symbols that clearly show what waste they are and write what waste they are.</li> <li>6. Each group introduces the box to the rest of the class.</li> </ol> <p>1. Each bin is actively used in the classroom throughout the term and is emptied into the school recycling bins when full.</p> <p>Additionally: Organic garbage is placed in biodegradable bags and frequently emptied into a container placed in the schoolyard. The preparation time of the fertilizer can be shortened by adding a small amount of soil and, if possible, worms. Compost should be mixed and aerated frequently. In this way, students create compost from their own waste. This compost can be used for support purposes when growing flowers or vegetables and fruits.</p>





Co-funded by  
the European Union



<b>Learning Check/Evaluation</b>	Assess student awareness of how waste is recycled and students' active use of waste bins in the classroom. Observe effective communication within the group as they prepare their boxes and introduce them to the class.
<b>References</b>	Video for the cover of the boxes: <a href="https://youtu.be/6aPMu8i43IU">https://youtu.be/6aPMu8i43IU</a>

## RECYCLED MASK

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• To gain the skill of making paper pulp by recycling waste paper.</li> <li>• To develop the ability to design creative masks from paper mache and reuse waste products.</li> <li>• Encouraging students to reflect their personal expressions on the mask.</li> <li>• To develop skills of collaboration and exchange of ideas within the group.</li> </ul>
<b>Group Size</b>	25-30 students However, the number of participants may vary depending on the dynamics of the class and the number of students.
<b>Duration</b>	Explaining the activity and the scope: 15 minutes For to prepare the pulp: 10-20 minutes For pulp to stand: 3 days For the masks to harden: 3 days For coloring the masks: 25-35 minutes
<b>Materials</b>	For the pulp: <ul style="list-style-type: none"> <li>• Waste papers accumulated in the classroom</li> <li>• Water</li> <li>• A bucket the size of a head</li> <li>• Glue</li> </ul> For the mask: <ul style="list-style-type: none"> <li>• Waste materials such as: plastic/cork/metal caps, coloured cardboard to cut out, strings...</li> <li>• Glue</li> <li>• Colourful paint</li> <li>• Brush</li> <li>• Pen</li> </ul>





<p><b>Preparation</b></p>	<ol style="list-style-type: none"> <li>1. Collecting waste paper and waste materials to decorate the masks.</li> <li>2. Organizing art supplies.</li> <li>3. Creating a plan to guide students</li> <li>4. Making the necessary arrangements for the exhibition process.</li> </ol>
<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. The teacher gives students information about how to recycle waste paper.</li> <li>2. Shows students the process of making paper pulp..</li> <li>3. Students shred waste paper into very small pieces in the bucket.</li> <li>4. When it is thought that there are enough pieces of paper, water is put into it and the pieces are kneaded with water.</li> <li>5. The papers sit in water for a while (about 3 days) and turn into dough consistency.</li> <li>6. After waiting, the students drain all the excess water, add plenty of glue and mix again.</li> <li>7. Students shape the paper pulp prepared entirely according to their own imagination, and a mask is made from the pulp by using the bucket around it as if it were a head.</li> <li>8. It is important that the pulp is not liquid, because it must be thick and waterless in order to remain stable around the bucket and dry easily.</li> <li>9. A thin layer of glue is applied around the completed mask with a brush and left to dry.</li> <li>10. After this period, the dried masks are colored and decorated by students as they wish.</li> </ol> <p>Masks that reflect everyone's personal expressions are displayed to other students, teachers and parents.</p>
<p><b>Learning Check/ Evaluation</b></p>	<p>The instructor can ask students questions that will evaluate their environmental awareness achievements and tinkering component after this activity:</p> <ul style="list-style-type: none"> <li>• How did you use old paper to make new things during our project? Can you tell me why using old paper is important instead of throwing it away?</li> <li>• How do you think making things from recycled materials can help our Earth? Can you tell me one reason why it's good to reuse things instead of throwing them away?</li> <li>• Which other materials can be used to conduct such activities?</li> </ul>
<p><b>References</b></p>	<p>/</p>





## SPROUTING LEGUMES

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Understanding the sprouting process and exploring factors affecting plant growth.</li> <li>• Learning through data collection and observation.</li> <li>• Learning biology concepts.</li> </ul>
<b>Group Size</b>	<p>25-30 Students Each student will work individually.</p>
<b>Duration</b>	<p>Creating the sprouting area: 40-50 minutes The activity should be planned to cover 1 week, considering the sprouting process.</p>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• 1/4 cup of chickpeas, lentils or beans (in addition to all legumes, seeds such as sunflower seeds and pumpkin seeds can be sprouted. They must not have been processed before. However, since students will be testing, it will be more useful to test certain types).</li> <li>• Egg containers</li> <li>• Unused glass caps</li> <li>• Reused old, thin and water permeable textile</li> <li>• Tape</li> <li>• Warm water</li> <li>• Salt</li> <li>• Notebook/paper to collect data throughout the week</li> <li>• Pencil</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. The instructor makes an announcement and asks students to choose a legume, grain or seed; glass jar or plastic cup; bring a thin, water-permeable textile.</li> <li>2. Instructor prepares a ladder with all the possible steps for students, and prepares visuals or presentations to show students. This will be used to see the progress.</li> <li>3. Before the experiment begins, instructor prepares warm water in the classroom.</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Students bring the materials they brought to the experiment area and place them on the table. It is an individual activity.</li> <li>2. During the activity, reusable glass caps as well as old textiles; and old egg containers will be used to mention environmental awareness.</li> <li>3. First of all, the students soak the legumes they brought with warm water, add a little salt and leave them in the water for 4 hours.</li> <li>4. After the wait, the instructor talks about the benefits of sprouting [Sprouting decreases the phytic acid in the seed, thus improving digestion and mineral absorption; The vitamins, minerals and enzymes contained in legumes increase and they become very useful in terms of vitamins A, B, C, D and E (Tang et. al., 2014)].</li> <li>5. Then, students strain their legumes in jars or plastic cups, cover the egg container or glass cap with a thin textile; and fix with tape.</li> </ol>





	<ol style="list-style-type: none"> <li>6. Students make their own decisions and place the legumes they have prepared to sprout in a sunny place, in a bright place out of sunlight, and in a dark place.</li> <li>7. At this stage, the teacher ensures that different conditions are provided as much as possible, for this it is important that different legumes are in different light conditions and different materials.</li> <li>8. All students will have the ladders that was created by teacher to see the progress and create an ID card for their legumes. The date they started sprouting, material types and location should be included from the very beginning.</li> <li>9. For the ladder, teacher will inform students about steps and will give ten theoretical information about the activity.</li> <li>10. For a week, some of the students moisturize the legumes that will sprout once a day and some twice a day.</li> <li>11. To moisten it, water should be poured into it without lifting the textile on the lid, mixed slowly and then the water should be filtered.</li> <li>12. The weather temperature of each day and the number of times the student watered should be written on the report card throughout the week.</li> <li>13. In each step, the ladder will be thicked. Every step reached, instructor explains what will happen next and what to do now.</li> <li>14. At the end of the week, students should uncup their sprouts.</li> <li>15. Students should discuss the germination conditions.</li> <li>16. Sprouts grown for lunch can be added to students' meals for the day, as these sprouts are quite healthy in both raw and slightly cooked form. After sprouting, it should be consumed within 3 days at the latest and kept in the refrigerator in the meantime.</li> <li>17. In addition, wormed legumes can also be sprouted in the initial stage. Thus, instead of throwing away the infested legumes directly, the sprout parts can be consumed and the seed parts can be returned to nature as fertilizer.</li> </ol>
<p><b>Learning Check/ Evaluation</b></p>	<p>Each student should compare the growth of sprouts based on the materials they choose (egg container or glass caps), watering frequency (one time in a day or two times in a day), and storage conditions (sunny place or bright place out of sunlight or dark place).</p> <p>Students will evaluate the effects of their chosen experimental conditions on plant growth.</p> <p>The instructor should evaluate that students' individual experiments are compatible with the scientific method and that they can effectively analyze the data they obtain in this process.</p>
<p><b>References</b></p>	<p>Tang, D., Dong, Y., Ren, H., Li, L., &amp; He, C. (2014). A review of phytochemistry, metabolite changes, and medicinal uses of the common food mung bean and its sprouts (<i>Vigna radiata</i>). <i>Chemistry Central Journal</i>, 8, 4 - 4.</p>





## ECO-BIRDHOUSE

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To make students aware of the importance of recycling.</li> <li>Developing students' environmental awareness.</li> <li>Students use their practical skills to create safe shelters and feeding areas for birds.</li> <li>Gaining knowledge in biology and bird species and their role for the biodiversity/ecosystem.</li> </ul>
<b>Group Size</b>	<p>Can be done with small groups (3-5 people) Can also be done individually</p>
<b>Duration</b>	<p>Information about the topic, environmental awareness, recycle and reuse: 15-20 minutes Activity: 40-45 minutes</p>
<b>Materials</b>	<ul style="list-style-type: none"> <li>Empty milk and juice cartons (cleaned)</li> <li>Scissors</li> <li>Rope</li> <li>Tape</li> <li>Old and used textile pieces (to fill the inside of the birdhouse)</li> </ul> <p>To personalise:</p> <ul style="list-style-type: none"> <li>Colourful paint</li> <li>Brush</li> <li>Pen</li> <li>Crayons</li> <li>etc</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>Collecting materials or announcing students to bring them with themselves.</li> <li>Creating a simple plan that will explain to students how to do the work step by step.</li> <li>Stating safety precautions (how to use sharp tools, how to clean glue or paint, etc.).</li> <li>Before the lesson, the teacher asks the students to examine the birds they see in nature (from the balcony or garden of their home, at school, on the street, etc.), learn their species, and do a short research about birds. So they can prepare suitable nests for birds.</li> </ul>
<b>Description/Steps</b>	<ul style="list-style-type: none"> <li>A window is cut on one of the long surfaces of the cleaned empty milk or fruit juice carton boxes, which is large enough for birds to enter and exit easily, without being squeezed, but to keep the inside safe.</li> <li>Then, when we hold the small surfaces of the box (the bottom and top surfaces when the box is standing upright) with an opening window on the side, a hole is opened close to the surface above.</li> <li>A rope is passed through these holes and tied tightly at the top, leaving some space. This rope will help you hang the birdhouse anywhere.</li> <li>Then, the rope is taped to the hole and fixed tightly to prevent the rope in the holes from moving.</li> </ul>







