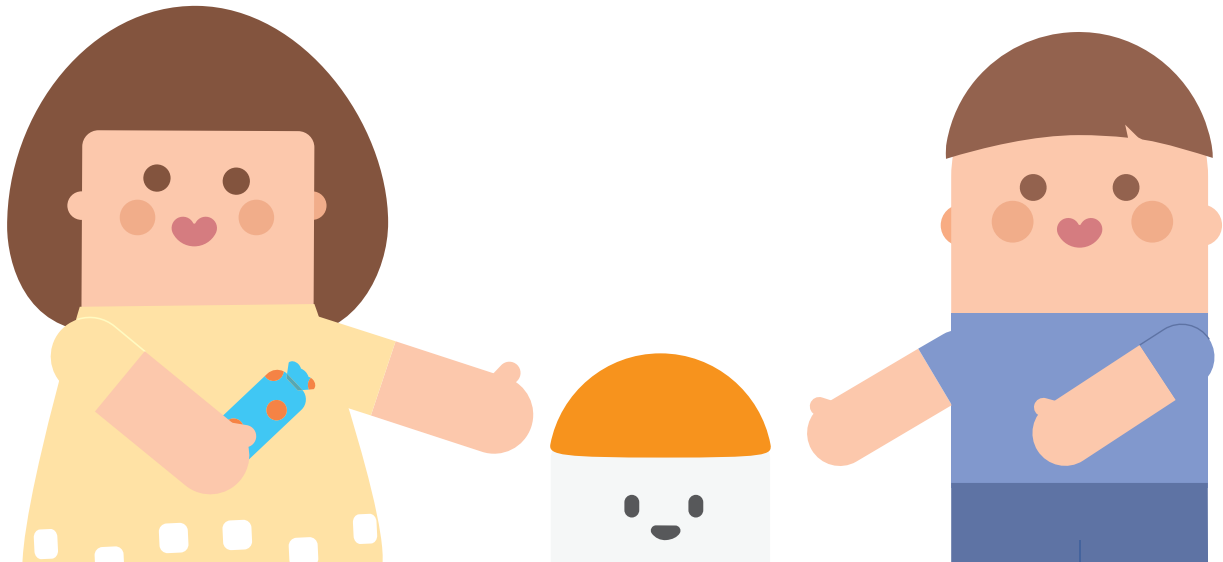


GAME BOOK



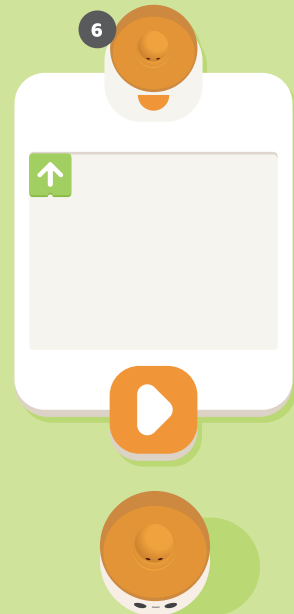
Give me a lever long enough
and a fulcrum on which to place
it, and I shall move the world.

-Archimedes

① Candy Party



Candy Party is a game full of fun and suspense, testing children's ability to observe and react quickly. Children need to target a certain candy on the map with three dices determining its color, shape, and decorative pattern. Besides, the difficulty of the programming task can be adjusted according to the number of dices. Therefore, the game is suitable for different types of children.



1

Map

2

Gold Stickers

3

Dices

4

Flags

5

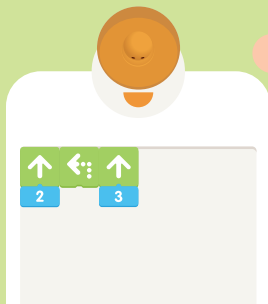
Colored Pens

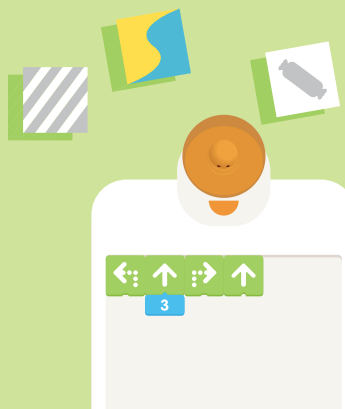
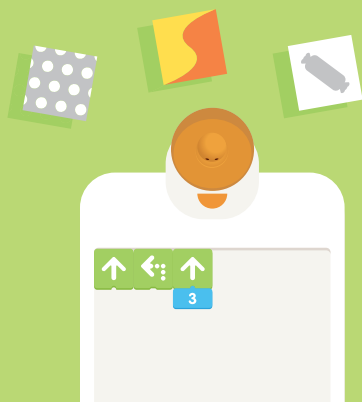
6

Command Tower
Control Board
MatataBot & Coding Blocks

01 GAME

- 1 Place MatataBot on the map at any position with an arrow. Please keep the eyes in line with the arrow direction.
- 2 Parents or children roll three dices and integrate the information of the dices to locate the target candy with a flag.
- 3 Create a program to make MatataBot move from the starting point to the flag.
- 4 Each time MatataBot find a candy, a gold coin sticker will be got.

