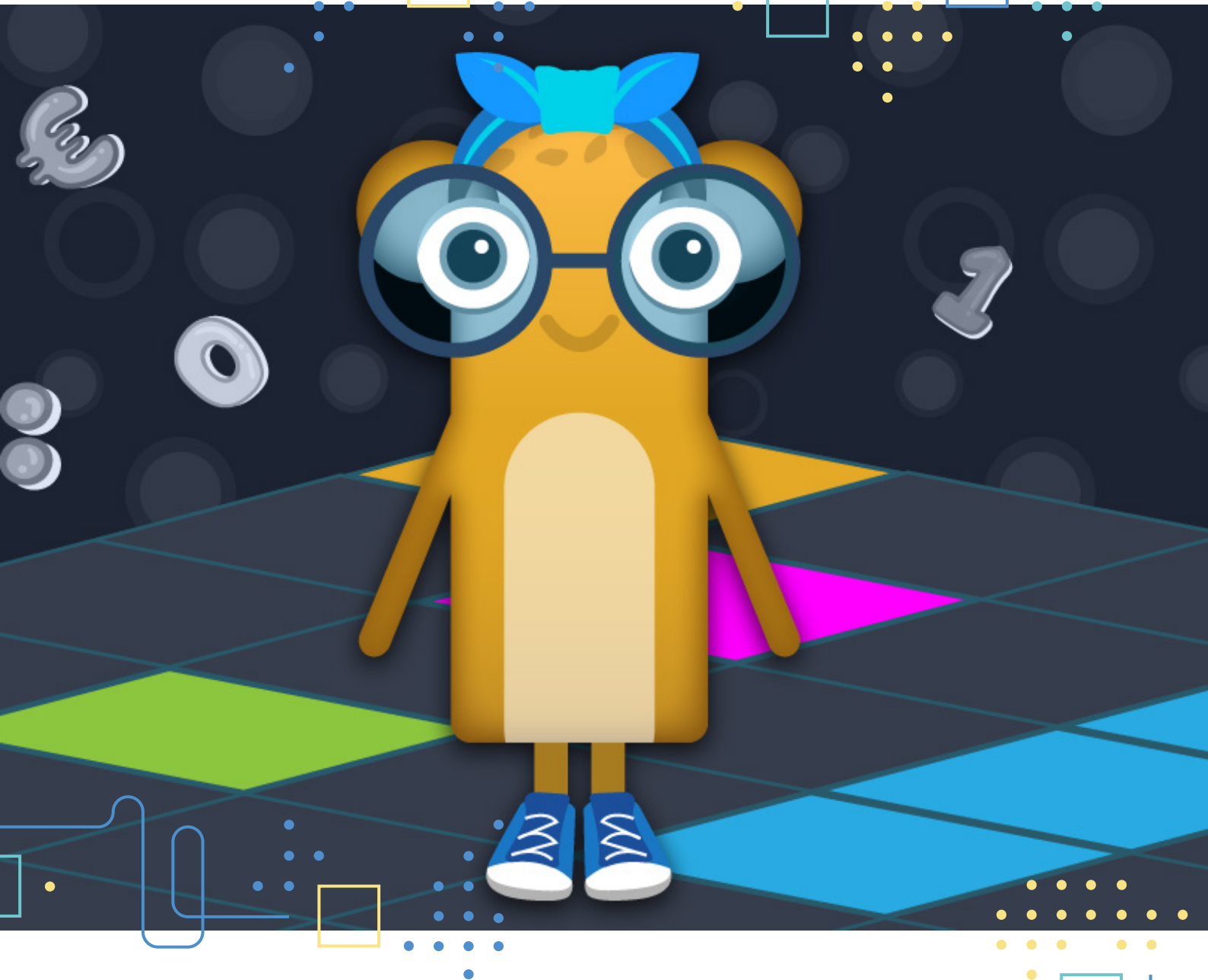


Guide to interactive applications

# Code with Ava in kindergarten

Games with coding on the interactive floor

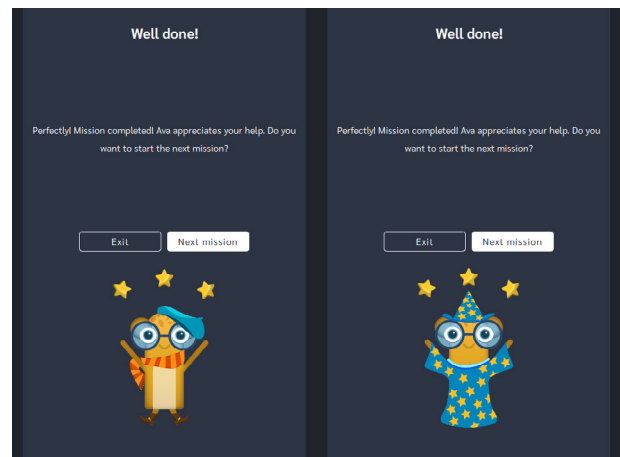
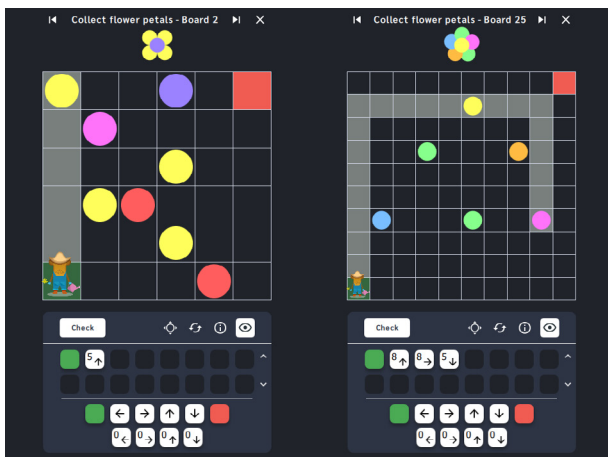
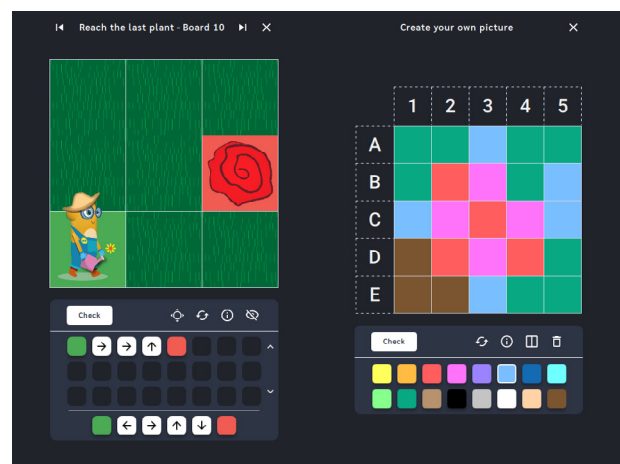
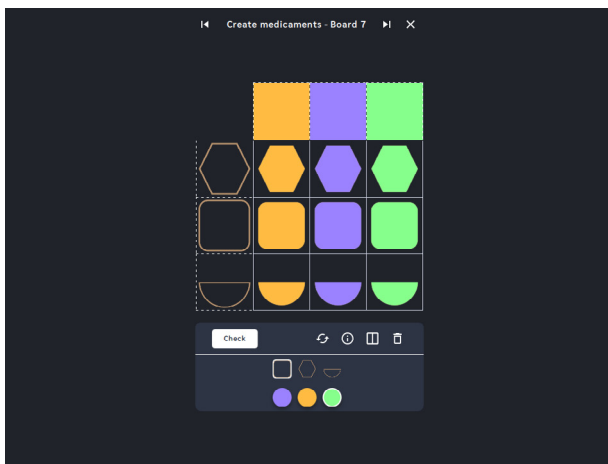
Designer: LavaVision