	<ul style="list-style-type: none"><li>• A warm and soft surface for the birds is created inside the box from old fabrics.</li><li>• The boxes can now be made interesting for the birds, and students can color the birdhouses as they wish.</li><li>• Students explain to other students what kind of birds they have prepared their birdhouses for. They share information with other students about what birds need based on their previous observation and research, how long they can stay there, what kind of weather they like, what they eat, and talks about why the birdhouse they built is suitable for the bird.</li><li>• It can be attached to open areas such as tree branches or balconies.</li><li>• This area will be sheltered for birds on cold days, and waste cardboard boxes were also used. You can also use other cardboard boxes using other methods.</li></ul> <p>Bonus: you can put bird seed inside the walls of the birdhouse and use peanut butter to secure them, peanut butter is not harmful to birds.</p>
<b>Learning Check/ Evaluation</b>	<p>It is ensured that students work for nature and living things, know why they do this, and are aware of its importance.</p> <p>They should realize that we can contribute to nature quite easily through recycling.</p> <p>Birdhouses that are no longer usable should be thrown into the necessary garbage bins before they harm nature.</p>
<b>References</b>	/







Co-funded by  
the European Union



## FROM WASTE TO USEFUL DESIGN

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Understanding the importance of the circular economy</li> <li>• Learn the key concepts of the circular economy and sustainability.</li> <li>• Learn how to reuse waste materials.</li> <li>• Learn through the application of circular economy concepts.</li> </ul>
<b>Group Size</b>	Each class can work independently, creating subgroups of 8-10 pupils
<b>Duration</b>	80 min
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Waste corks caps</li> <li>• Paper</li> <li>• Markers</li> <li>• Glue</li> <li>• A small container</li> <li>• A list of True/false questions on circular economy</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>• Students will be asked to bring leftover corks to school from family, relatives, friends.</li> <li>• The material will therefore be brought to school by the students, but it would be good if the adults had a supply of corks, in case those brought by the students are not enough.</li> </ul>
<b>Description/Steps</b>	<p><b>Phase 1 (20 min):</b> the educator explains the importance and value of discarded objects (in this case of cork), stressing the importance of reusing certain materials that are often thrown away without knowing that they might have a second use. The teacher introduces some basic and key concepts of circular economy such as: “circular/linear economy”; “recycling”; “reuse”; “plastic”; “waste collection”, etc.</p> <p><b>Phase 2 (20 min):</b> the activity then begins with the distribution of the corks, which will be won using the formative verification method: the teacher will divide the class into teams of 8-10 people, and each team will have to answer some T/F questions on circular economy posed by the teacher positively. Each time a team answers correctly, they will receive one or more corks depending on the difficulty of the question.</p> <p><b>Phase 3 (40 min):</b> The students, accompanied by an adult - support teachers, educators, colleagues from other subjects, school staff can be used - will set up their project to build the structures of small cork pots, which the adult will then fix with hot glue.</p> <p>At the end of the activity, all together, they will place the beautiful new pots made from the discarded corks in the garden.</p>





<b>Learning Check/ Evaluation</b>	The educator can evaluate the success of the learning during the activity. If the participants succeed in making the pots from cork, it means that they will have learned the principles of the circular economy and will have been able to apply them.
<b>References</b>	Video of the cork pot: <a href="https://www.youtube.com/watch?v=Vaso_realizzato_con_tappi_in_sughero">Vaso realizzato con tappi in sughero (youtube.com)</a>

### A PLATE FOR TWO

<b>Learning Outcomes</b>	Giving a second life to organic waste while protecting biodiversity
<b>Group Size</b>	The activity will be done as a class, but each individual student will work on his or her own 'plate'.
<b>Duration</b>	60 min
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Oranges</li> <li>• Knives for cutting oranges in half</li> <li>• Scissors with a rounded tip</li> <li>• Cotton thread or other organic material</li> <li>• Three manual squeezers</li> <li>• Bird seeds</li> </ul>
<b>Preparation</b>	Each teacher must have the students find the oranges already cut in half. Apart from that, nothing special is needed as preparation: just lots of oranges and the desire to drink juice!
<b>Description/Steps</b>	<p><b>The first step consists of an orange juice relay (25 min):</b></p> <ul style="list-style-type: none"> <li>• The class will be divided into three teams and each team will send one student in turn to squeeze oranges for juicing. Each time a student squeezes half, he or she will then run to relieve the other teammate, who will proceed to squeeze the other half.</li> <li>• The team that makes the most juice with the least oranges in 25 minutes wins: no more wastage, it will be very important that the students squeeze the oranges to the best of their ability.</li> </ul> <p><b>Orange plate (25 min):</b></p> <ul style="list-style-type: none"> <li>• Each team must carefully wash the orange halves they have used for juicing.</li> <li>• The students, aided by the adults, will pierce the four ends of each orange half and pass threads of organic material through them that will be used to hang them in tree's branches.</li> <li>• Orange plates are filled with birds' seeds.</li> </ul>





Co-funded by  
the European Union



	Hanging the orange plates: Students and teachers find a spot in the school where to hang these delicious and beautiful bird feeders on the trees in the garden!
<b>Learning Check/ Evaluation</b>	Each student will be assessed for commitment at each stage of the activity. In particular dedication and participation will be appreciated.
<b>References</b>	

### NATIVE SCAVENGER HUNT

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To develop observation skills by encouraging the children to carefully examine and identify various elements in nature, such as plants, insects and artificial objects.</li> <li>Encourage a mindset of waste reduction by incorporating items or challenges related to identifying natural materials that can be repurposed or recycled.</li> <li>Facilitate discussions about sustainable practices by integrating questions or challenges that stimulate children to report any waste in nature.</li> </ul>
<b>Group Size</b>	This workshop can accommodate groups of various sizes. Children can play both individually and in small 2/3 people groups.
<b>Duration</b>	90 minutes
<b>Materials</b>	<ul style="list-style-type: none"> <li>Printables</li> <li>Pencils</li> <li>Scavenger hunt list</li> <li>Certificates or small prizes</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>Keep items simple and extremely safe</li> <li>Create a list of items or clues they have to find during the activity, e.g.: “insects”; “leaves”; “wood piece”; “flower”; “waste”; “special object”, etc.</li> <li>Remind children to be careful and not to disrupt animal habitats and make them aware on the importance not to throw waste improperly.</li> </ul>
<b>Description/Steps</b>	<ul style="list-style-type: none"> <li>Select location</li> <li>Prepare materials</li> <li>Divide children into teams</li> <li>Explain the game rules</li> <li>Provide each team with a copy of the scavenger hunt list or clues. Start the scavenger hunt and encourage the children to explore the area, ticking off items as they find them.</li> </ul>





<b>Learning Check/ Evaluation</b>	After the scavenger hunt, gather the children and review their findings. discuss with the children the presence of any waste found in nature, the damage they can cause in nature and its proper disposal (30 min). Recognise the children's efforts by awarding with certificates or small prizes.
<b>References</b>	<a href="https://www.greenchildmagazine.com/nature-scavenger-hunt/">https://www.greenchildmagazine.com/nature-scavenger-hunt/</a>

## RECYCLE BINGO CARD GAME

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn and understand how to recycle different waste materials.</li> <li>To learn about different waste categories.</li> </ul>
<b>Group Size</b>	2-8 players per game group. Big class group can be divided into several game groups.
<b>Duration</b>	10-15 minutes per round. Several rounds can be played.
<b>Materials</b>	<ul style="list-style-type: none"> <li>Printed game cards (72 pieces) and game boards (8 pieces) (attached).</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>Print out game cards and game boards (attached). Make sure that the cards are printed double-sided and boards one-sided. Each game group needs their own set. Cut out and laminate cards and boards.</li> </ul>
<b>Description/Steps</b>	<p>The educator should consider whether to discuss the different types of waste and their proper sorting before the game.</p> <ol style="list-style-type: none"> <li>Each player takes a board. Boards are divided into different themes of waste (paper, cardboard, glass, bio waste, metal, mixed waste, plastic, hazardous waste). If there are only 2-4 players, each player can take several boards.</li> <li>Bingo cards are mixed and spread out on the table so players can't see their pictures.</li> <li>Player who starts the game, takes one card. The card will have a picture of trash in it, for example an empty jar of jam. The player whose theme board the card fits (in this case the glass) gets to keep the card and places it on their board. If the card doesn't fit to anybody's board, it will be dismissed and the player takes a new card.</li> <li>Player who got the previous card can take a new card from the table and the game goes on.</li> <li>Player who correctly fills their board first (9 cards per board) wins the round. If players have several boards, all their boards may be filled to win the round.</li> </ol> <p>After the game the sorting of different waste materials can be reviewed with the whole class.</p>





Co-funded by  
the European Union



<b>References</b>	<a href="https://www.canva.com/design/DAGEtSNyWJw/bZQF1Do1buovUtkYLPMBXA/edit">https://www.canva.com/design/DAGEtSNyWJw/bZQF1Do1buovUtkYLPMBXA/edit</a>
-------------------	---