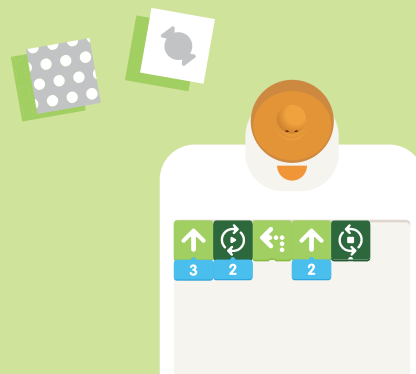




02 GAME

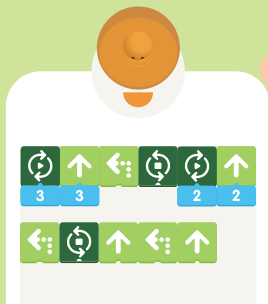
- 1 Place MatataBot on the map at any position with an arrow. Please keep the eyes in line with the arrow direction.
- 2 Parents or children roll two dices and integrate the information of the dices to locate the target candy with a flag.
- 3 Create a program to make MatataBot move from the starting point to the flag.
- 4 Each time MatataBot find a candy, a gold coin sticker will be got.

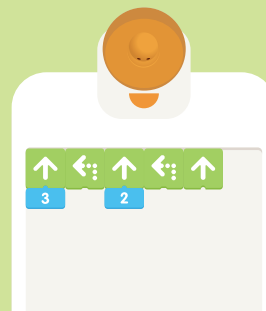
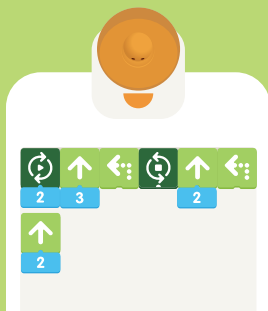




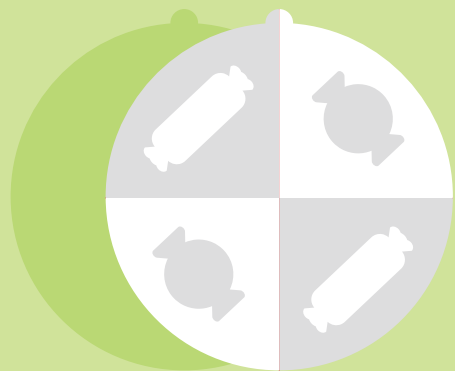
03 GAME

- 1 Place MatataBot on the map at any position with an arrow. Please keep the eyes in line with the arrow direction.
- 2 Parents or children roll a dice to find out all the target candies and locate them with colored pen.
- 3 Create a program to let MatataBot find all target candies at one time.
- 4 Each time MatataBot find a candy, a gold coin sticker will be got.

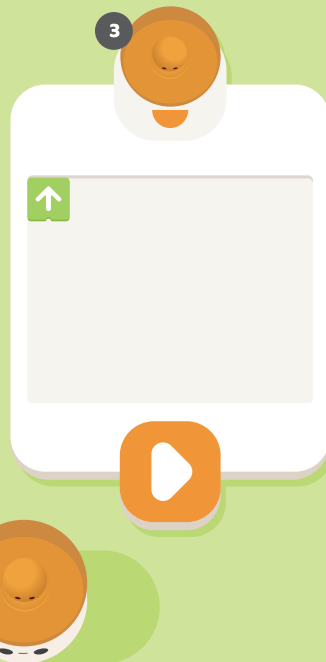




② Candy Spin Wheel



Candy Spin Wheel is the advanced version of Candy Party, testing children's observation ability, quick response ability, and their rotation ability. The goal of this game is to correctly match each grid of the spin wheel and the candies on the map.