## Meet Ava

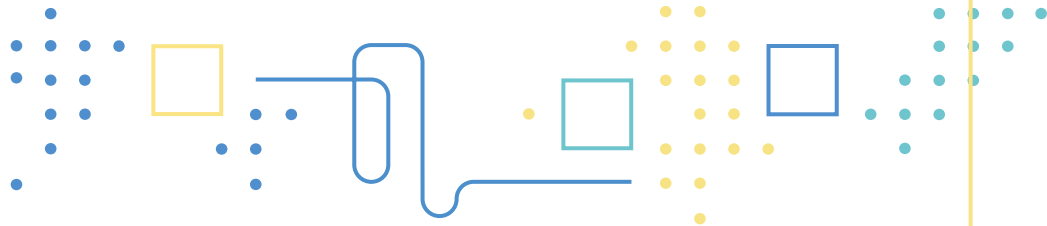
Help Ava find lost treasures, collect fruits and vegetables in the garden, paint colorful mosaics for the inhabitants of the Funn Galaxy! Ava, traveling between the planets of the Funn Galaxy, carries out many missions for keeping safe and peaceful lives of its inhabitants. Accompanying Ava is great fun and an opportunity to take your first steps in the world of coding. Interactive coding boards stimulate the development of visual perception, spatial orientation, logical and algorithmic thinking. Code with Ava in kindergarten is the beginning of an adventure with coding for the youngest.



## Who is it for?

The „Code with Ava in kindergarten” application package can complement the daily educational activities for preschool children , as well as corrective and compensatory, revalidation and didactic classes. It can also make the time spent by children in school day-care centers, educational institutions, institutions organizing children’s free time more attractive.

The applications are dedicated in particular to coding classes for the youngest preschool children - 5-7 years old. For individual and group work.

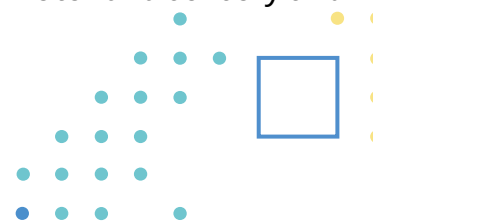


## What are the objectives of these activities?

Fictionalized applications create a play package full of adventures and interesting missions to perform. The games and activities contained therein provide an opportunity to stimulate the development of visual perception, spatial orientation, logical and algorithmic thinking . The aim of the work of specialists creating this package was to create a tool that, by using boards with a grid of fields (from 3x3 to 10x10), will enable shaping the skills of coding and algorithms in early childhood education .

Children can practice sequencing, pattern recognition, problem solving, and creative thinking. The ability to track the sequence being executed on the board makes it easier to understand and detect any mistakes in the code made up of a sequence of directional arrows. The applications support the development of mathematical skills, such as recognizing digits in ascending and descending order, learning a simple coordinate system, eg A-B-Cx1-2-3; language skills, such as systematic reading of letters, recognizing letters, putting them into words, reading them. Depending on the application, students may search for a single solution or come up with their own paths and patterns. They can also observe and repeat the sequence of symbols, or arrange the route themselves or create a graphic drawing. Code with Ava in kindergarten is a multifunctional tool supporting learning the basics of coding.

The authors of the package tried to respond to the developmental needs of preschool and school children, focusing primarily on supporting motor and sensory skills during organized and safe games and plays .



## What is inside?

**7 thematic sections - 26 applications - 768 interactive coding boards**

The „Code with Ava in Kindergarten” Coding Basics course contains **twenty-six applications** from the thematic sections of the extended „Code with Ava” course: Graphical Coding, Sequences, Mazes, Routing, Letters and Words, Numbers and Actions, Co-ordinates. The applications have been selected in order to work with the youngest preschool children.

Each application is a **set of properly designed interactive coding boards**. The board consists of a grid of fields (3x3, 6x6, 10x10) and a tool with which the child solves the task to complete the mission of Ava’s heroine, e.g. designs the route with arrows, creates colorful pictures by applying colors to the grid, marks the boxes directly on the grid. board.

The applications use **the ability to vary the level of difficulty** by the size of the boards used, the length of the mapped routes, the complexity of the patterns used, the range of numbers, the number of items to be collected or avoided on the boards. Applications can be divided into two workspaces, so you can work on any two boards simultaneously. It is **a comprehensive tool that supports learning coding and algorithms in early childhood education**.

