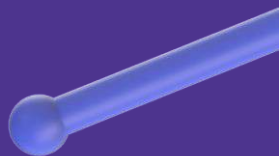
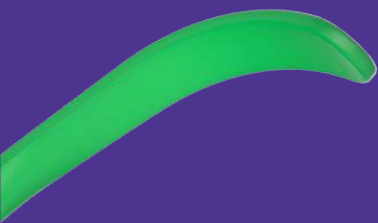


# STEM EVENT KIT PLAY BOOK



# HELLO PLAY FRIEND,

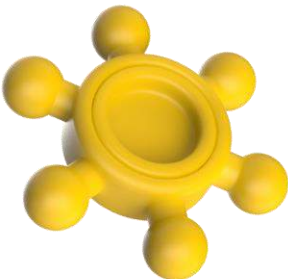
**As you know, when it comes to play, children are the sole experts. They can produce unique plays and toys with their limitless imagination, and unleash their creativity when they are given the opportunity.**

**We prepared this play book to guide adults about how to use the Toyi STEM Event Kit and what can be done with them. You will not find here any step-by-step instructions for children playing with Toyi as we always favor child-led and free play principles.**

**Let's explore together what children can do with unlimited imagination with Toyi STEM Event Kit!**

# TABLE OF CONTENTS

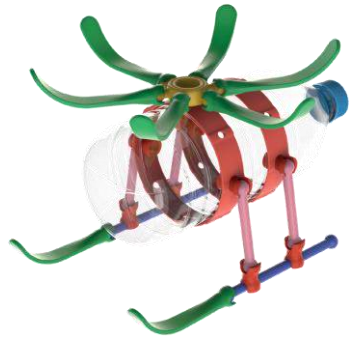
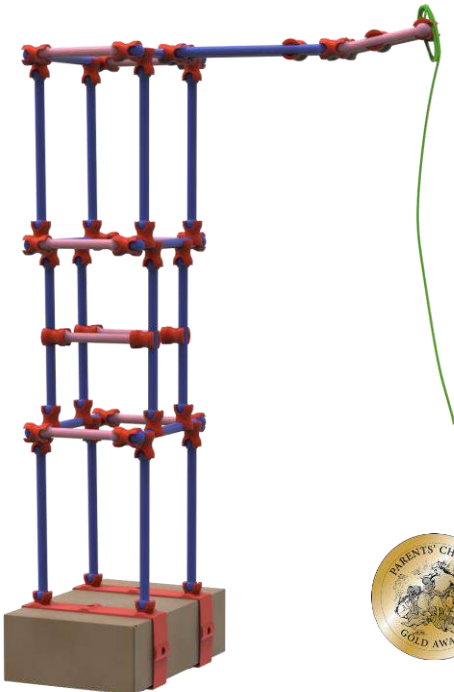
- 01. What is Toyi
- 02. The Play Process
- 03. Inside the Kit
- 04. How Toyi Connects
- 05. How Toyi Transform
- 06. Toyi Benefits
- 07. Sustainability
- 08. Notes to Facilitator
- 09. Workshops



# WHAT IS TOYI

**ToyI is an eco-friendly creative building kit that enables children to transform everyday objects into unique toys.**

**The ToyI experience does not end with the transformation; once children create a toy, another chapter begins where they play with it and improve it for as long as they want.**



# INSIDE THE KIT

**With a kit consisting of wheels, gears, joints, sticks, flexible connectors, kids can transform any object around them into a toy of their own creation.**



**Propeller**



**Short and  
Long Sticks**



**Joints**



**Gears**



**Wheels**



**Small and Large Flexible  
Connectors**

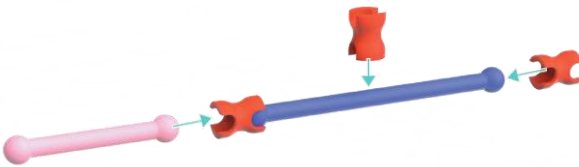
# HOW TOYI CONNECTS



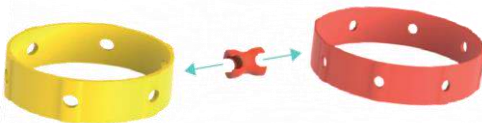
**Toyì is an open-ended creative building system that supports free play. Toyì pieces work with each other in a modular way, allowing for various combinations.**



**If the flexible connector is too large for the object you plan to attach it on, a joint can be used to close that gap.**



**The joints allow you to connect the sticks horizontally or vertically.**



**You can connect two flexible connectors with the help of joints.**

# HOW TOYI TRANSFORMS

**Toyi offers children a new transformation system for incorporating found objects into the play process. This vision means that what your child can create is not limited with what is included in the Toyi kit: the vast numbers of everyday objects and their combinations with Toyi parts offer limitless possibilities for unique toys.**



## Explore

Explore your surroundings and pick an object.



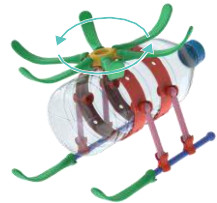
## Connect

Wrap it with a connector.