## COLLAGE ABOUT REDUCING CARBON FOOTPRINT

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn and understand how you can reduce your own carbon footprint with small everyday actions.</li> <li>Recycling and reusing old magazines.</li> </ul>
<b>Group Size</b>	3-4 pupils per working group. Big class group can be divided into several working groups.
<b>Duration</b>	45-60 min. (discussion 10-15 minutes, working time 30-40 minutes, presenting 10-15 minutes)
<b>Materials</b>	<ul style="list-style-type: none"> <li>A3 or A2 sizes of paper sheets, one sheet per group.</li> <li>Old magazines that pupils can cut.</li> <li>Scissors for each student.</li> <li>Glues ticks, 1-2 per group.</li> <li>Pencil for each pupil.</li> <li>Colouring pens.</li> </ul>
<b>Preparation</b>	Gathering papers, magazines and other tools.
<b>Description/Steps</b>	<p>First discussion about what carbon footprint means, why and how you can reduce it yourself. Information for example from this link: <a href="https://youth.europa.eu/get-involved/sustainable-development/how-reduce-my-carbon-footprint_en">https://youth.europa.eu/get-involved/sustainable-development/how-reduce-my-carbon-footprint_en</a></p> <p>Then the class is divided into working groups. Each group assembles a collage on paper of what they can do in their everyday life to reduce their carbon footprint. The collage is assembled by cutting and pasting pictures from magazines, drawing and writing.</p> <p>Finally each group presents their collages to the whole class and a discussion may take place.</p>
<b>Learning Check/Evaluation</b>	In the presentation pupils show their knowledge about understanding the topic and what kind of ideas they have about it.
<b>References</b>	European youth portal: <a href="https://youth.europa.eu/get-involved/sustainable-development/how-reduce-my-carbon-footprint_en">https://youth.europa.eu/get-involved/sustainable-development/how-reduce-my-carbon-footprint_en</a>





## ARRANGING CIRCULAR ECONOMY DISPLAY

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To understand how the circular economy works in action.</li> <li>To get rid of old and unnecessary items and maybe get something useful in return.</li> </ul>
<b>Group Size</b>	The number of participants doesn't need to be specified.
<b>Duration</b>	The number of participants doesn't need to be specified.
<b>Materials</b>	<ul style="list-style-type: none"> <li>Place for the display, for example a table or a shelf.</li> </ul>
<b>Preparation</b>	Organize a place and the monitoring for the display.
<b>Description/Steps</b>	<p>This event can be arranged inside one classroom or it can be extended into the whole school. Everyone, staff and pupils, can participate if wanted. People bring some unused but still usable items from home. These can be for example toys, clothes, books, mugs...</p> <p>Items are put on display so that everyone can freely access them. The point of the event is that everyone can leave items that they want to get rid of and take items that they find useful.</p> <p>The pupils can make posters and advertisements for the event. Some points that the organizer needs to take in consideration:</p> <ul style="list-style-type: none"> <li>How to monitor that the brought items are actually unbroken.</li> <li>How to take care of the order and cleanliness of the display and that the items are not scattered outside the display.</li> <li>What to do with the left over items after the event.</li> </ul> <p>Is there a need to check fire safety regulations.</p>
<b>Learning Check/Evaluation</b>	The teacher can manage a discussion about circular economy with the pupils after managing the display, when they can observe the pupils understanding and knowledge about the topic
<b>References</b>	/





## RECYCLING LIST GAME

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To think of creative ways to use items.</li> </ul>
<b>Group Size</b>	3-4 pupils per team. Big class group can be divided into several teams.
<b>Duration</b>	5 minutes per round (5-7 rounds) + 10 minutes for score calculating ≈ 45 minutes
<b>Materials</b>	<ul style="list-style-type: none"> <li>A sheet of paper and a pencil for each team</li> <li>Broken items</li> <li>A watch for keeping time</li> </ul>
<b>Preparation</b>	Gathering the presented items.
<b>Description/Steps</b>	<p>Game rules:</p> <ol style="list-style-type: none"> <li>1. Teacher presents items that are broken (the items are presented one by one at the beginning of each round). Because they are broken, they may not be functional in their original purpose anymore. But maybe they could be used for some other purpose?</li> <li>2. For each 5 minute round teams have to come up with ideas how to use the broken items for some other purpose. For example: a broken shoe can be used for a plant pot, a theatre costume, laces for string etc. Teams list their ideas on paper.</li> <li>3. After all the rounds the answers are reviewed. For each useful and creative idea the team gets a point. If it's the same idea with some other team, neither of the teams gets a point. Team that gets the most points wins.</li> </ol>
<b>Learning Check/Evaluation</b>	The pupils show their innovative and knowledge skills about reusing items by listing different purposes for broken items.
<b>References</b>	/







## FUTILE GADGETS / ITEMS

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn about the use of natural resources.</li> <li>To learn about futile gadgets.</li> <li>To learn to use recycled materials in building something new.</li> </ul>
<b>Group Size</b>	1-4 pupils per working group. Big class group can be divided into several working groups.
<b>Duration</b>	60-90 minutes (the concept of futile gadget 10-15 minutes, use of natural resources 10 minutes, building 30-45 minutes, presenting 10 minutes)
<b>Materials</b>	<ul style="list-style-type: none"> <li>Recycled cardboard and plastic</li> <li>Sketching paper for each group</li> <li>Pencils</li> <li>Scissors, 2-3 per group</li> <li>Roll of tape for each group</li> <li>Gluesticks, 1-2 per group or school glue</li> <li>Paint</li> <li>Paintbrushes</li> </ul>
<b>Preparation</b>	Gathering recycled and working materials.
<b>Description/Steps</b>	<p>Teacher introduces the concept of futile gadget and gives some examples (examples in the links). The group then has a discussion about what other examples they can think of.</p> <p>Teacher educates the class about the use of natural resources, and how they are used to make items (information for example from this link: <a href="https://education.nationalgeographic.org/resource/conserving-earth/">https://education.nationalgeographic.org/resource/conserving-earth/</a>)</p> <p>The pupils then design their own futile gadget:</p> <ul style="list-style-type: none"> <li>What is it used for?</li> <li>How does it work/what does it do?</li> <li>What is it made of?</li> <li>Why is it futile/useless?</li> </ul> <p>The pupils build their gadgets out of recycled cardboard and plastic.</p> <p>At the end of the lesson each group presents their gadget and explains the purpose of it and why it is useless.</p>
<b>Learning Check/Evaluation</b>	The teacher evaluates the pupils' knowledge and understanding about the use of natural resources by observing their presentations about their gadgets and whether they think the items are useless.
<b>References</b>	<p>Natural resources: <a href="https://education.nationalgeographic.org/resource/conserving-earth/">https://education.nationalgeographic.org/resource/conserving-earth/</a></p> <p>Futile gadgets: <a href="https://www.brainz.org/useless-kitchen-gadgets/">https://www.brainz.org/useless-kitchen-gadgets/</a>, <a href="https://www.businessinsider.com/stupid-gadgets-2011-11">https://www.businessinsider.com/stupid-gadgets-2011-11</a>, <a href="https://www.mirror.co.uk/interactives/six-gadgets-no-one-asked-12819519">https://www.mirror.co.uk/interactives/six-gadgets-no-one-asked-12819519</a></p>





## MAKE A STICK OF CHALK FROM EGGSHELLS

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn how to use recycled bio waste into something new.</li> <li>To get some sidewalk or blackboard chalk sticks.</li> </ul>
<b>Group Size</b>	The number of participants doesn't need to be specified.
<b>Duration</b>	10-20 min. (making of one stick) 3 days for drying
<b>Materials</b>	<ul style="list-style-type: none"> <li>Preferably white eggshells (a spoonful of eggshell powder is enough for one small stick of chalk, use big amounts if you want bigger sticks)</li> <li>Water</li> <li>Flour or plaster</li> <li>Food colour or paint</li> <li>Spoon or stirring tool</li> <li>A cup and a tool to crush the egg shells</li> <li>A mixing cup</li> </ul>
<b>Preparation</b>	Gathering eggshells and needed tools. When working with small children the egg shells may be crushed into powder in advance.
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>Crush the eggshells into fine powder.</li> <li>Mix equal amounts of eggshell powder, flour or plaster and water together. NOTE that you should be careful with the water: the mixture should not be too runny but thick paste.</li> <li>Mix some food colouring or paint to the mixture and crush them together so that the mixture is evenly coloured.</li> <li>Shape the mixture by hands and roll it inside a paper towel or pour it in a mold.</li> <li>Let the chalk dry for 2 or 3 days.</li> </ol> <p>Make some sidewalk or blackboard art with self made eggshell chalk.</p>
<b>Learning Check/Evaluation</b>	After or during the process the teacher can engage the pupils with discussion on what are the benefits for the environment to use recycled materials to make something new. The evaluation may happen based on this conversation.
<b>References</b>	<p><u>Natural resources:</u>  <a href="https://education.nationalgeographic.org/resource/conserving-earth/">https://education.nationalgeographic.org/resource/conserving-earth/</a>  <u>Futile gadgets:</u> <a href="https://www.brainz.org/useless-kitchen-gadgets/">https://www.brainz.org/useless-kitchen-gadgets/</a>,  <a href="https://www.businessinsider.com/stupid-gadgets-2011-11">https://www.businessinsider.com/stupid-gadgets-2011-11</a>,  <a href="https://www.mirror.co.uk/interactives/six-gadgets-no-one-asked-12819519">https://www.mirror.co.uk/interactives/six-gadgets-no-one-asked-12819519</a></p>