The protagonist of the course is Ava, a brave traveler who traverses the planets in the Funn Galaxy, who carries out **many missions** for the sake of the peaceful life of its inhabitants. Ava has seven planets to visit: Planet of Artists, Explorers, Alchemists, Gardeners, Wild West Planet, Librarians and Scientists. Each of them has a lot of different tasks to perform that help children understand and master the basics of coding step by step.

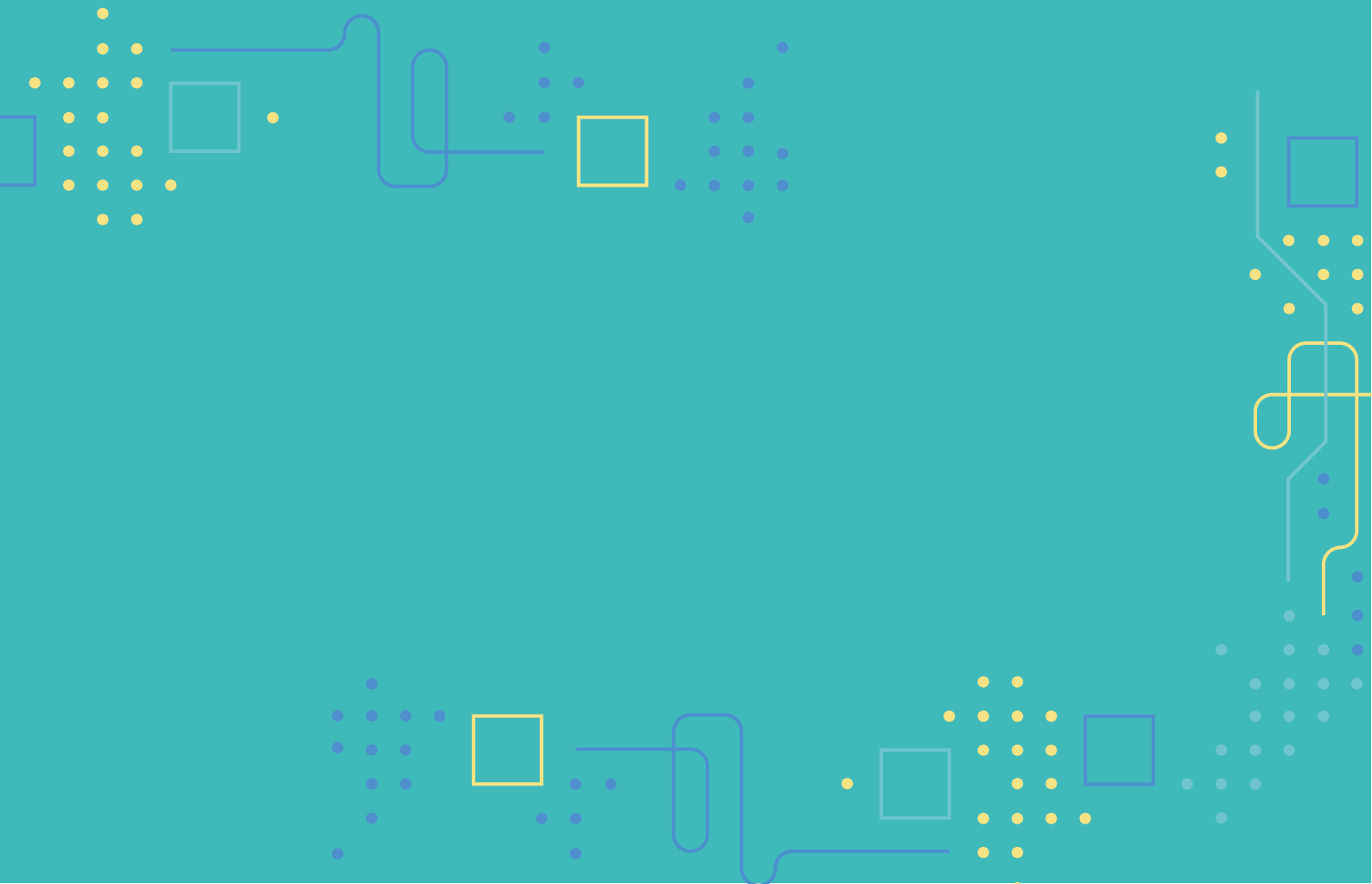
The package includes two **applications for creative work** - graphic design of any pictures (Create your own picture) and paths (Create your own route)!

## Child development support

The applications included in the package have been developed in cooperation with teachers and psychologists. Interactive games and exercises can perfectly enrich group class scenarios as well as individual exercises.

With the course Code with Ava in kindergarten you can practice:

- visual perception;
- spatial orientation;
- eye-hand coordination;
- classification of items;
- patterns recognition;
- creation sequences of commands to control objects;
- reading skills, systematic familiarization with letters;
- the ability to recognize popular species of plants and animals;
- the ability to understand basic mathematical concepts;
- independent and creative thinking.

