

DREAM CITY

Set of cards

Storytelling with
Educational Robotics.

DOWNLOAD



Dream City: Manual of the Set of Cards for Storytelling with Educational Robotics

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[Greencode – Building an Eco-Friendly Future with Robots](#)
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INTRODUCTION

The GREENCODE project promotes environmental awareness and educational robotics in Early Childhood Education. This set of cards supports the project's goals by encouraging children and adults to engage with one of the most powerful tools for learning: **storytelling**.

Through imaginative narratives, it's possible to explore environmental issues and different solutions in a creative, meaningful way. By creating stories, children can understand the importance of caring for the planet and recognize the roles they can play in protecting the environment. Storytelling makes abstract environmental ideas relatable and memorable, laying the foundation for lifelong environmental awareness and stewardship.

The cards present images to ignite the imagination, but the stories will be led by the players, their experiences and concerns. The goal is to **contribute to a Dream City, where environmental problems are solved through collaboration between different agents**.

Any card is open to interpretation by the players and the stories can use as many cards as needed. Other objects can be combined with the cards to expand the universe of the story and/or spark the fun. Particularly, robots make good companions with these cards.

Enjoy the cards and let us know about your Dream City!

CATEGORIES OF CARDS



Spaces



Animal characters



Robot characters



Human characters



Environmental problems



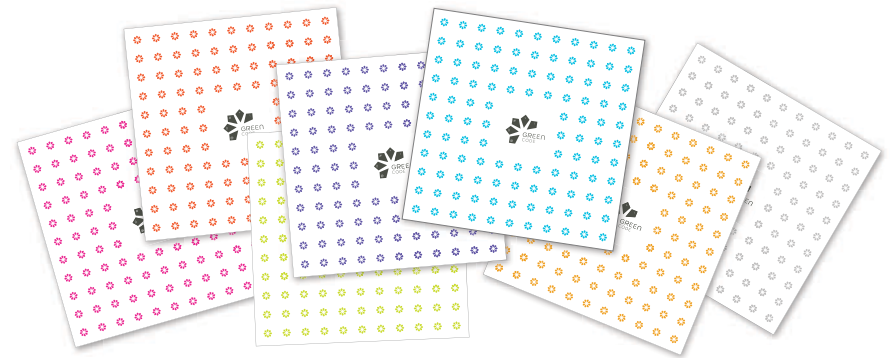
Solutions: Actions



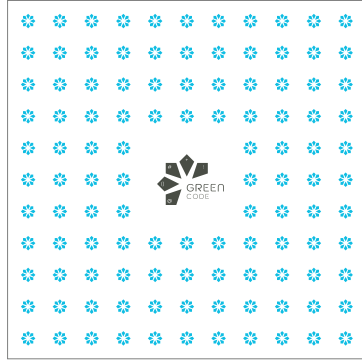
Solutions: Objects

The categories present important ideas for a story: where, who, what, and how. Each category can be a spark for imagination.

The colour on the back of the cards allows the identification of their category.



SPACES



(Back of the cards)



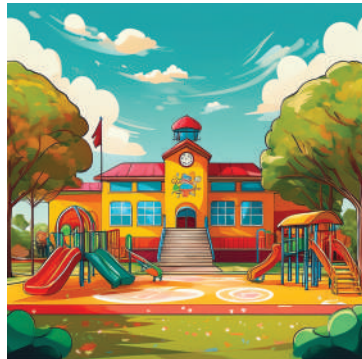
City street



City park



City river/lake



Playground



School/kindergarten

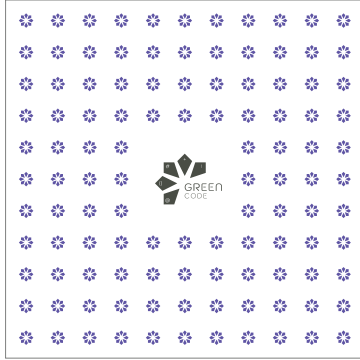


Home backyard



Home

ANIMAL CHARACTERS



(Back of the cards)