## SEWING A SOCK SNAKE

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn how to use broken clothes to make something new.</li> <li>To learn and develop hand stitching and fine motor skills.</li> <li>To make mascots for the classroom.</li> </ul>
<b>Group Size</b>	The number of participants doesn't need to be specified.
<b>Duration</b>	2-4 lessons
<b>Materials</b>	<ul style="list-style-type: none"> <li>Broken but clean socks</li> <li>Scissors</li> <li>Sewing needle</li> <li>Sewing thread</li> <li>Cotton filling</li> <li>Buttons for eyes</li> <li>Piece of fabric for tongue</li> <li>Hot glue gun</li> <li>Various decorations</li> </ul>
<b>Preparation</b>	Gathering old socks and the needed tools. This activity may require that pupils need heavy personal assistance with sewing.
<b>Description/Steps</b>	<p>This activity can be done individually or the pupils can work together and join their snakes (without the head and the tail) together to make one long snake.</p> <ol style="list-style-type: none"> <li>Cut the socks open so that they become a tube.</li> <li>Hand stitch the tubes together from their edges until the snake reaches the desired length. REMEMBER to leave a hole for turning and filling between two of the tubes.</li> <li>Shape one end with scissors so it's pointy and stitch it up.</li> <li>Place the tongue inside the other end and stitch it up on top of the tongue.</li> <li>Turn the whole snake inside out through the hole and fill it with cotton filling.</li> <li>Stitch up the filling hole.</li> <li>Sew or use hot glue to attach the buttons for eyes and various decorations if wanted.</li> </ol>
<b>Learning Check/Evaluation</b>	After or during the process the teacher can engage the pupils with discussion on what are the benefits for the environment to use recycled materials to make something new. The evaluation may happen based on this conversation.
<b>References</b>	<u>Snake instructions: <a href="https://www.youtube.com/watch?v=nRrMLYwkvLM">https://www.youtube.com/watch?v=nRrMLYwkvLM</a></u>





## CROCHETING CHAIR COVERS FROM BROKEN CLOTHES

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn how to use broken clothes to make something new.</li> <li>To learn and develop crocheting and fine motor skills.</li> <li>To make chair covers for the classroom chairs.</li> </ul>
<b>Group Size</b>	The number of participants doesn't need to be specified. This activity is done individually.
<b>Duration</b>	2-5 lessons
<b>Materials</b>	<ul style="list-style-type: none"> <li>Broken clothes or textiles (for example bed sheets)</li> <li>Scissors</li> <li>Crocheting hooks (not necessary)</li> <li>Thick sewing needle</li> <li>Thick sewing thread</li> </ul>
<b>Preparation</b>	Gathering recycled materials and needed tools. Clothes and textiles need to be cut or torn to shreds before crocheting. The longer the shred, the better. This part can also be done with the pupils. This activity may require that pupils need heavy personal assistance with crocheting and sewing.
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1.Start the crocheting by doing a slip knot to the textile shred.</li> <li>2.Crochet a long chain. This can be done with either a thick crocheting hook or with fingers.</li> <li>3.When the chain is long enough, end it.</li> <li>4.Start rolling the chain into a circle (or other preferred shape) and attach the rows to each other by sewing from each loop. Be careful that the shape is not too tight so that it doesn't become convex.</li> </ol>
<b>Learning Check/Evaluation</b>	After or during the process the teacher can engage the pupils with discussion on what are the benefits for the environment to use recycled materials to make something new. The evaluation may happen based on this conversation.
<b>References</b>	/





## MAKING PLANT POTS FROM METAL CANS

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn how to use waste to make something new.</li> <li>To strengthen the relationship with nature by planting a plant seed.</li> <li>(To learn about renewal.)</li> </ul>
<b>Group Size</b>	The number of participants doesn't need to be specified. This activity is done individually.
<b>Duration</b>	60 min.
<b>Materials</b>	<ul style="list-style-type: none"> <li>Empty metal cans</li> <li>A hammer</li> <li>A thick nail</li> <li>Different kinds of thin paper (for example stickers, figured tissues, shreds of book pages...)</li> <li>Water</li> <li>School glue</li> <li>Glue brushes</li> <li>Soil and plant seeds</li> </ul>
<b>Preparation</b>	<p>Gathering the recycled and needed materials. Cleaning the surface of the metal cans. Mixing water and glue 1:1</p>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>Use a nail and hammer to punch a hole to the bottom of the can. Younger pupils may need assistance with this.</li> <li>Select and prepare pictures you want to use or shred book/magazine pages.</li> <li>Spread some glue on the surface of the can and place the paper pieces on the glue. You may want to cover the entire surface so that no metal is visible.</li> <li>Spread more glue on the papers carefully so that the paper doesn't rip. Let the can dry.</li> <li>Use the can for planting a plant or a seed.</li> </ol> <p>Old flower/plant pots can also be used in this project instead of cans in which case the project becomes a renewal of the old instead of creating something new. If this is the case</p>
<b>Learning Check/Evaluation</b>	<p>After or during the process the teacher can engage the pupils with discussion on what are the benefits for the environment to use recycled materials to make something new and planting new plants. The evaluation may happen based on this conversation.</p>
<b>References</b>	/





## BUILDING A BALL TRACK / A MARBLE RUN

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>To learn how to use recycled materials when sketching.</li> <li>To learn creative thinking and social skills.</li> </ul>
<b>Group Size</b>	3-5 pupils per working group. Big class group can be divided into several working groups.
<b>Duration</b>	45 minutes
<b>Materials</b>	<ul style="list-style-type: none"> <li>Recycled cardboard (for example milk and yoghurt cartons)</li> <li>Play-dough or blu tack</li> <li>A small ball or marble for each group</li> <li>A timer for each group</li> <li>A cup for each group</li> </ul>
<b>Preparation</b>	Gathering recycled materials and needed tools.
<b>Description/Steps</b>	<p>Teacher explains the rules:</p> <ol style="list-style-type: none"> <li>Each group builds a track on a table for the ball using recycled cardboard and play-dough or blu tack.</li> <li>The track ends in a cup.</li> <li>The marble run should last exactly 10 seconds from the ball's release to when it falls into the cup. (For smaller pupils the time can be less.)</li> <li>This can be made into a competition where the winner is the group that gets their track closest to 10 seconds.</li> </ol>
<b>Learning Check/Evaluation</b>	The teacher can observe the pupils how innovative they use the recycled materials for the tinkering purpose.
<b>References</b>	/







## UPCYCLED FASHION DESIGN WORKSHOP

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Foster creativity and innovation by repurposing waste materials to create fashion pieces.</li> <li>• Promote environmental awareness and the importance of upcycling in the fashion industry.</li> <li>• Develop sewing and design skills, as well as an understanding of sustainable fashion practices.</li> </ul>
<b>Group Size</b>	Flexible, ideally 5-15 participants per group.
<b>Duration</b>	90-120 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted clean and safe waste materials suitable for upcycling into fashion pieces (e.g., old fabric scraps, denim jeans, t-shirts, plastic bags, bottle caps, etc.).</li> <li>• Sewing machines (if available) or needles, thread, scissors, and other sewing supplies.</li> <li>• Embellishments such as buttons, beads, ribbons, and fabric paints (optional).</li> <li>• Mannequins or dress forms for displaying finished designs (optional).</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Collect a variety of clean waste materials, ensuring they are suitable for upcycling into fashion pieces.</li> <li>2. Set up a designated fashion design area with tables, chairs, sewing machines (if available), and access to sewing supplies and embellishments.</li> <li>3. Prepare examples or images of upcycled fashion designs to inspire participants.</li> <li>4. Briefly explain the workshop objectives, safety guidelines, and the importance of upcycling in the fashion industry to the participants.</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Introduce the concept of upcycling in fashion, explaining how waste materials can be transformed into new and unique clothing and accessories.</li> <li>2. Show examples or images of upcycled fashion designs to spark participants' creativity and provide inspiration.</li> <li>3. Divide participants into small groups or pairs, ensuring each group has access to a variety of waste materials and sewing supplies.</li> <li>4. Encourage participants to brainstorm ideas and sketch designs for their upcycled fashion pieces, considering styles, colors, and embellishments.</li> <li>5. Provide guidance on basic sewing techniques and garment construction principles, helping participants translate their designs into wearable pieces.</li> <li>6. Support participants as they cut, sew, and assemble their upcycled fashion pieces, offering assistance and troubleshooting as needed.</li> <li>7. Encourage creativity by allowing participants to experiment with different combinations of materials and embellishments to enhance their designs.</li> <li>8. Once the fashion pieces are completed, invite participants to model their creations or display them on mannequins for a fashion show.</li> <li>9. Facilitate a discussion about the environmental impact of the fashion industry and the role of upcycling in reducing waste and promoting sustainability.</li> </ol>







Co-funded by  
the European Union



<b>Learning Check/ Evaluation</b>	<ul style="list-style-type: none"> <li>• Observe participants' engagement, creativity, and collaboration during the workshop.</li> <li>• Evaluate the uniqueness and innovation of the upcycled fashion pieces created by each group.</li> <li>• Facilitate a group discussion to reflect on the experience, highlighting key learnings and insights about upcycling and sustainable fashion practices.</li> </ul>
<b>References</b>	<ul style="list-style-type: none"> <li>• "Upcycled Fashion Ideas": <a href="https://www.eco-friendly-fashion.com/upcycled-fashion-design-ideas/">https://www.eco-friendly-fashion.com/upcycled-fashion-design-ideas/</a></li> <li>• "DIY Upcycled Clothing Projects": <a href="https://www.diyincrafts.com/1078/fashion/50-diy-clothing-tutorials-upcycle-projects-for-women">https://www.diyincrafts.com/1078/fashion/50-diy-clothing-tutorials-upcycle-projects-for-women</a></li> </ul>