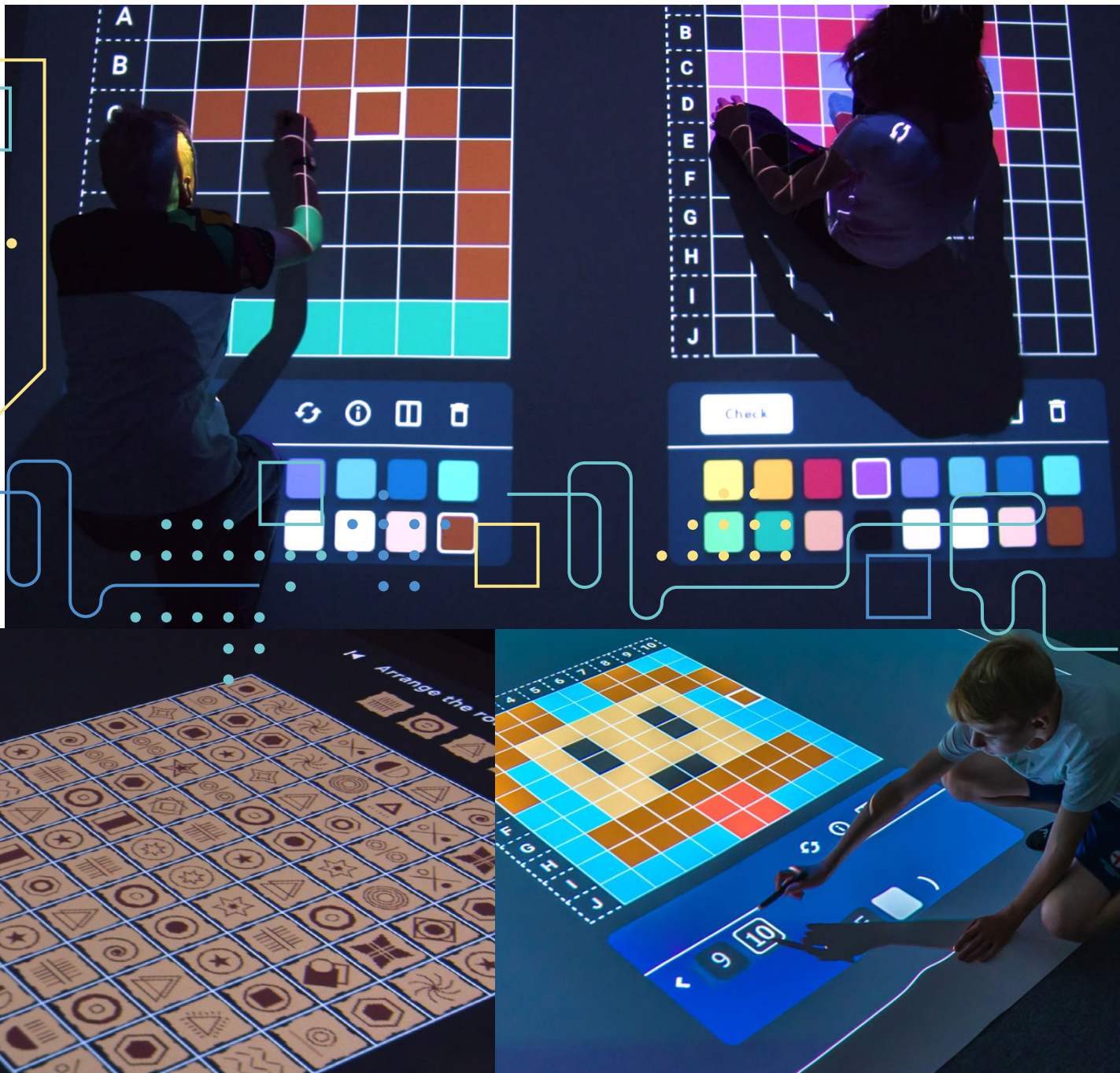


## Fun with the Code with Ava in Kindergarten on the Motioncube interactive floor

- You can run the Code with Ava in Kindergarten games on the interactive floor
- with Motioncube Player available on [www.motioncube.io](http://www.motioncube.io)

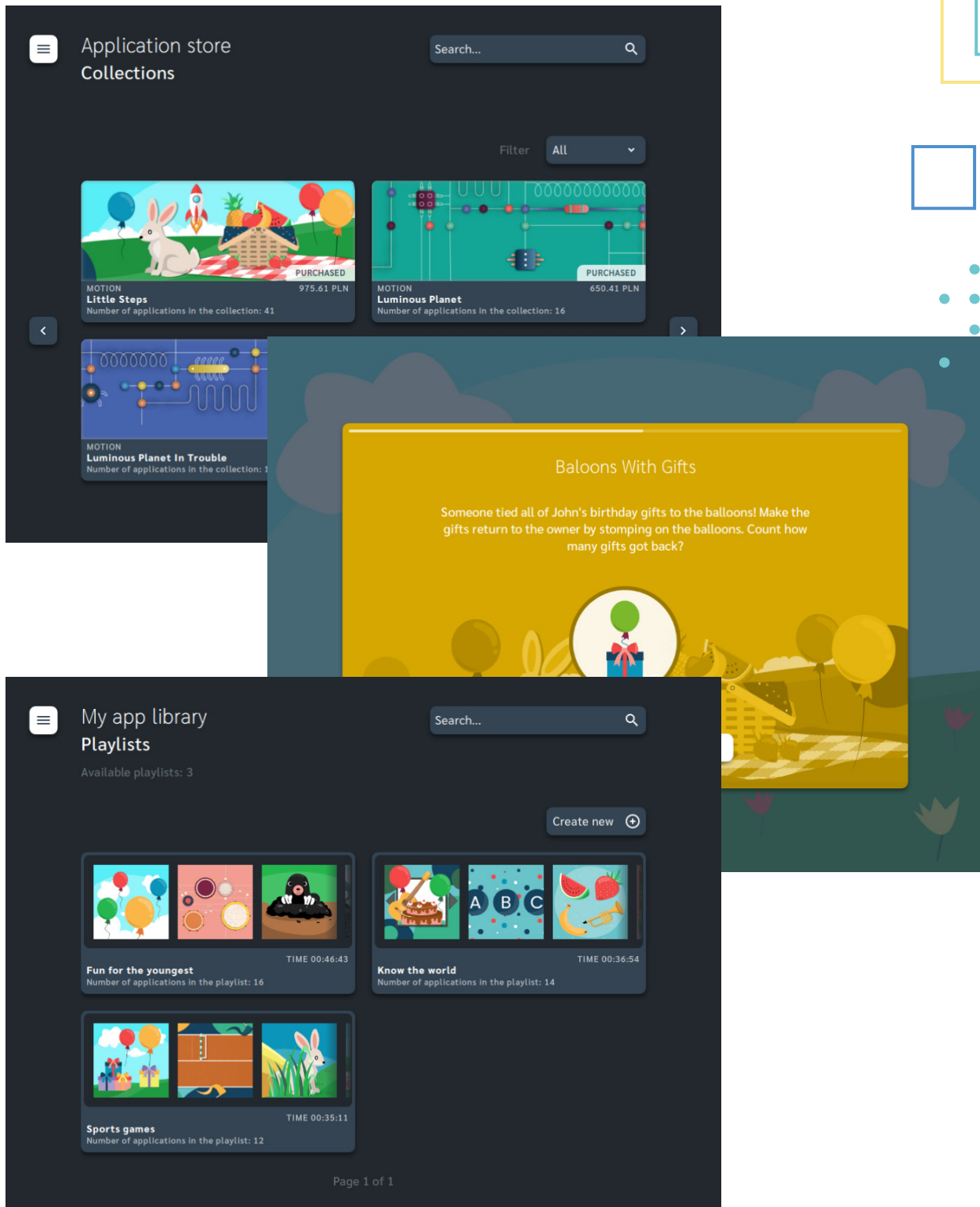
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See video