1

Map

2

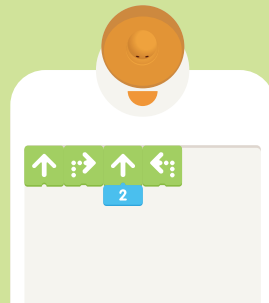
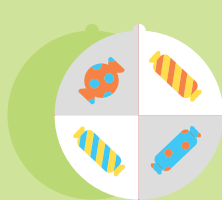
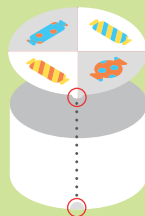
Candy Spin Wheels

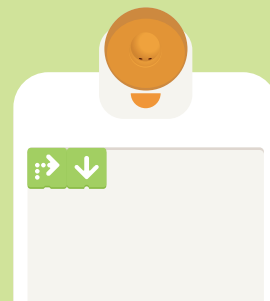
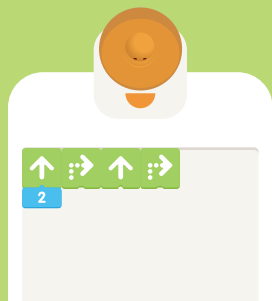
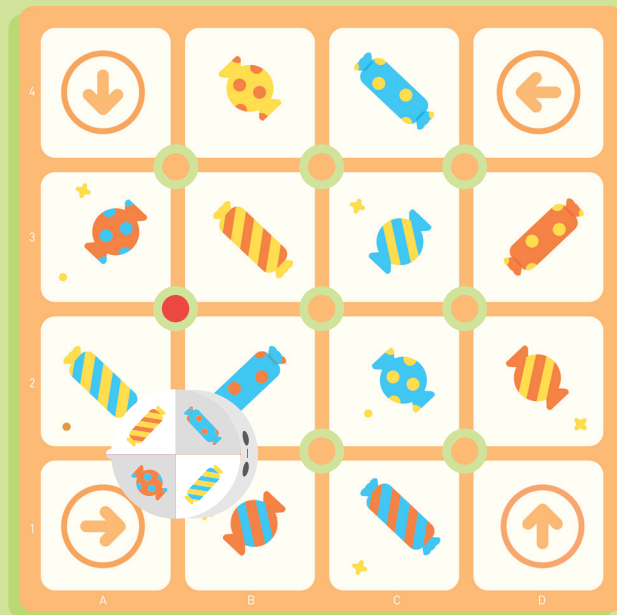
3

Command Tower
Control Board
MatataBot & Coding Blocks


01 GAME

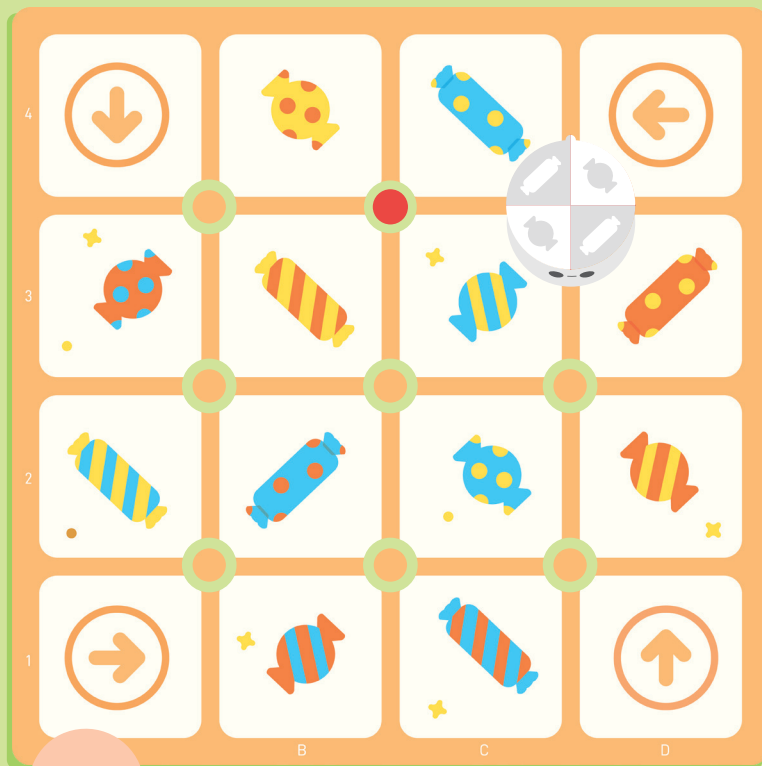
- 1 Choose a one-star difficulty spin wheel card and attach it on the top of MatataBot's head. The dividing line needs to be aligned with gray semicircle on the back of MatataBot.
- 2 Select any intersection point on the map as the starting point.
- 3 Find the intersection point on the map that corresponds to the 🍬 and mark it with a colored pen.
- 4 Program MatataBot to go from the starting point to the marking point and ensure that the card and the candy correspond correctly.