Dog



Bee



Fish



Squirrel



Bird

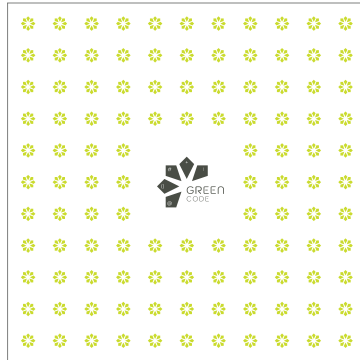


Cat

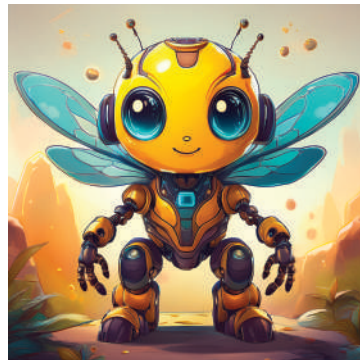


Toad

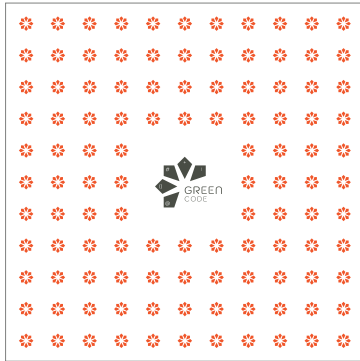
ROBOT CHARACTERS



(Back of the cards)



HUMAN CHARACTERS



(Back of the cards)



Scientist



Gardener



Reporter



Ecologist



Engineer

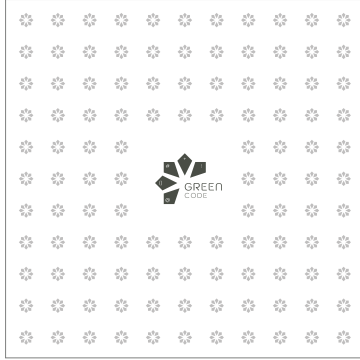


Artist



Doctor

ENVIRONMENTAL PROBLEMS



(Back of the cards)



Loss of biodiversity



Loss of biodiversity



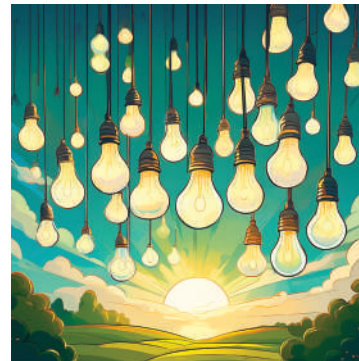
Loss of biodiversity



Loss of biodiversity



Water consumption/waste



Energy consumption/waste



Consumerism

(continued...)



Traffic



Noise pollution



Noise pollution



Air pollution



Air pollution

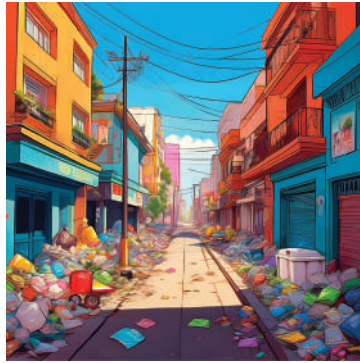


Water pollution



Water pollution

(continued...)



Waste (litter on the streets)



Waste (plastic)



Waste (metal)



Waste (paper)



Waste (glass)

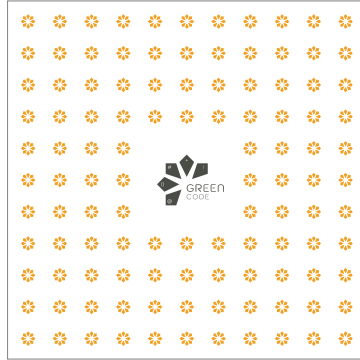


Waste (batteries)



Waste (electronics)

SOLUTIONS: ACTIONS



(Back of the cards)