# Motioncube Player

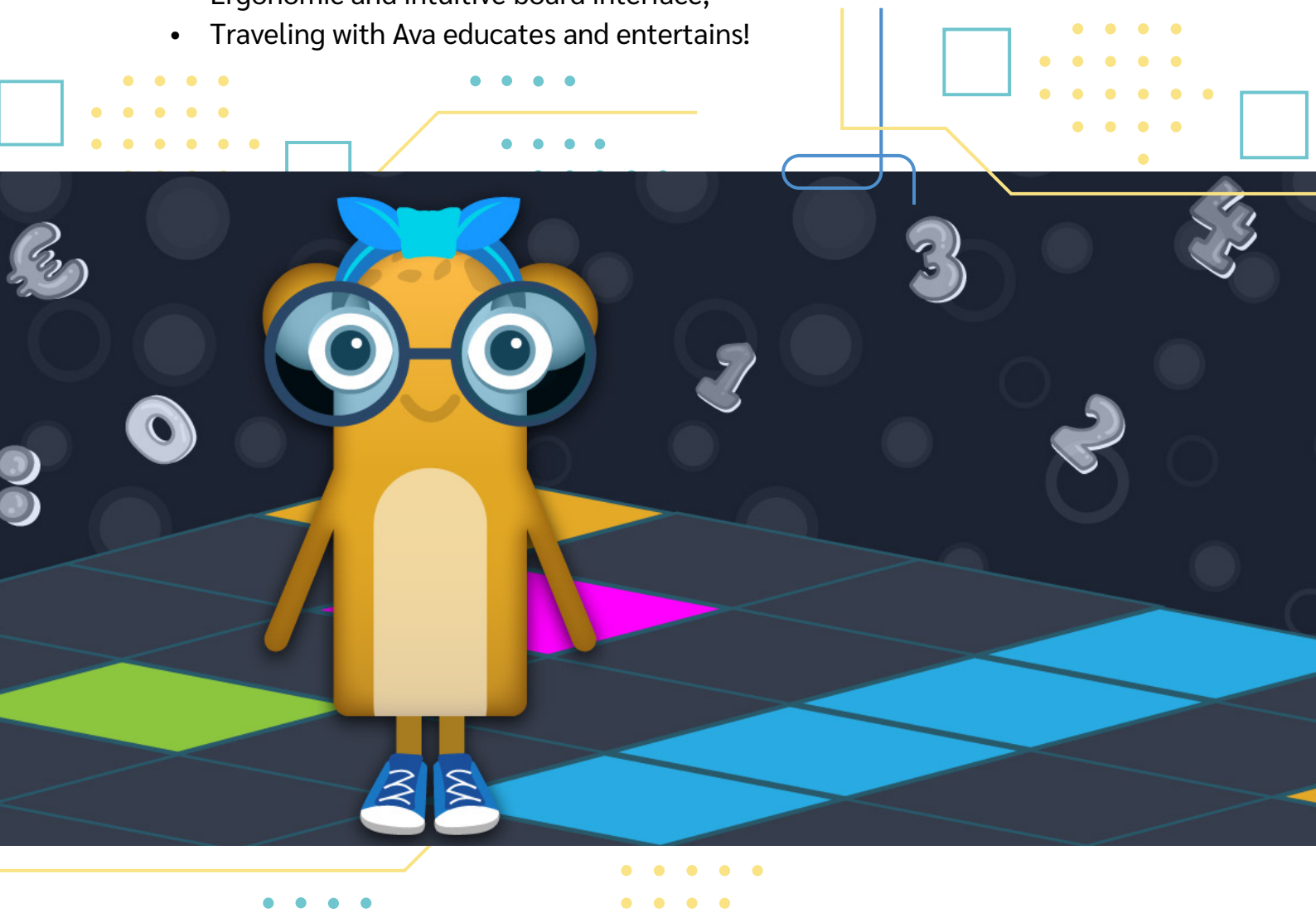
With Motioncube Player, you can easily manage your App Library, update your app collections, run playlists, and access a wide offer of educational interactive games.





## Why choose Code with Ava in kindergarten?

- It is a collection of exercises and games which, by adjusting the appropriate level, become a carefully selected didactic means;
- Introduce the youngest to the world of coding in an interesting and interactive way;
- Support the development of logical and analytical thinking in children in a large, graphically attractive format;
- Tested and recommended by children and teachers;
- Ergonomic and intuitive board interface;
- Traveling with Ava educates and entertains!



Code with me in the kindergarten!

[motioncube.io](https://motioncube.io)

**Code With Ava in kindergarten consists of 26 applications divided into 7 thematic sections.**

## **Section I - Graphical coding**

Work is in full swing on the Planet of Artists. That is where the Funn Galaxies get paintings, mosaics and patterned fabrics that decorate their cozy little houses. Create colorful pictures with Ava! Thanks to the Domain with Ava, you will create visual perception, orient hand-eye coordination, orientation spatial orientation.

**Number of applications: 2**

## **Section II - Encrypted routes**

The travelers who traversed the lands of the Planet of Explorers in the past have left their maps behind. Help Avie recreate blurred paths and forge new paths. Thanks to this, you will improve visual perception and logical thinking, as well as develop the ability to classify objects, create patterns and patterns.