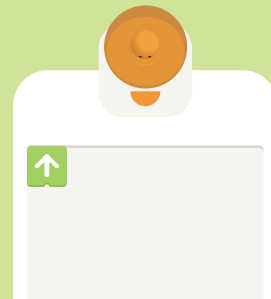
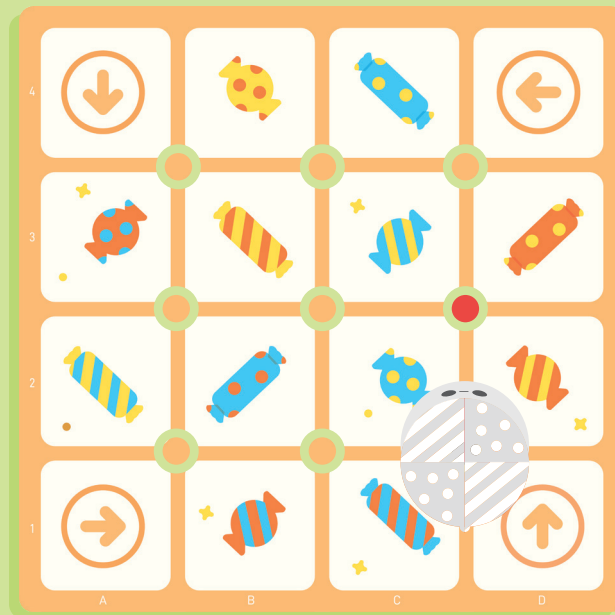
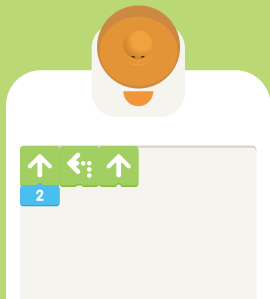
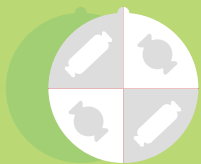
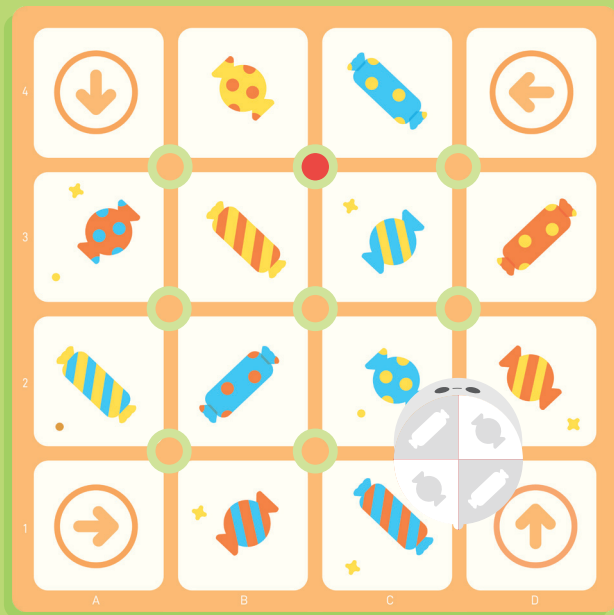




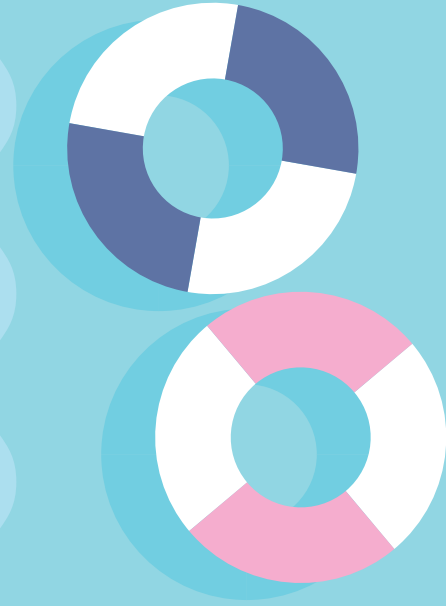
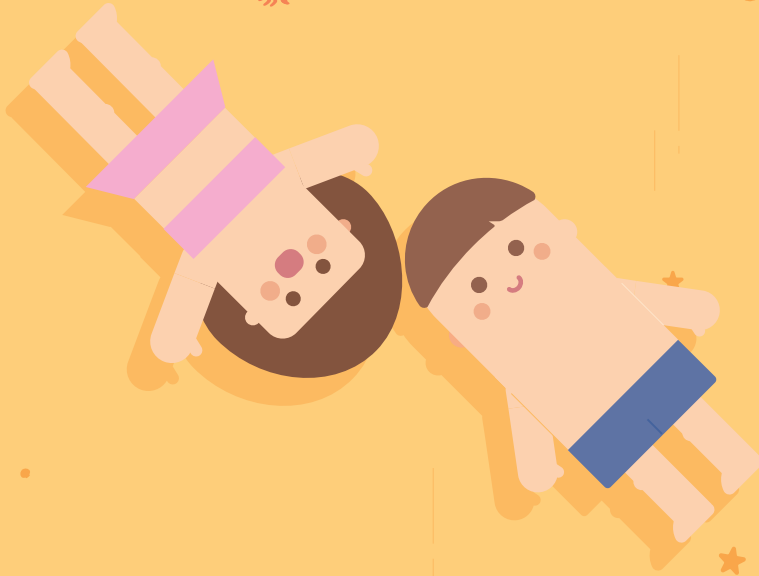
02 GAME