## RECYCLED SCULPTURE TINKERING WORKSHOP

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Encourage creativity and innovation by repurposing waste materials to create sculptures.</li> <li>• Promote environmental awareness and the importance of recycling and upcycling.</li> <li>• Develop fine motor skills, spatial reasoning, and problem-solving abilities through hands-on tinkering.</li> </ul>
<b>Group Size</b>	5-15 participants per group.
<b>Duration</b>	90-120 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted clean and safe waste materials (e.g., cardboard boxes, plastic bottles, aluminum cans, newspaper, egg cartons, etc.).</li> <li>• Scissors, glue, tape, staplers, and other crafting supplies.</li> <li>• Optional: Paints, markers, brushes, and other decorative materials.</li> <li>• Protective gear such as gloves and aprons (optional, depending on materials used).</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Collect a variety of clean waste materials, ensuring they are safe for children to handle.</li> <li>2. Set up a designated tinkering area with tables, chairs, and access to crafting supplies.</li> <li>3. Prepare examples or images of recycled sculptures to inspire participants.</li> <li>4. Briefly explain the workshop objectives, safety guidelines, and the importance of recycling and upcycling to the participants.</li> </ol>





<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. Introduce the concept of recycling and upcycling, explaining how waste materials can be transformed into new and creative artworks.</li> <li>2. Show examples or images of recycled sculptures to spark participants' creativity and provide inspiration.</li> <li>3. Divide participants into small groups, ensuring each group has access to a variety of waste materials and crafting supplies.</li> <li>4. Encourage participants to brainstorm ideas and sketch designs for their recycled sculptures, considering shapes, textures, and structural stability.</li> <li>5. Guide participants through the construction process, demonstrating techniques for cutting, folding, bending, and assembling the materials.</li> <li>6. Provide assistance and support as needed, encouraging participants to experiment with different combinations of materials and construction methods.</li> <li>7. Encourage participants to incorporate elements of storytelling or symbolism into their sculptures, expressing their ideas and messages through art.</li> <li>8. Once the sculptures are completed, invite participants to share their creations with the group, explaining the materials used and the inspiration behind their designs.</li> <li>9. Facilitate a discussion about the environmental impact of waste and the importance of recycling and upcycling in reducing waste and conserving resources.</li> </ol>
<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>- Observe participants' engagement, creativity, and collaboration during the workshop.</li> <li>- Evaluate the uniqueness and innovation of the recycled sculptures created by each group.</li> <li>- Facilitate a group discussion to reflect on the experience, highlighting key learnings and insights about recycling and sustainable practices.</li> </ul>
<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• "Recycled Sculpture Ideas for Kids": <a href="https://www.teachstarter.com/us/blog/recycled-sculpture-ideas-for-kids-us/">https://www.teachstarter.com/us/blog/recycled-sculpture-ideas-for-kids-us/</a></li> <li>• "Recycled Art Projects for Kids": <a href="https://www.thesprucecrafts.com/recycled-art-projects-for-kids-1254238">https://www.thesprucecrafts.com/recycled-art-projects-for-kids-1254238</a></li> </ul>





## UPCYCLED TOY TINKERING WORKSHOP

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Foster creativity and innovation by encouraging children to repurpose materials to create new toys.</li> <li>• Promote understanding of upcycling and sustainable practices.</li> <li>• Develop problem-solving skills and hand-eye coordination through tinkering and crafting.</li> </ul>
<b>Group Size</b>	Flexible, depending on available resources and space.
<b>Duration</b>	90 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted recyclable and reusable materials (e.g., cardboard tubes, plastic bottles, fabric scraps, bottle caps, etc.).</li> <li>• Scissors, glue, tape, markers, and other crafting supplies.</li> <li>• Optional: Tools such as small saws, drills (if appropriate for age group and supervised properly).</li> <li>• Examples or images of upcycled toys for inspiration.</li> <li>• Safety goggles and gloves for handling tools (if applicable).</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Gather a variety of clean recyclable and reusable materials, ensuring they are safe for children to handle.</li> <li>2. Set up a designated tinkering area with tables, chairs, and crafting supplies.</li> <li>3. Arrange tools and safety equipment (if applicable) in a safe and accessible manner.</li> <li>4. Prepare examples or images of upcycled toys to inspire participants.</li> <li>5. Briefly explain the workshop objectives, rules, and safety guidelines to the participants.</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Introduce the concept of upcycling and its environmental benefits, explaining how it involves turning waste materials into new and useful items.</li> <li>2. Show examples or images of upcycled toys to spark participants' creativity and provide inspiration.</li> <li>3. Divide participants into small groups or let them work individually, depending on group size and dynamics.</li> <li>4. Provide access to the recyclable and reusable materials and crafting supplies, encouraging participants to brainstorm ideas for their toys.</li> <li>5. Encourage participants to experiment with different materials and techniques to bring their toy ideas to life.</li> <li>6. Offer guidance and support as needed, helping participants troubleshoot any challenges they encounter during the tinkering process.</li> <li>7. Allow time for participants to design, build, and decorate their upcycled toys, encouraging creativity and imagination.</li> <li>8. Once the toys are completed, invite participants to share their creations with the group, explaining the materials used and the inspiration behind their designs.</li> <li>9. Facilitate a discussion about the importance of upcycling and how participants can apply the principles of sustainability in their daily lives.</li> </ol>





Co-funded by  
the European Union



<b>Learning Check/ Evaluation</b>	<ul style="list-style-type: none"> <li>• Observe participants' engagement, creativity, and problem-solving skills during the workshop.</li> <li>• Evaluate the uniqueness and innovation of the upcycled toys created.</li> <li>• Facilitate a discussion about the environmental impact of upcycling and its role in promoting sustainability.</li> </ul>
<b>References</b>	<ul style="list-style-type: none"> <li>• "Upcycled Toy Ideas for Kids": <a href="https://www.diynetwork.com/how-to/make-and-decorate/crafts/upcycled-toy-ideas-for-kids">https://www.diynetwork.com/how-to/make-and-decorate/crafts/upcycled-toy-ideas-for-kids</a></li> <li>• "Recycled Crafts for Kids - 20 Easy Recycled Craft Ideas for Children": <a href="https://www.redtedart.com/recycled-crafts-for-kids/">https://www.redtedart.com/recycled-crafts-for-kids/</a></li> </ul>

## ECO-FRIENDLY SCULPTURE GARDEN

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Encourage creativity and environmental awareness by challenging children to create sculptures using recycled materials.</li> <li>• Promote understanding of sustainability and the importance of repurposing materials.</li> <li>• Foster teamwork and collaboration among participants.</li> </ul>
<b>Group Size</b>	Flexible, depending on available resources and space
<b>Duration</b>	90 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted recyclable materials (e.g., cardboard, plastic bottles, aluminum cans, newspaper, etc.).</li> <li>• Glue, tape, scissors, and other crafting supplies.</li> <li>• Large cardboard or plywood sheets for the base of the sculpture garden.</li> <li>• Paints, markers, or other decorative materials (optional).</li> <li>• Signage indicating the name of the sculpture garden (optional).</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Collect a variety of clean recyclable materials and sort them into bins or containers for easy access during the activity.</li> <li>2. Set up a designated area for creating the sculptures, ensuring there is enough space for participants to work comfortably.</li> <li>3. Prepare the base for the sculpture garden by laying out large cardboard or plywood sheets.</li> <li>4. Arrange tables or workstations with crafting supplies and tools.</li> <li>5. Briefly explain the activity objectives, rules, and safety guidelines to the participants.</li> </ol>





<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. Introduce the concept of recycling and its role in reducing waste and protecting the environment.</li> <li>2. Show examples of sculptures made from recycled materials to inspire participants and ignite their creativity.</li> <li>3. Divide participants into small groups or pairs, depending on group size and dynamics.</li> <li>4. Explain that each group will be responsible for creating a sculpture using the provided recyclable materials.</li> <li>5. Encourage participants to brainstorm ideas and plan their sculptures before starting construction.</li> <li>6. Provide access to the recyclable materials and crafting supplies, allowing participants to begin building their sculptures.</li> <li>7. Offer guidance and support as needed, encouraging creativity and experimentation.</li> <li>8. Once the sculptures are completed, invite participants to arrange them on the base to create the sculpture garden.</li> <li>9. Allow time for groups to make any final adjustments or additions to their sculptures.</li> <li>10. Encourage participants to take a tour of the sculpture garden, admiring each other's creations and discussing the materials used.</li> <li>11. Optionally, take photos of the sculpture garden to document the project and share with participants and their families.</li> </ol>
<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Observe participants' engagement, creativity, and teamwork during the activity.</li> <li>• Evaluate the uniqueness and innovation of the sculptures created.</li> <li>• Facilitate a discussion about the importance of recycling and how everyday materials can be transformed into art.</li> </ul>
<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• "Recycled Art Sculptures for Kids": <a href="https://www.kcedventures.com/blog/recycled-art-sculptures-for-kids">https://www.kcedventures.com/blog/recycled-art-sculptures-for-kids</a></li> <li>• "Recycled Sculpture Ideas for Kids": <a href="https://www.teachstarter.com/us/blog/recycled-sculpture-ideas-for-kids-us/">https://www.teachstarter.com/us/blog/recycled-sculpture-ideas-for-kids-us/</a></li> </ul>