**Number of applications: 4**

## **Section III - Escapes from mazes**

On the planet of the Wild West, Ava acts as the sheriff. Take on the challenges facing the law enforcement officer and help Ava get out of the mazes. By defining directions, by locating items on the board, you will support the development of spatial orientation and the ability to create a sequence of commands.

**Number of applications: 5**

## **Section IV - Garden paths**

The inhabitants of Planet Ogródników cultivate plants. Help Ava collect flowers, vegetables and fruits so that nobody's tummy rumbles all winter long! By arranging the route from blocks, you will shape the ability to create algorithms and command sequences. You can also develop the ability to recognize plants and animals.

**Number of applications: 7**

## **Section V - Word coding**

Planet Librarians is famous for its great Archive, in which each word is assigned a code. Help Avie in this tedious job! By reading and recording the route with arrow blocks, synthesizing and auditory analysis of words, you will improve your spatial orientation and develop your reading skills.

**Number of applications: 4**

## **Section VI - Numbered paths**

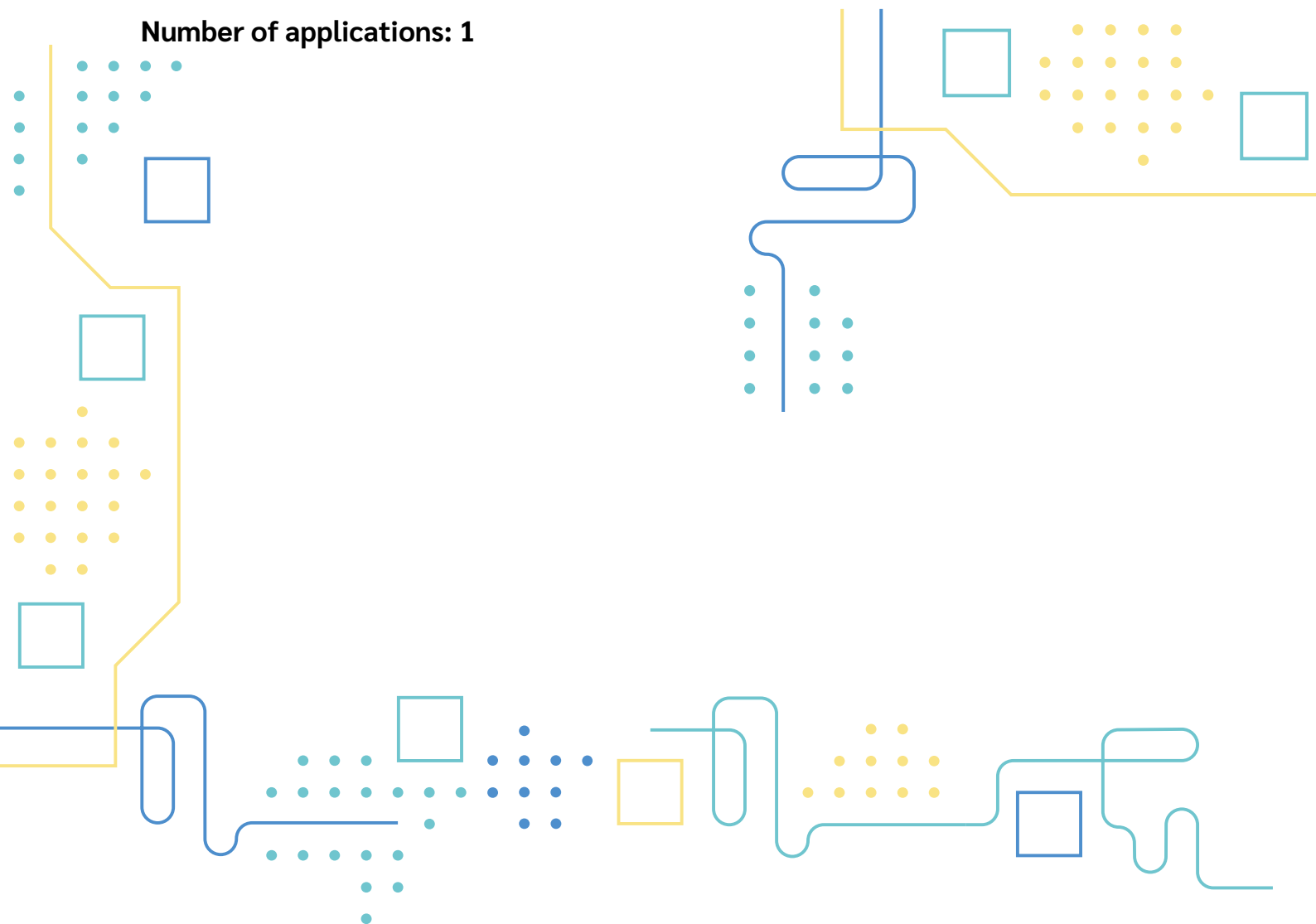
On the Scientist Planet, many paths have been encrypted. Help Avie to find routes encoded with numbers and math. By organizing the numbers and results of activities, arranging your route with arrow blocks, you will shape your ability to understand basic mathematical concepts and operations.

**Number of applications: 3**

## Section VII - Alchemists coordinates

The Planet of the Alchemists produces medicines for all the inhabitants of the Funn Galaxy. Help Avie create them according to complex recipes. By marking points on the board, reading their position in a coordinate system, you will shape visual perception and develop spatial orientation.

**Number of applications: 1**



## Section I - Graphical coding



### Complete Symmetrical Pictures

Complete the pattern on the fabric following its mirror image.



### Copy Pictures

Help Ava complete the colourful boards according to the given pattern.

## Section II - Encrypted routes



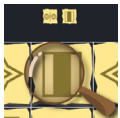
### Find the end of the route

Follow the sequence of symbols and indicate where it leads.



### Create your own route

Create new paths using the sequences of ancient symbols.



### Arrange the route on the map

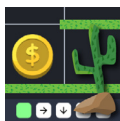
Recognize the sequence of symbols and arrange a route following the pattern.



### Find the end of the route

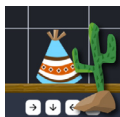
Follow the sequence of symbols and indicate where it leads.

## Section III - Escapes from mazes



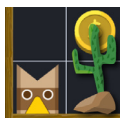
### Collect treasures

Go through all the fields with lost items.