- 1 Choose a two-star difficulty spin wheel card and attach it on the top of MatataBot's head. The dividing line needs to be aligned with gray semicircle on the back of MatataBot.
- 2 Select any intersection point on the map as the starting point.
- 3 Find the intersection point on the map that corresponds to the  and mark it with a colored pen.
- 4 Create a program to let MatataBot go from the starting position to the marking point and ensure that the card and the candy correspond correctly.

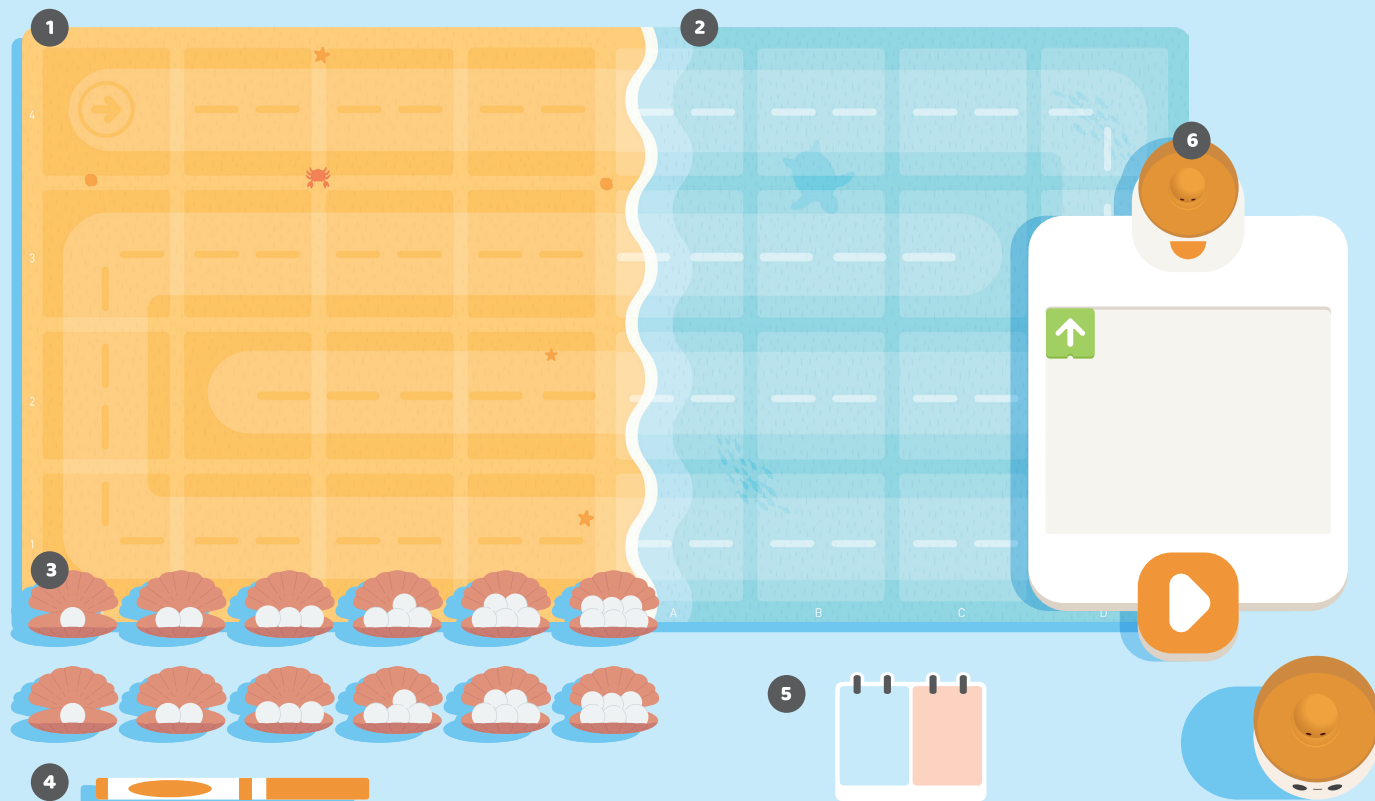




3 Beach Shell Collection



Beach Shell Collection game map is composed of two 4*4 maps. Matatalab Coding Set Home Edition can be used by single or multi-player on a rotating basis to start the game. Children need to program to collect as many shells on the map as possible and win with largest number of pearls. This game tests children's ability to combine motion coding blocks, number coding blocks and loop coding blocks, and their mathematical thinking ability.