## WASTE SORTING RELAY RACE

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Increase awareness and understanding of waste sorting and recycling practices.</li> <li>• Promote teamwork, cooperation, and physical activity among participants.</li> <li>• Reinforce the importance of environmental responsibility and sustainable habits.</li> </ul>
<b>Group Size</b>	10-20 participants per team.
<b>Duration</b>	60 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted recyclable and non-recyclable items (e.g., paper, plastic, glass, aluminum, food waste, etc.).</li> <li>• Large bins or containers labeled for different types of waste (recyclable, non-recyclable, compostable).</li> <li>• Stopwatch or timer.</li> <li>• Whistle or bell to signal the start and end of the race.</li> <li>• Cones or markers to set up the relay course.</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Gather a variety of clean recyclable and non-recyclable items for the sorting activity.</li> <li>2. Set up a relay course in a designated area, ensuring there is enough space for teams to move freely.</li> <li>3. Arrange the bins or containers at the end of the course, each labeled with a different category of waste.</li> <li>4. Briefly explain the activity objectives, rules, and safety guidelines to the participants.</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Divide participants into teams, with each team lining up at the starting line of the relay course.</li> <li>2. Explain that the objective of the relay race is to correctly sort the waste items into the designated bins as quickly as possible.</li> <li>3. When the race begins, the first participant from each team runs to the pile of waste items, selects one item, and races back to the sorting area.</li> <li>4. The participant must then correctly place the item into the appropriate bin (recyclable, non-recyclable, or compostable) before tagging the next teammate to continue the race.</li> <li>5. The relay continues in this manner until all waste items have been sorted correctly.</li> <li>6. If a participant places an item in the wrong bin, they must return it to the pile and select another item to sort.</li> <li>7. The race ends when all waste items have been sorted, and the last participant crosses the finish line.</li> <li>8. Use a stopwatch or timer to record the time taken by each team to complete the relay race.</li> <li>9. Congratulate the winning team and encourage all participants to discuss what they learned about waste sorting and recycling during the activity.</li> </ol>







<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Observe participants' teamwork, communication, and problem-solving skills during the relay race.</li> <li>• Assess participants' understanding of waste sorting and recycling practices based on their sorting accuracy.</li> <li>• Facilitate a discussion about the importance of proper waste disposal and recycling in reducing environmental impact.</li> </ul>
<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• "Recycling Games for Kids": <a href="https://www.epa.gov/recycle/recycling-games-and-activities-kids">https://www.epa.gov/recycle/recycling-games-and-activities-kids</a></li> <li>• "Recycling Relay Race Game": <a href="https://www.greeneducationfoundation.org/nationalgreenweeksub/waste-reduction-tips/tips-and-resources/recycling-relay-race-game.html">https://www.greeneducationfoundation.org/nationalgreenweeksub/waste-reduction-tips/tips-and-resources/recycling-relay-race-game.html</a></li> </ul>

## TIN CAN LANTERN CRAFTING WORKSHOP

<p><b>Learning Outcomes</b></p>	<ul style="list-style-type: none"> <li>• Encourage creativity and innovation by repurposing waste tin cans to create decorative lanterns.</li> <li>• Promote environmental awareness and the importance of upcycling materials.</li> <li>• Develop fine motor skills and hand-eye coordination through crafting and decorating.</li> </ul>
<p><b>Group Size</b></p>	<p>5-15 participants per group.</p>
<p><b>Duration</b></p>	<p>90 minutes.</p>
<p><b>Materials</b></p>	<ul style="list-style-type: none"> <li>• Clean and empty tin cans (varying sizes and shapes).</li> <li>• Safety gloves and goggles.</li> <li>• Permanent markers or paint pens.</li> <li>• Hammer and nails or awl (for punching holes).</li> <li>• Tea light candles or battery-operated LED candles.</li> <li>• Optional: Wire for handles, decorative materials such as beads or ribbon.</li> </ul>
<p><b>Preparation</b></p>	<ol style="list-style-type: none"> <li>1. Collect a sufficient number of clean and empty tin cans, ensuring they are safe for handling.</li> <li>2. Set up a designated crafting area with tables, chairs, and access to crafting supplies.</li> <li>3. Prepare safety equipment such as gloves and goggles for participants.</li> <li>4. Lay out all crafting materials and tools in an organized manner for easy access.</li> </ol>







<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. Introduce the concept of upcycling and explain how waste tin cans can be transformed into decorative lanterns.</li> <li>2. Demonstrate the safety procedures for handling tin cans, including wearing gloves and being cautious of sharp edges.</li> <li>3. Provide examples or images of tin can lantern designs to inspire participants.</li> <li>4. Divide participants into small groups or pairs, ensuring each group has access to a variety of tin cans and decorating materials.</li> <li>5. Encourage participants to brainstorm ideas and sketch designs for their tin can lanterns, considering patterns, shapes, and themes.</li> <li>6. Instruct participants to carefully punch holes in the tin cans using a hammer and nails or an awl, creating decorative patterns or designs.</li> <li>7. Once the holes are punched, allow participants to further personalize their lanterns by decorating them with permanent markers or paint pens.</li> <li>8. Optional: Attach wire handles to the tin cans to create lanterns that can be hung up.</li> <li>9. Place tea light candles or battery-operated LED candles inside the tin cans to illuminate the lanterns.</li> <li>10. Dim the lights and enjoy the warm glow of the tin can lanterns created by the participants.</li> </ol>
<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Observe participants' engagement, creativity, and attention to safety during the workshop.</li> <li>• Evaluate the uniqueness and creativity of the tin can lantern designs created by each group.</li> <li>• Facilitate a group discussion to reflect on the experience, highlighting key learnings and insights about upcycling and waste reduction.</li> </ul>
<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• "DIY Tin Can Lanterns": <a href="https://www.familyhandyman.com/project/diy-tin-can-lanterns/">https://www.familyhandyman.com/project/diy-tin-can-lanterns/</a></li> <li>• "Tin Can Lantern Craft for Kids": <a href="https://www.firefliesandmudpies.com/tin-can-lanterns/">https://www.firefliesandmudpies.com/tin-can-lanterns/</a></li> </ul>





## RECYCLING SORTING RELAY RACE

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Increase knowledge and understanding of recycling practices and waste sorting.</li> <li>• Promote teamwork, cooperation, and physical activity among participants.</li> <li>• Reinforce the importance of responsible waste disposal and environmental stewardship.</li> </ul>
<b>Group Size</b>	10-20 participants per team.
<b>Duration</b>	60 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted clean and safe recyclable and non-recyclable items (e.g., paper, plastic bottles, aluminum cans, glass jars, etc.).</li> <li>• Large bins or containers labeled for different types of recyclable materials (paper, plastic, metal, glass).</li> <li>• Timer or stopwatch.</li> <li>• Whistle or bell to signal the start and end of the race.</li> <li>• Cones or markers to set up the relay course.</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Gather a variety of recyclable and non-recyclable items, ensuring they are clean and safe for handling.</li> <li>2. Set up a designated relay race area with clearly marked bins for different types of recyclable materials.</li> <li>3. Arrange the recyclable items and bins in a line, spaced out along the relay course.</li> <li>4. Briefly explain the rules and objectives of the recycling sorting relay race to the participants.</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>1. Divide participants into teams, with each team lining up at the starting line of the relay course.</li> <li>2. Explain that the objective of the relay race is to correctly sort the recyclable items into the designated bins as quickly as possible.</li> <li>3. When the race begins, the first participant from each team runs to the first item on the course, identifies whether it is recyclable or non-recyclable, and places it in the appropriate bin.</li> <li>4. The participant then runs back to tag the next teammate, who repeats the process with the next item on the course.</li> <li>5. The relay continues in this manner until all recyclable items have been sorted correctly into the bins.</li> <li>6. If a participant places an item in the wrong bin, they must correct the mistake before tagging the next teammate.</li> <li>7. The race ends when all recyclable items have been sorted, and the last participant crosses the finish line.</li> <li>8. Use a timer or stopwatch to record the time taken by each team to complete the relay race.</li> <li>9. Congratulate the winning team and facilitate a discussion about the importance of recycling and responsible waste disposal.</li> </ol>





<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Observe participants' teamwork, communication, and problem-solving skills during the relay race.</li> <li>• Evaluate the accuracy and efficiency of the recycling sorting process performed by each team.</li> <li>• Facilitate a group discussion to reflect on the experience, highlighting key learnings and insights about recycling practices.</li> </ul>
<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• "Recycling Relay Race Game": <a href="https://www.greeneducationfoundation.org/nationalgreenweeksub/waste-reduction-tips/tips-and-resources/recycling-relay-race-game.html">https://www.greeneducationfoundation.org/nationalgreenweeksub/waste-reduction-tips/tips-and-resources/recycling-relay-race-game.html</a></li> <li>• "Recycling Games for Kids": <a href="https://www.epa.gov/recycle/recycling-games-and-activities-kids">https://www.epa.gov/recycle/recycling-games-and-activities-kids</a></li> </ul>

## WASTE WIZARD VS. RECYCLE QUEEN: BATTLE AGAINST TRASHZILLA - RECYCLING ROLE-PLAYING GAME

<p><b>Learning Outcomes</b></p>	<ul style="list-style-type: none"> <li>• In this interactive role-playing game, participants will step into the shoes of characters like the Waste Wizard, Recycle Queen, and Trashzilla. Through teamwork and problem-solving, they will navigate challenges to protect the environment and promote recycling.</li> </ul> <ol style="list-style-type: none"> <li>1. Waste Wizard: Possesses the power to sort and recycle waste. Goal: Collect and recycle as much waste as possible.</li> <li>2. Recycle Queen: Leads efforts to protect the environment and promote recycling. Goal: Ensure proper waste management and educate others.</li> <li>3. Trashzilla: A terrible monster created by improper waste disposal. Goal: Create chaos and disrupt recycling efforts.</li> </ol>
<p><b>Group Size</b></p>	<p>10-20 participants per group.</p>
<p><b>Duration</b></p>	<p>90 minutes.</p>
<p><b>Materials</b></p>	<ul style="list-style-type: none"> <li>• Various clean and safe recyclable and non-recyclable items.</li> <li>• Large bins or containers labeled for different types of recyclable materials.</li> <li>• Costumes or props for the characters.</li> <li>• Scoreboard or chart for tracking points.</li> <li>• Timer or stopwatch.</li> <li>• Whistle or bell to signal the start and end of each round.</li> <li>• Optional: Educational materials or posters about recycling and waste management.</li> </ul>