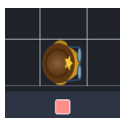
### Avoid traps in the maze

Avoid obstacles on the way!



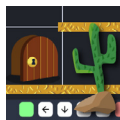
### Find the end of the route

Follow the sequence of symbols and indicate where it leads.



### Find the police station

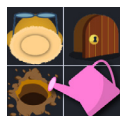
Show Ava the finish line so she can end her daily patrol.



### **Get out of the maze**

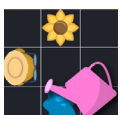
Create an exit instruction from the maze by creating a code from the arrows.

## **Section IV - Garden paths**



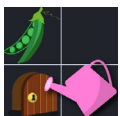
### **Avoid traps in the garden**

Skip all things that are not ripe vegetables or fruit!



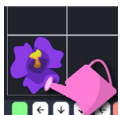
### **Gardening season**

Gather the crops, avoid the obstacles!



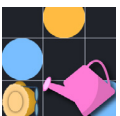
### **Gather specific crops**

Make a route and gather all the flowers, fruit or vegetables!



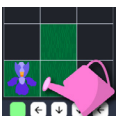
### **Reach the last plant**

Design the way to lead Gardener Ava to her destination!



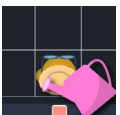
### **Collect flower petals**

Use the arrow blocks to collect the flower petals you need.



### **Collect crops**

Make a path between the beds for Ava to collect all the crops.



### **Where is the gate?**

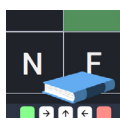
Analyze the code and help Ava find the exit from the garden.

## **Section V - Word coding**



### **Find words**

Find the word on the board.



### **Mark Letters**

Mark on the board with the letters the word highlighted on the empty board.



### Decode words

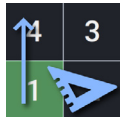
Read the word coded with arrows.



### Encode words

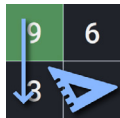
Use the arrows to code the words shown above the board.

## Section VI - Numbered paths



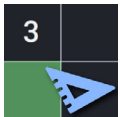
### Numbers go up

Arrange the route from the smallest to the biggest number.



### Numbers go down

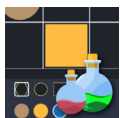
Arrange a code that will lead Ava from the biggest to the smallest number.



### Collect all numbers

Create a route with ordered numbers.

## Section VII - Alchemists coordinates



### Create medicaments

Match ingredients with specific colours.

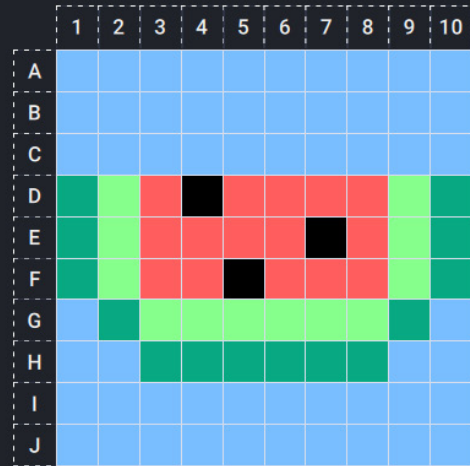
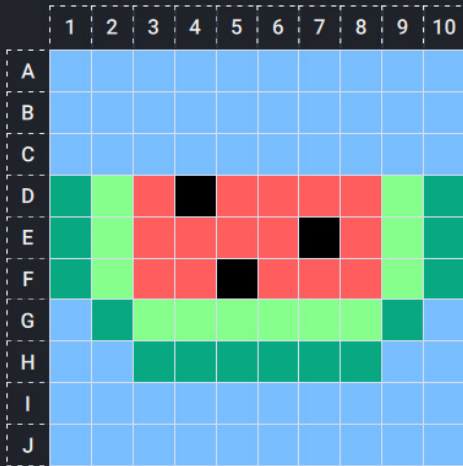


Reach the last plant - Board 12
Create your own picture

|   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| A |   |   |   |   |   |
| B |   |   |   |   |   |
| C |   |   |   |   |   |
| D |   |   |   |   |   |
| E |   |   |   |   |   |

Control panel for 'Create your own picture' with a 'Check' button, a refresh icon, and a color palette with 16 color swatches.