## Transform

Transform the object and create your own toy.



## Play

Play, enjoy, learn, improve, and share with your playmates!

# TOYI BENEFITS



**Toyi introduces a new concept of toy by inviting children to explore their surroundings in a creative way and to see everyday objects as potential parts for their new toys. With this unique experience, Toyi enables children to develop several crucial skills:**



## **STEM Skills**

Children develop unique solutions to the design challenges they encounter and improve their science, technology, engineering, and math skills while playing with Toyi.



## **21st Century Skills**

Toyi improves children's 21st century skills such as problem solving, critical and innovative thinking, communication, adaptation, cooperation, and taking initiative; and helps them become more creative, productive, and self-confident lifelong learners.



## **Green Skills**

With Toyi, children create their own toys by redefining and redesigning everyday objects around them. With this special play experience it provides, Toyi helps children gain green skills and become more creative, productive, and caring.



# FOR A SUSTAINABLE AND PLAYFUL PLANET

Caring for our children means more than making them happy with toys – it includes sharing the responsibility for the future of our planet. We act sustainably in every sense in our design, manufacturing and play processes.



## **Made from Recycled Plastic & Paper**

We use recycled plastic\* and paper



## **Upcycling through Play**

We allow children to upcycle disposable objects as key parts of their toys and help them learn upcycle through play



## **Limitless Combinations, Long Lifetime**

Toyi has a long lifetime thanks to its potential for limitless transformations.



## **Washable**

Toyi is durable and washable.



\*Flexible connectors excluded.



# Notes to the Facilitator


## Innovation

In today's rapidly changing and evolving world, we have started to frequently hear the word "innovation." **Innovation is the process of transforming and improving existing systems through the emergence of new ideas.** Innovation is a value-creating novelty and is crucial for the progress of societies and a sustainable future. Through innovation, new technologies are discovered, business models are developed, and innovative solutions are found for social problems.

## Creativity and Innovative Thinking

We generate new ideas by thinking creatively, and when we bring these ideas to life, we innovate. All the innovations we use today that serve our work, contribute to society and the environment are a result of innovation.

Innovation is not limited to science and technology alone; it encourages creativity, critical thinking skills, and problem-solving abilities. Therefore, introducing our children to innovation is extremely important to unlock their intellectual and creative potential.






# Notes to the Facilitator

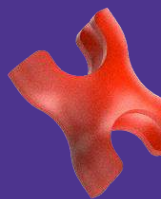
## Raising Innovative Children

Nurturing children with the fundamental principles of innovation is a crucial responsibility to mold them into successful and productive individuals in the world of tomorrow. In today's world, cultivating our children with the basic principles of innovation ensures their success and productivity. Innovative children will stand out in the future world through their problem-solving skills, creativity, and leadership abilities.

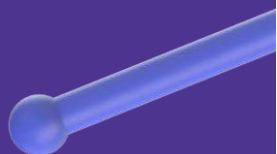
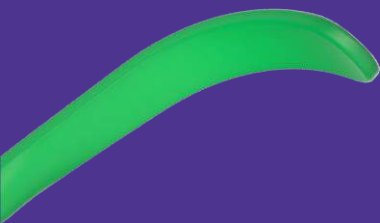
For us adults, there are undoubtedly significant tasks in fostering an innovative generation that thinks creatively, develops technology, creates inventions, and is unafraid to be original. Every child harbors an "innovation hero" within them. The key is to nurture this innovation hero within us, to continue learning and evolving with them, and to generate innovations. The world is changing, and the future is approaching rapidly and magnificently. Adapting to change is an inevitable reality. In this process of adaptation and change, thinking innovatively, thinking creatively, and being original are essential processes for both ourselves and the children we are raising.

The workshop suggestions presented here are specifically designed to foster innovative children and rediscover innovation heroes, particularly for a sustainable world and future.





# WORK- SHOP





## Tips to Facilitator

Since collecting materials for the workshop is part of the process, we recommend that you involve children in this process. You can make a material collection corner in a previously determined area in your classroom, or ask children to bring waste materials from their homes for the workshop day.



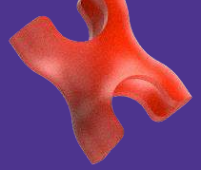


## **Tips to Facilitator**

You can place the pieces in the middle of the table to make it easier for children to access Toyi pieces and waste materials during the workshop.



# Innovation Heroes



## Overview

**Explain to children what innovation is and why it is important. How does innovation affect different areas in our lives? Give examples of what it does.**

## Duration

**60 min.**

## Class Size

15 children for 1 facilitator

## Group Size

Individuals or 2-3 children

## Materials Needed

Upcycling materials like milk/egg boxes, juice bottles, paper rolls, card boxes, pine cones, etc. It is best to include the children in the process of collecting materials.

## Environment

Indoor, outdoor

A circular layout is recommended so that every child can see and reach all collected materials and Toyi parts in the middle.