<p><b>Preparation</b></p>	<ol style="list-style-type: none"> <li>1. Prepare costumes or props for the characters.</li> <li>2. Set up a designated workshop area with tables, chairs, and recycling bins.</li> <li>3. Arrange the recyclable items and bins in a line, spaced out along the workshop area.</li> <li>4. Briefly explain the rules and objectives of the game to the participants.</li> </ol>
<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li>1. Divide participants into teams, assigning each team a character role: Waste Wizard, Recycle Queen, or Trashzilla.</li> <li>2. Introduce the characters and their respective goals and abilities.</li> <li>3. Start the game with the Waste Wizard and Recycle Queen teams working together to collect and sort recyclable items into the appropriate bins.</li> <li>4. Trashzilla, controlled by a designated participant or facilitator, will attempt to disrupt the recycling efforts by scattering non-recyclable items.</li> <li>5. Use the timer or stopwatch to track the time taken by each team to complete the recycling challenges.</li> <li>6. Award points to teams based on the amount of waste recycled and the efficiency of their efforts.</li> <li>7. Rotate character roles for each round to give participants a chance to experience different perspectives.</li> <li>8. Encourage role-playing and creativity as participants embody their characters and interact with each other.</li> <li>9. Continue with additional rounds, introducing new challenges and obstacles for the teams to overcome.</li> <li>10. After completing all rounds, tally the points and declare the winning team as the ultimate heroes: Waste Wizard or Recycle Queen!</li> </ol>
<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Facilitate a debriefing session to discuss the experience and insights gained from the game.</li> <li>• Reflect on the challenges faced by each character and the importance of teamwork and cooperation in promoting recycling and waste management.</li> <li>• Encourage participants to share ideas for real-world actions they can take to support recycling efforts in their communities.</li> </ul>
<p><b>References</b></p>	<p>No specific references needed for this imaginative and interactive role-playing game!</p>





## QUIZ-STYLE GAME

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>Educate children about recycling practices, waste management, and environmental conservation through interactive gameplay.</li> </ul>
<b>Group Size</b>	Flexible, suitable for small to medium-sized groups of children (5-15 players).
<b>Duration</b>	60 minutes.
<b>Materials</b>	<ul style="list-style-type: none"> <li>Recycling-themed riddles (pre-written or created by the facilitator).</li> <li>Small prizes or rewards for participants (optional).</li> <li>Timer or stopwatch.</li> <li>Whistle or bell to signal the start and end of each round.</li> </ul>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>Prepare a set of recycling-themed riddles related to different aspects of waste management, recycling processes, and environmental conservation.</li> <li>Set up a designated play area with ample space for participants to move around.</li> <li>Familiarize yourself with the riddles and their answers to facilitate the game smoothly.</li> <li>Optional: Prepare small prizes or rewards to motivate participants (e.g., stickers, pencils, or small toys).</li> </ol>
<b>Description/Steps</b>	<ol style="list-style-type: none"> <li>Gather the participants and explain the rules and objectives of Recycling Riddle Race.</li> <li>Divide the participants into teams or let them play individually, depending on the group size and dynamics.</li> <li>Start the game by presenting the first recycling riddle to all participants.</li> <li>Participants must race to solve the riddle and provide the correct answer.</li> <li>The first participant or team to correctly answer the riddle earns points and advances to the next challenge.</li> <li>Continue with subsequent rounds, presenting new riddles and challenges related to recycling and waste management.</li> <li>Use a timer or stopwatch to limit the time for each round, adding a sense of urgency and excitement to the game.</li> <li>At the end of the game, tally up the points earned by each participant or team to determine the winners.</li> <li>Award prizes or rewards to the winning participants as recognition for their recycling knowledge and participation.</li> </ol>
<b>Example Recycling Riddles:</b>	<ol style="list-style-type: none"> <li>"I'm made of paper, but I'm not for reading. Put me in the bin to start recycling! What am I?" - Answer: Newspaper</li> <li>"I'm round and shiny, and I hold drinks tight. When you're done with me, recycle me right! What am I?" - Answer: Aluminum can</li> <li>"I come from trees, but I'm not a leaf. Write on me and recycle me, what a relief! What am I?" - Answer: Cardboard box</li> </ol>





Co-funded by  
the European Union



<b>Learning Check/ Evaluation</b>	<ul style="list-style-type: none"> <li>• After the game, facilitate a discussion with participants about the importance of recycling and waste reduction in protecting the environment.</li> <li>• Encourage participants to share their favorite riddles from the game and what they learned about recycling.</li> <li>• Provide additional information or resources about recycling practices and environmental conservation for further learning.</li> <li>• By combining fun and learning, Recycling Riddle Race aims to inspire children to become champions of recycling and environmental stewardship!</li> </ul>
<b>References</b>	<p><a href="https://www.epa.gov/recycle/recycling-games-and-activities-kids">https://www.epa.gov/recycle/recycling-games-and-activities-kids</a>  <a href="https://kids.nationalgeographic.com/explore/science/recycling/">https://kids.nationalgeographic.com/explore/science/recycling/</a> -</p>

## ECO EXPLORERS: DISCOVERING THE MAGIC OF RECYCLING

<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Increase knowledge and understanding of recycling practices and environmental conservation.</li> <li>• Foster creativity and critical thinking skills through hands-on activities and exploration.</li> <li>• Promote a sense of responsibility and stewardship towards the environment among participants.</li> </ul>
<b>Group Size</b>	<p>Flexible, suitable for small to medium-sized groups of children (5-15 participants).</p>
<b>Duration</b>	<p>90 minutes.</p>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• Assorted recyclable materials (e.g., paper, cardboard, plastic bottles, aluminum cans).</li> <li>• Crafting supplies (scissors, glue, tape, markers, paints, brushes, etc.).</li> <li>• Educational resources or posters about recycling and environmental conservation.</li> <li>• Optional: Costumes or props related to environmental themes (e.g., nature-inspired costumes, recycling superhero capes).</li> <li>• Snacks or refreshments (optional).</li> </ul>







<p><b>Preparation</b></p>	<ol style="list-style-type: none"> <li>1. Gather a variety of clean and safe recyclable materials for crafting activities.</li> <li>2. Set up a designated workshop area with tables, chairs, and crafting supplies.</li> <li>3. Prepare educational resources or posters about recycling and environmental conservation to display during the workshop.</li> <li>4. Plan and organize the sequence of activities and games for the workshop agenda.</li> <li>5. Optional: Prepare costumes or props to enhance the theme of eco exploration.</li> </ol>
<p><b>Description/Steps</b></p>	<ol style="list-style-type: none"> <li><b>1. Introduction (15 minutes):</b> <ul style="list-style-type: none"> <li>- Welcome participants to the Eco Explorers workshop.</li> <li>- Introduce the theme of environmental exploration and the importance of recycling and waste reduction.</li> <li>- Briefly outline the activities and games planned for the workshop.</li> </ul> </li> <li><b>2. Recycling Relay Race (20 minutes):</b> <ul style="list-style-type: none"> <li>- Divide participants into teams for a fun and active recycling relay race.</li> <li>- Participants race to collect recyclable items and sort them into designated bins.</li> <li>- Encourage teamwork, cooperation, and speed as teams compete to finish first.</li> </ul> </li> <li><b>3. Eco Crafts Station (30 minutes):</b> <ul style="list-style-type: none"> <li>- Set up a crafting station with assorted recyclable materials and crafting supplies.</li> <li>- Participants engage in creative crafting activities, such as making recycled paper art, cardboard sculptures, or plastic bottle planters.</li> <li>- Encourage participants to explore their creativity while repurposing waste materials into new and useful creations.</li> </ul> </li> <li><b>4. Environmental Exploration Game (20 minutes):</b> <ul style="list-style-type: none"> <li>- Conduct an interactive game or scavenger hunt focused on environmental exploration.</li> <li>- Participants search for hidden clues or objects related to recycling and environmental conservation.</li> <li>- Provide educational insights and fun facts about nature, wildlife, and sustainability throughout the game.</li> </ul> </li> <li><b>5. Reflection and Discussion (5 minutes):</b> <ul style="list-style-type: none"> <li>- Gather participants for a brief reflection and discussion session.</li> <li>- Ask participants to share their favorite moments from the workshop and what they learned about recycling and environmental conservation.</li> <li>- Emphasize the importance of taking action to protect the environment and encourage participants to continue exploring eco-friendly practices in their daily lives.</li> </ul> </li> </ol>







	<p><b>6. Conclusion and Farewell (5 minutes):</b></p> <ul style="list-style-type: none"> <li>- Thank participants for their participation in the Eco Explorers workshop.</li> <li>- Provide any additional resources or information about recycling and environmental conservation for further exploration.</li> <li>- Encourage participants to continue their eco-friendly journey and make a positive impact on the planet.</li> </ul>
<p><b>Learning Check/ Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Facilitate a post-workshop reflection session to discuss key learnings and insights about recycling and environmental conservation.</li> <li>• Provide resources or suggestions for participants to continue practicing eco-friendly habits at home and in their communities.</li> <li>• Follow up with participants after the workshop to reinforce learning and encourage continued engagement in environmental stewardship.</li> </ul> <p>By providing an interactive and immersive experience, the Eco Explorers workshop aims to ignite children's curiosity and passion for recycling and environmental conservation, empowering them to become champions of sustainability in their communities.</p>
<p><b>References</b></p>	<p>Earth911. (n.d.). Kids Recycling Activities and Games. Retrieved from <a href="https://earth911.com/home-garden/kids-recycling-activities-and-games/">https://earth911.com/home-garden/kids-recycling-activities-and-games/</a> <a href="https://kids.nationalgeographic.com/explore/science/recycling/">https://kids.nationalgeographic.com/explore/science/recycling/</a></p>