Campaign



Ride bicycles



Recycle



Plant flowers



Care for animals

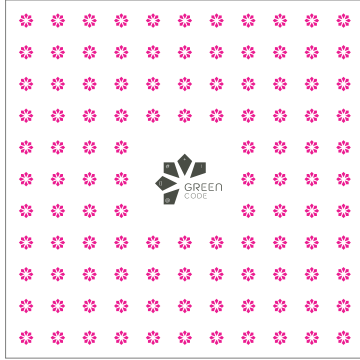


Spend time in nature



Reuse

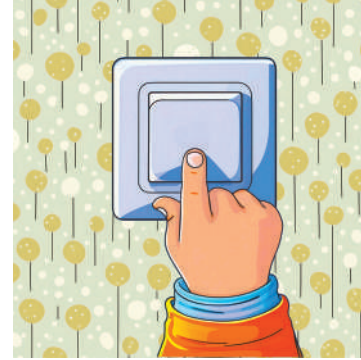
SOLUTIONS: OBJECTS



(Back of the cards)



Wind turbines and solar panels



Light switch



Composter



Recycling bins



Insect hotel



Research tools



Posters

HOW TO PLAY

The cards can be used in a variety of ways – individually or in groups, using all categories or just a few, chosen at random or carefully selected. It is recommended that stories begin with the classic prompt, *“Once upon a time...”*, and conclude with a vision of a Dream City, imagined and shaped by the players themselves.

Each card belongs to a specific category and includes suggested content, but its interpretation is open to the players’ experience and imagination. Meaningful discussion about what is seen or read is a key part of the process, enriching both storytelling and learning. Children’s personal experiences in their own cities can naturally become part of the narratives, grounding the stories in real-world connections and perspectives.

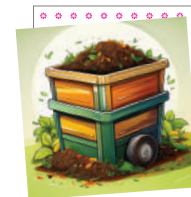
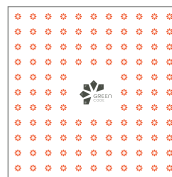
To deepen engagement, children can create drawings or use objects to represent elements of their story. These additions bring new layers of meaning to the process. The drawings can be turned into new cards to expand the set, giving children a sense of authorship and ownership in the evolving narrative world.

BASIC PLAY

Begin by placing the cards face down, organised into seven separate piles according to their categories. Each player or group selects one card from each of the following categories: **Spaces**, **Problems**, and up to three **Characters**. After discussing the selected cards, players reflect on what solutions might be needed to address the challenges presented. Next, they search through the **Solutions** piles to find one or more cards that best respond to the problems identified. With all selected cards in hand, players begin building their story.

Example

From the pile of **Spaces**, children drew **Home**. Then, the **Bird** and the **Ladybug robot** came up from the **Characters** piles. As soon as the **Consumerism** card was drawn from the **Problems** pile, the conversation shifted to wasting food. The story started to be sketched: a family that needs help in solving wasted food. Children chose the **Composter** card, connected to the food waste. Because of the **Bird** character, the **Care for Animals** card was also picked. And the story began...



The narrative should incorporate all the chosen cards, encouraging creativity and collaboration as children imagine how characters interact with spaces, solve problems, and contribute to their vision of a Dream City.

PROMPT-DRIVEN PLAY

Begin by choosing a **Character** and a **Problem** card and use them to introduce a story that invites children to participate and imagine solutions together. (You can also suggest that a child or a group starts the process for others.)

Example

*"One day, Stripy, the little bee, came to our school to ask for help.
'There are no flowers left to visit,' she said.
'All the bees are hungry and feeling sad.'
What can we do to help the bee and her friends live in a Dream City?"*



The rest of the story can be developed using ideas from any of the remaining cards, regardless of their category. Let the children guide the direction of the narrative with their creativity and experiences.

This open-ended approach encourages discussion, empathy, and collaborative problem-solving, while keeping the storytelling experience fun and meaningful.

FUN PLAY

Begin by placing the cards face down, organised into seven separate piles according to their categories. Each player or group draws one card from each category, randomly. With all selected cards in hand, players begin building their story.

Example

The **Character** cards drawn were the **Cat**, the **Dog robot** and the **Scientist**. The **Space** was the **Playground**. The **Problem** was **Noise pollution**. The **Solution** cards were **Plant flowers** and **Research tools**. At first, children had a difficult time making the connections as the cards didn't seem related. They started the story with a meeting of the characters in the school playground because the scientist wanted the help of the children in using the research tools that could clarify how noise was affecting everyone in the city. As a compensation for all the support that would lead to the solution, a new garden in the playground was promised. And the story began...