①
Beach Map

②
Sea Map

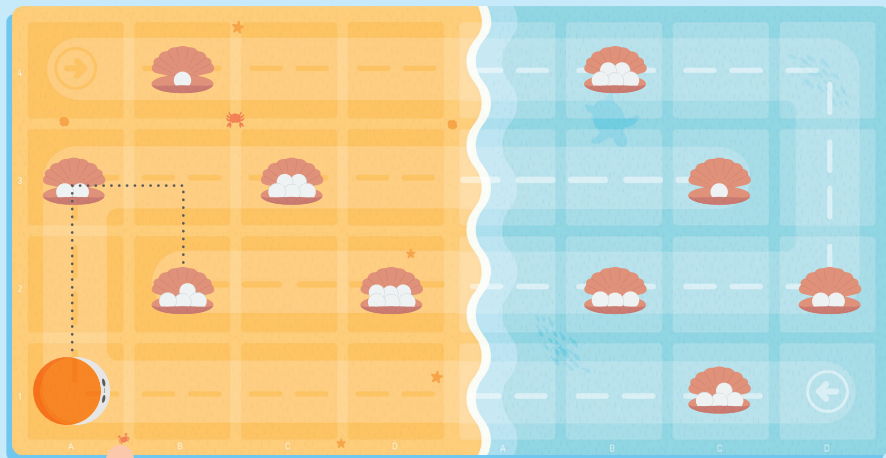
③
Shell Stickers

④
Colored Pens

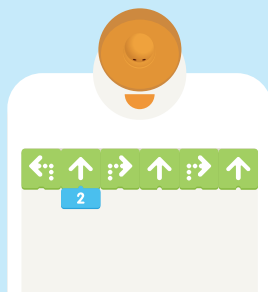
⑤
Scoreboard

⑥
Command Tower
Control Board
MatataBot & Coding Blocks

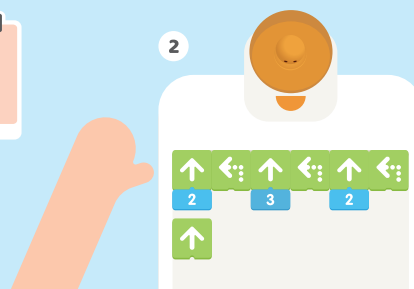
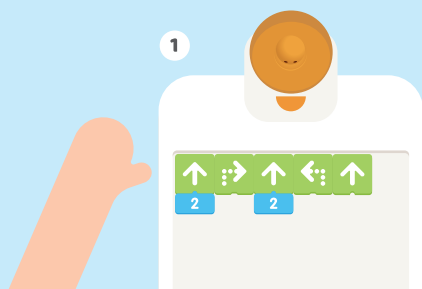