## Key Outputs

Creativity, Communication, Problem-solving  
Critical and innovative thinking, Cooperation  
STEM Skills, Upcycling



# Innovation Heroes



## 1. Free Talk & Ice Breaker 10 dk

Identify a problem among real-world issues. Encourage children to generate innovative solutions for solving this problem.

Facilitate a brainstorming session with children to discuss how new ideas can emerge. Inspire them to design a new product or service to address the identified problem or meet a need. Encourage them to develop original ideas and utilize their creativity.

## 2. Discovering Materials 5 dk

Place Toyi pieces in the middle of the group and allow children to explore them along with the upcycling materials.

## 3. Making the Toys 25 dk

Encourage teamwork and sharing throughout the workshop, but also let each child create their own design. Help them with the connections if they need it.

## 4. Sharing 20 dk

Encourage children to present their designs to others. To them improve their skills in presenting their projects effectively help for. Listening to other children's ideas and encourage them to give feedback.

# NOTES

## Tips to Facilitator

Use your creativity to make a microphone with Toyi pieces to encourage children to share the toys they make :)



# GET INSPIRED



**Forest Fire  
Fighting Helicopter**



**Bird Nest**

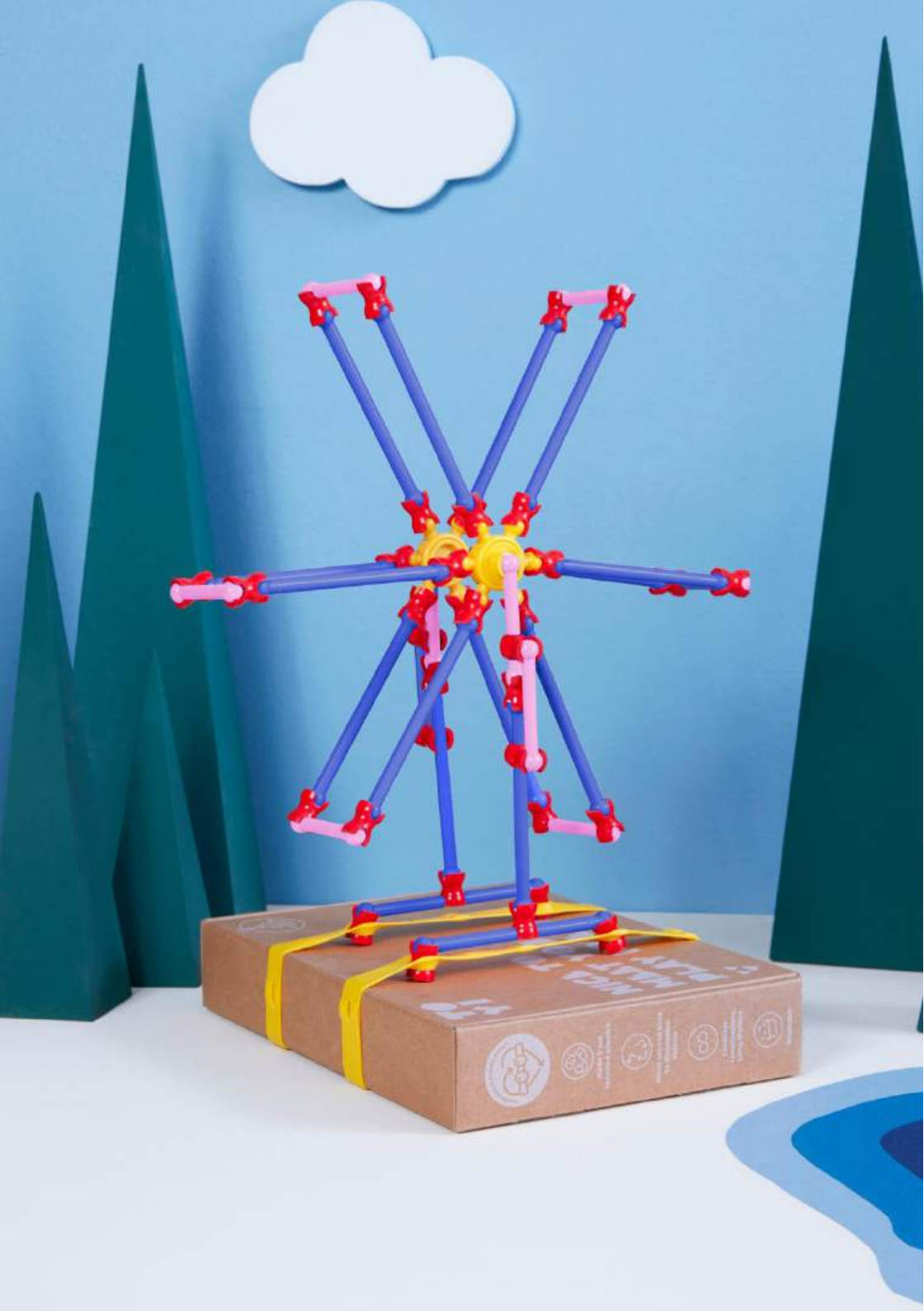


**Ocean Cleaning  
Robot**



**Wind Powered  
Ferris Wheel**







TOYI