The narrative should incorporate all the chosen cards, encouraging creativity and collaboration as children imagine how characters interact with spaces, solve problems, and contribute to their vision of a Dream City.

OPEN CHOICE PLAY

Lay out all the cards face up so that players can see the full range of options. Invite the children to explore and discuss the cards together. They can then choose the ones that inspire them the most to build their story.

Players use their selected cards – across any category – combining them in imaginative ways, to create a narrative.

Example

*Children wanted a story that happened in the sky. So, they chose the **Dragon robot** and the **Bird**. Next, they chose **Air pollution** as a problem and the **Engineer** who could build a cleaning machine that the flying heroes would take to the skies. And the story began...*



This open-ended format encourages creativity, decision-making, and collaborative storytelling.

GUIDED DISCOVERY PLAY

Lay out all the cards face up, grouped by category, so that players can see the full range of options.

Players begin by selecting one card at random to spark the story. Using this as a starting point, they then choose additional cards from each category that they would like to include in their narrative and vision of a Dream City. All categories should be included.

Example

*The first card to be drawn was the **Insect hotel**. This could help to make insects thrive, so children looked for the **Bee** and the **Bee robot**. With some help, the **Loss of biodiversity** was chosen, as children made the connection with the sad bees card. Children added **Plant flowers** as part of the solution and decided on the **Artist** so that the hotels would be decorated. The **City lake** was chosen as children were keen on having green spaces and water available for insects.*



This approach combines an element of surprise with creative choice, encouraging children to build connections, solve problems, and develop a story inspired by the cards they select.

ROBOT-ASSISTED PLAY

Lay out the piles of cards on a mat, organised by category. Players then guide a robot to each pile to help select the cards for their story. Once the story is created, children retell it by using the cards on the mat – this time programming or guiding the robot to move from one card to the next, following the sequence of the narrative.

Example

After moving their robot from pile to pile, children had gathered the following cards: **City street**, **Squirrel**, **Cleaning robot**, **Reporter**, **Waste (litter)**, and **Posters**. They decided to draw one street across the mat, adding litter on some of the cells. Their robot was decorated to look like the cleaning robot card. Then, the children told a story as if the reporter was broadcasting the news: a squirrel and a robot were cleaning the city streets, leaving behind posters encouraging citizens not to litter. As the reporters delivered the news, other children moved the robot across the mat, replacing litter with the small posters they had drawn.



This activity encourages storytelling, sequencing, and basic robotics skills in a fun and meaningful way.

CUSTOMISATION

The printable pages include “empty” cards that can be used to extend the set. Players might design new cards that complete or better represent their city and narratives.

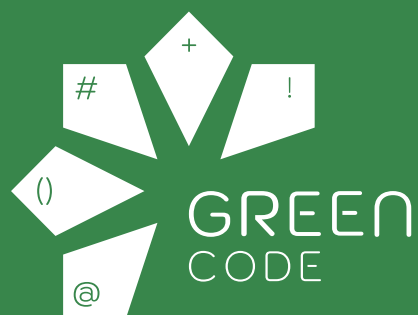


Example of a card created by a user, to represent a tank for rainwater harvesting

GREENCODE Kit

The Erasmus+ GREENCODE “Building an Eco-Friendly Future with Robots” project developed a set of complementary resources:

- [Preparing Future Educators: Higher Education Course **Curriculum** on Robotics and Environmental Education.](#)
- [Preparing Future Educators: **Lesson Plans** – Supporting the Higher Education Course Curriculum on Robotics and Environmental Education.](#)
- [Preparing Future Educators: Digital **Handbook** on Robotics and Environmental Education.](#)
- [**Activity Book** – Educational Robotics and Environmental Education in Early Childhood Education.](#)
- [**Video tutorials.**](#)
- [Dream City: **Set of Cards** for Storytelling with Educational Robotics.](#)



GREENCODE

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