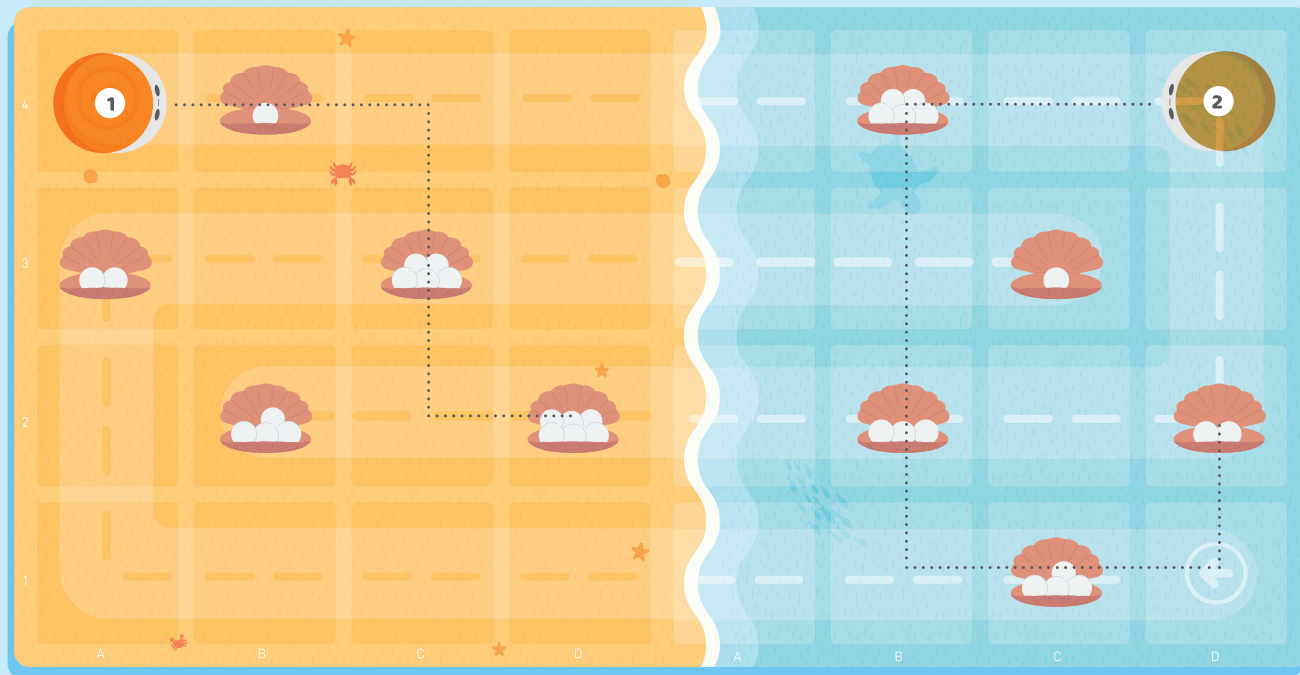
01 GAME



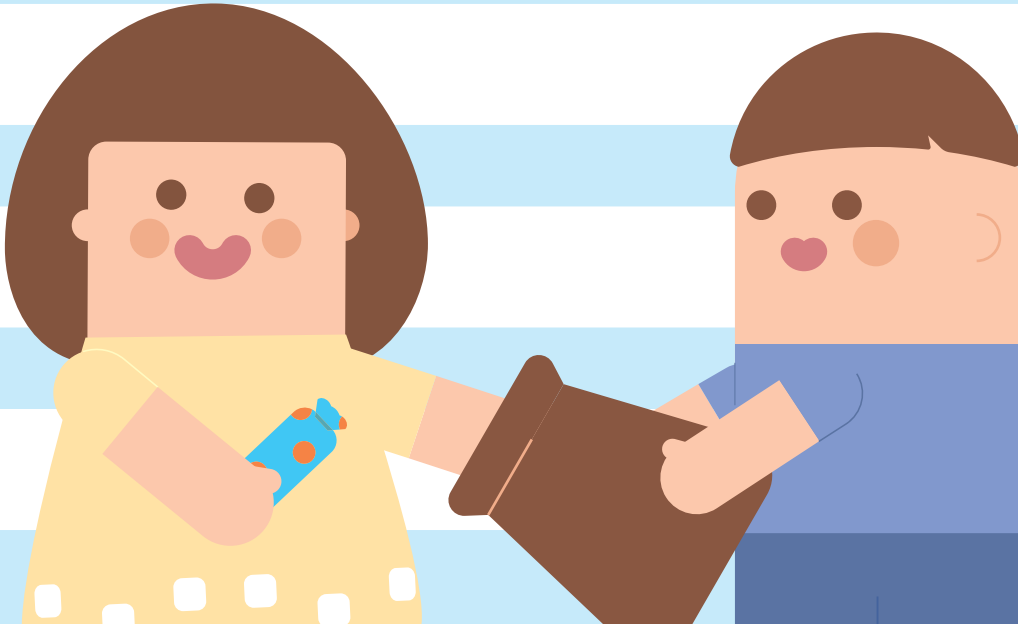
$$\begin{array}{c} \text{Shell with 2 pearls} \\ 2 \end{array} + \begin{array}{c} \text{Shell with 4 pearls} \\ 4 \end{array} = \begin{array}{|c|c|} \hline 6 & \\ \hline \end{array}$$