Co-funded by  
the European Union



# We tried the activities and had a great time doing them!





Co-funded by  
the European Union







Co-funded by  
the European Union





Co-funded by  
the European Union







Co-funded by  
the European Union





Co-funded by  
the European Union







Co-funded by  
the European Union





Co-funded by  
the European Union





Co-funded by  
the European Union







Co-funded by  
the European Union





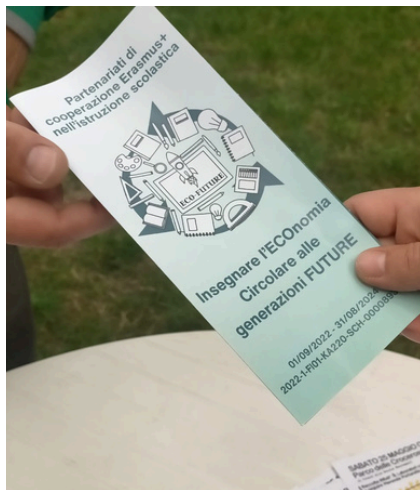
Co-funded by  
the European Union







Co-funded by  
the European Union





Co-funded by  
the European Union



# CONCLUSIONS







Co-funded by  
the European Union



The Circular Economy Education Toolkit is a comprehensive resource designed to engage young pupils in the principles and practices of the circular economy. By integrating interactive and practical activities, the toolkit aims to foster a deep understanding of sustainable practices and the importance of resource efficiency from an early age.

Our TOOLKIT is a unique resource for introducing young pupils to circular economy concepts. It fosters early awareness of sustainability issues and simplifies complex ideas, making them accessible and profoundly engaging for young learners.

The TOOLKIT's activities, games, and cartoons are designed to significantly enhance pupil engagement and ensure a solid understanding of these crucial concepts. It encourages active learning and retention of circular economy principles by involving students in practical tasks such as recycling projects, upcycling crafts, and waste audits.

The toolkit plays a crucial role in promoting critical thinking and problem-solving games. It challenges pupils to find creative solutions to real-world sustainability issues. Activities like designing sustainable products or creating zero-waste plans foster innovative thinking and practical application of knowledge, inspiring young minds to think outside the box. By participating in the TOOLKIT's activities, pupils develop habits and behaviours that support sustainability. These activities encourage responsible consumption, waste reduction, and resource efficiency, contributing to a culture of sustainability among young learners.





Co-funded by  
the European Union



The TOOLKIT empowers pupils by giving them ownership of their learning and sustainability initiatives. Activities are designed to be student-led, fostering a sense of responsibility and agency in promoting circular economy practices within their communities. They encourage collaboration among pupils, teachers, and the wider community.

The TOOLKIT is designed to be adaptable to different educational contexts and scalable across various age groups. This flexibility ensures that circular economy education can be effectively implemented in diverse learning environments, from primary schools to extracurricular programs, providing educators with a versatile tool to meet their teaching needs.

In conclusion, the Circular Economy Education Toolkit offers dynamic and practical activities and games to teach young pupils about sustainability and resource management. By engaging students in hands-on, practical activities, the toolkit enhances their understanding of the circular economy and instils lifelong values and behaviours that support sustainable living. Educators can play a pivotal role in shaping a generation of environmentally conscious and responsible citizens through this toolkit.





Co-funded by  
the European Union



# CARTOONS





Co-funded by  
the European Union



**Project Overview:** the ECO-FUTURE initiative aims to educate young children on circular economy principles through animated cartoons. These cartoons teach the importance of recycling materials, including paper, plastic, aluminium, and glass, following the 4Rs approach (Reduce, Reuse, Recycle, and Recover). The animations are designed to be both educational and entertaining, helping children understand the significance of sustainability in a fun and engaging way.

**Objective of the Cartoons:** The primary goal of the ECO-FUTURE Educational Cartoons is to provide accessible and engaging resources that promote environmental awareness among young pupils. Using superheroes as central characters, these animations demonstrate practical recycling techniques and highlight the importance of community involvement in environmental conservation. The cartoons are part of a digital toolkit available for download and accessible through the ECO-FUTURE project's website and its partners' platforms.





Co-funded by  
the European Union



## Key Episodes:

### Episode 1: "The GreenGuardians: The Paper Story"

- **Learning Outcome:** Children learn the importance of recycling paper and the impact of recycling on the environment.
- **Synopsis:** Waste Wizard and Recycle Queen combat Trashzilla in a paper-littered city. Through humour and adventure, they transform the paper waste into fun, recyclable items, teaching the citizens of EcoVille the joys of recycling.

### Episode 2: "The GreenGuardians: The Plastic Rumble"

- **Learning Outcome:** Children understand the dangers of plastic pollution, particularly in marine ecosystems, and learn about the recycling process for plastics.
- **Synopsis:** The superheroes tackle plastic waste on EcoVille Beach, creatively recycling the plastic into valuable items while battling Trashzilla, who emerges from the ocean depths.





Co-funded by  
the European Union



### Episode 3: "The GreenGuardians: The Aluminum Adventures"

- **Learning Outcome:** Pupils recognize the unique properties of aluminium and the environmental and economic benefits of recycling it.
- **Synopsis:** In a futuristic recycling facility, Waste Wizard and Recycle Queen turn a mountain of aluminium cans into valuable community items, while Trashzilla, clad in aluminium armour, tries to disrupt their efforts.

### Episode 4: "The GreenGuardians: The Glass Gaia"

- **Learning Outcome:** Children learn about the endless recyclability of glass and the importance of recycling it to conserve energy and reduce landfill waste.
- **Synopsis:** After a festival leaves glass littered around EcoVille, the superheroes creatively recycle the glass into beautiful and functional items, overcoming Trashzilla's attempt to shroud the city in darkness.





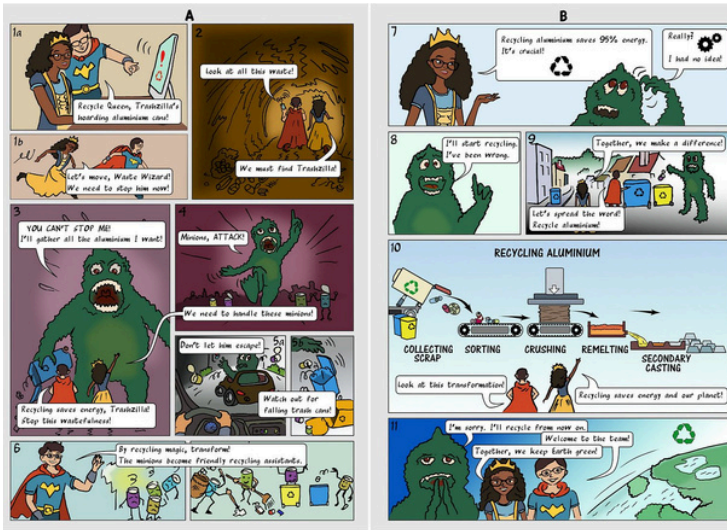


Co-funded by  
the European Union



**Educational Approach:** Each episode includes a class exercise to reinforce the educational content, such as recycling relays and creative art projects using recycled materials. These activities are designed to ensure that the children enjoy the cartoons and retain the lessons about recycling and sustainability.

**Conclusion:** The ECO-FUTURE Educational Cartoons are a key tool in teaching children about circular economy principles. Through engaging stories, vibrant animations, and relatable characters, the cartoons aim to inspire the next generation to protect the environment actively.







Co-funded by  
the European Union



## CARTOON LINKS:

### **Episode 1: "The GreenGuardians: The Paper Story"**

[https://ecofutureproject.eu/wp-](https://ecofutureproject.eu/wp-content/uploads/2024/08/Aluminium-English_2-1.mp4)

[content/uploads/2024/08/Aluminium-English\\_2-1.mp4](https://ecofutureproject.eu/wp-content/uploads/2024/08/Aluminium-English_2-1.mp4)

### **Episode 2: "The GreenGuardians: The Plastic Rumble"**

[https://ecofutureproject.eu/wp-](https://ecofutureproject.eu/wp-content/uploads/2024/08/Plasticrumble-English-1.mp4)

[content/uploads/2024/08/Plasticrumble-English-1.mp4](https://ecofutureproject.eu/wp-content/uploads/2024/08/Plasticrumble-English-1.mp4)

### **Episode 3: "The GreenGuardians: The Aluminum Adventures"**

[https://ecofutureproject.eu/wp-](https://ecofutureproject.eu/wp-content/uploads/2024/08/Aluminium-English_2-1.mp4)

[content/uploads/2024/08/Aluminium-English\\_2-1.mp4](https://ecofutureproject.eu/wp-content/uploads/2024/08/Aluminium-English_2-1.mp4)

### **Episode 4: "The GreenGuardians: The Glass Gaia"**

[https://ecofutureproject.eu/wp-](https://ecofutureproject.eu/wp-content/uploads/2024/08/Glass-English-1.mp4)

[content/uploads/2024/08/Glass-English-1.mp4](https://ecofutureproject.eu/wp-content/uploads/2024/08/Glass-English-1.mp4)





Co-funded by  
the European Union



## Open Educational Resources

The Eco-future Toolkit is an Open Educational Resource released under an open license.

The CC BY-NC-SA 4.0 DEED license covers the content. This means that reuse is allowed, given appropriate credit and changes are indicated. You may not use the material for commercial purposes. If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. Creative Commons is the nonprofit behind the open licenses and other legal tools that allow creators to share their work. Our legal tools are free to use. Link to license: <https://creativecommons.org/licenses/by-nc-sa/4.0/deed.en>





Co-funded by  
the European Union



## DISCLAIMER

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