Collect flower petals - Board 4
Collect flower petals - Board 18



Check

↺ ⓘ 📏 🗑️

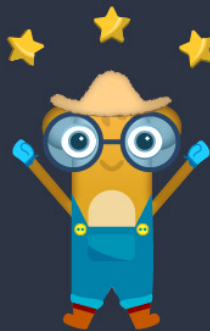
■ ■ ■ ■ ■

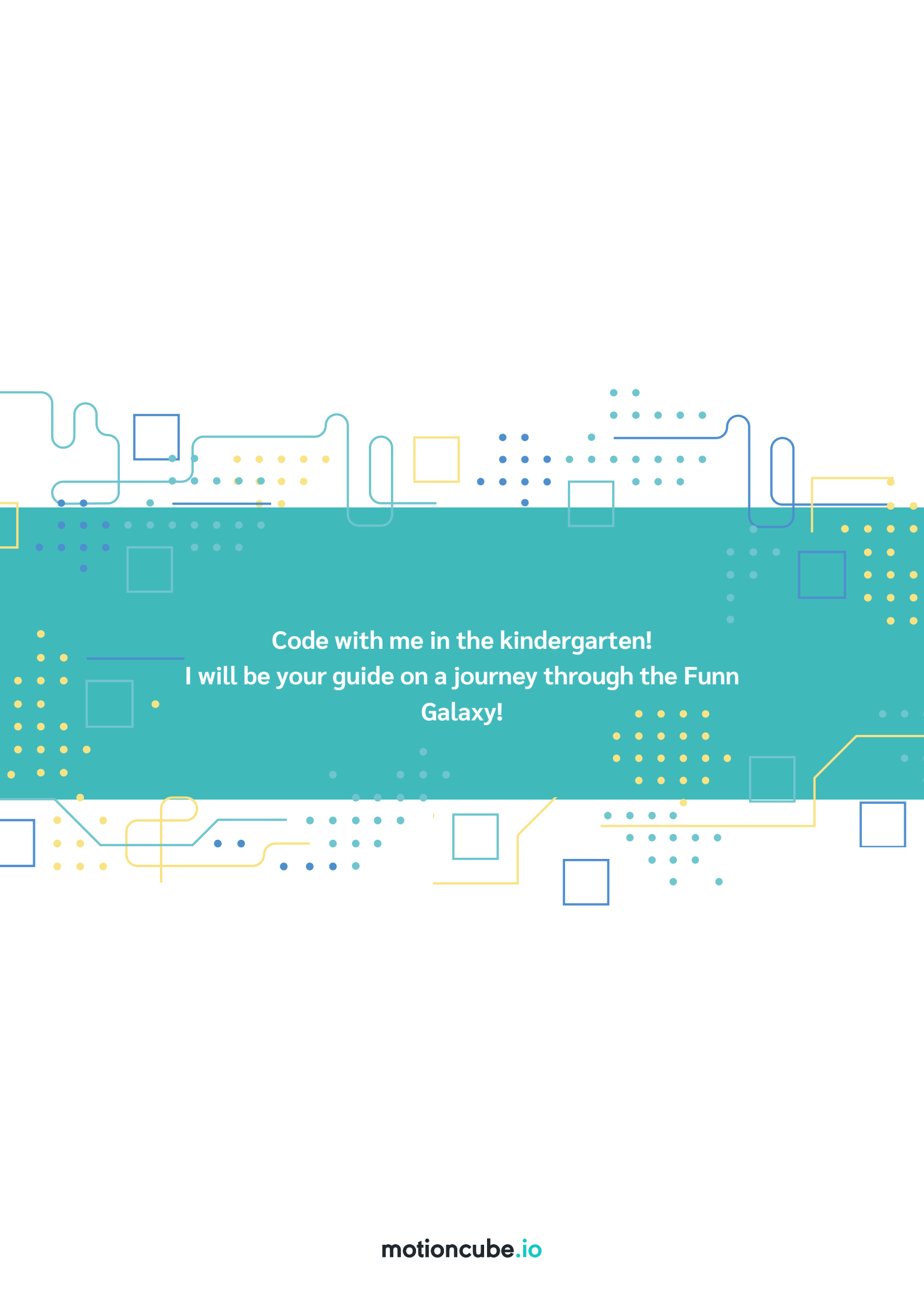
Well done!

Perfectly! Mission completed! Ava appreciates your help. Do you want to start the next mission?

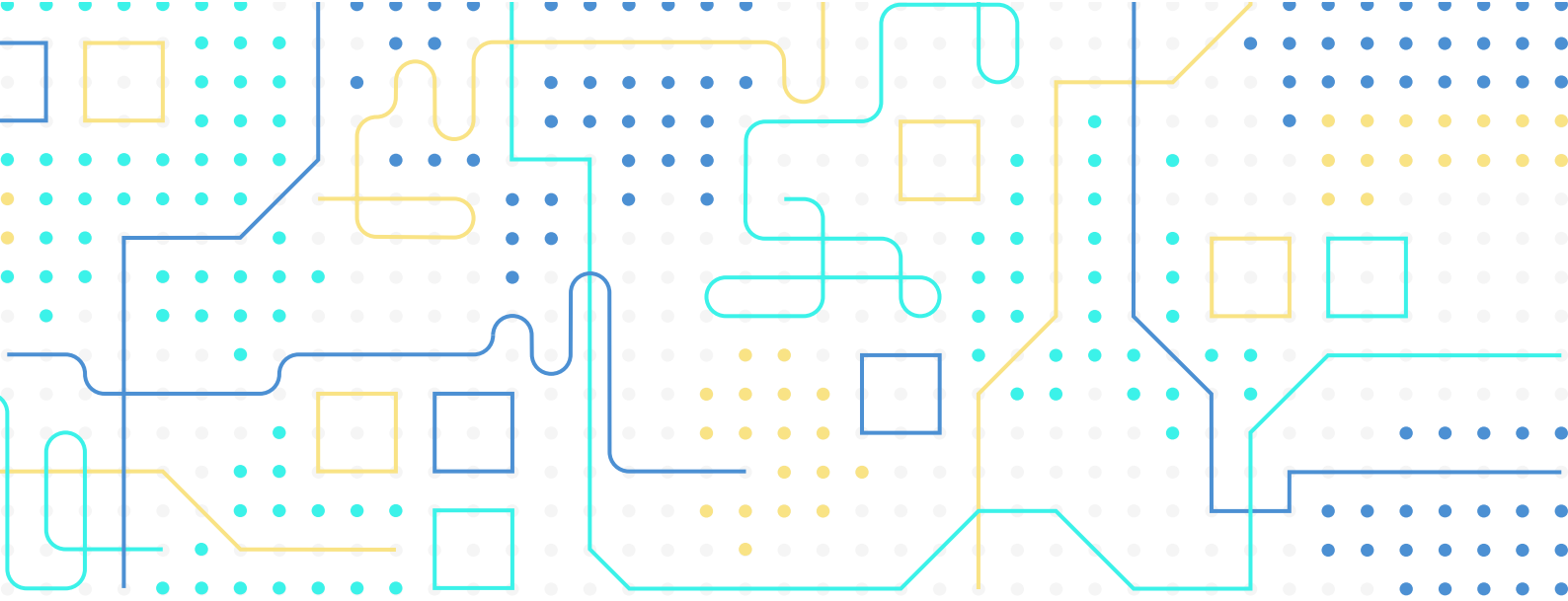
Exit

Next mission



The background features a central teal horizontal band. Above and below this band are decorative patterns consisting of thin blue and yellow lines, squares, and clusters of small dots in blue and yellow. The overall aesthetic is clean, modern, and tech-oriented.

**Code with me in the kindergarten!**  
**I will be your guide on a journey through the Funn**  
**Galaxy!**



Check more on  
[www.motioncube.io](http://www.motioncube.io)