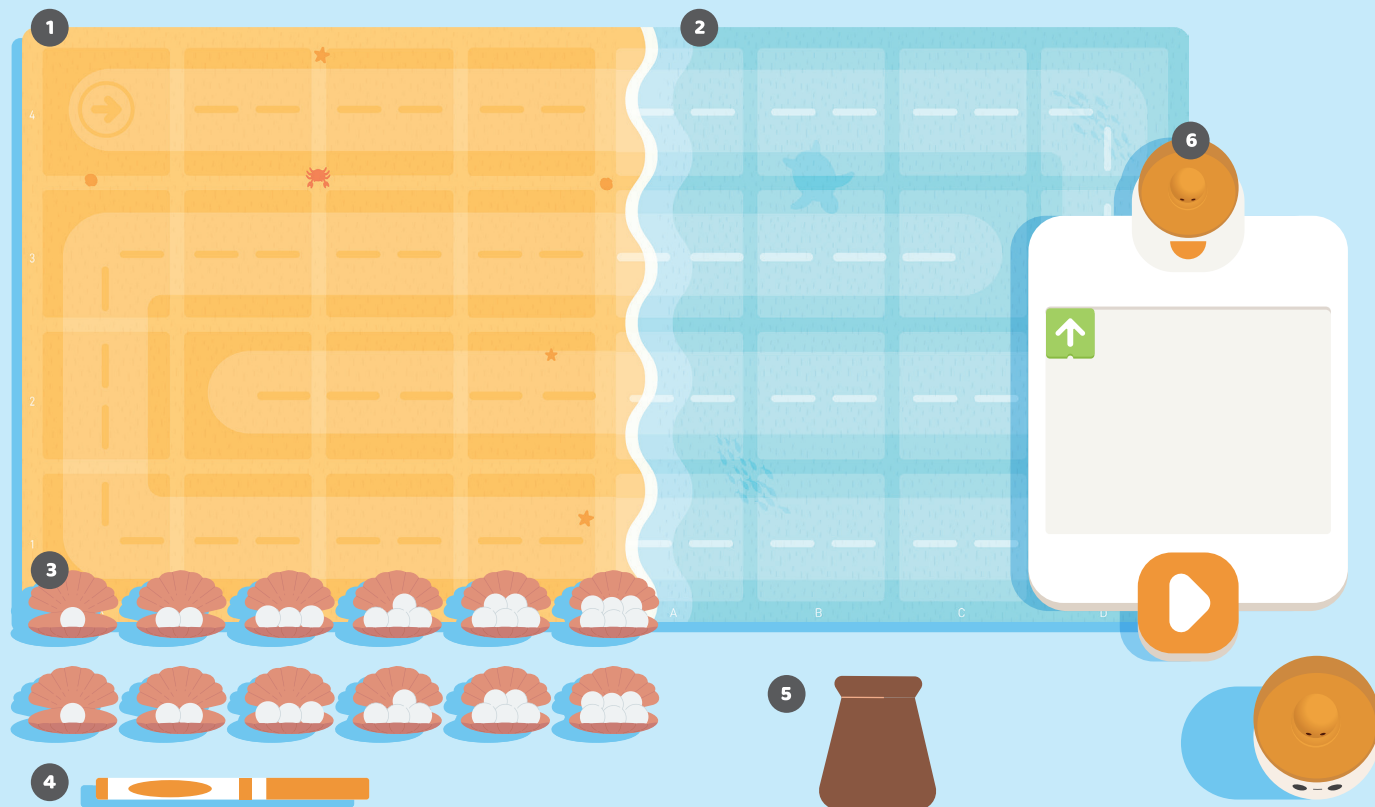
- 1 Attach the shell stickers randomly on the map grid.
- 2 Select any of the four corners of the map as the starting point for MatataBot.
- 3 Collect as many shells as possible through programming.
- 4 Add up the number of pearls in the collected shells and record the total on the scoreboard.
- 5 In multiplayer games, choose multiple starting points, take turns to program and score.
- 6 If the MatataBot is out of bounds due to a programming error during the game, the program should be deemed invalidated and the child should return the shells acquired from that programming before it is the next child's turn. After all shells on the map are collected, the game ends, and the child with the most pearls wins.



④ Bag Programming



Bag Programming is a multi-player game where each player takes turn to collect shells using Matatalab Coding Set Home Edition. Children need to take turns to randomly pick 4 coding blocks from the bag to create a shell-collection program. When the shells on the map are all collected, the round is over and the one with the most pearls wins. This game tests children's algorithm thinking, the ability to use various programming methods, and their mathematical thinking ability. In this game left/right turn coding blocks and move backward coding blocks are the trick to winning.



①
Beach Map

②
Sea Map

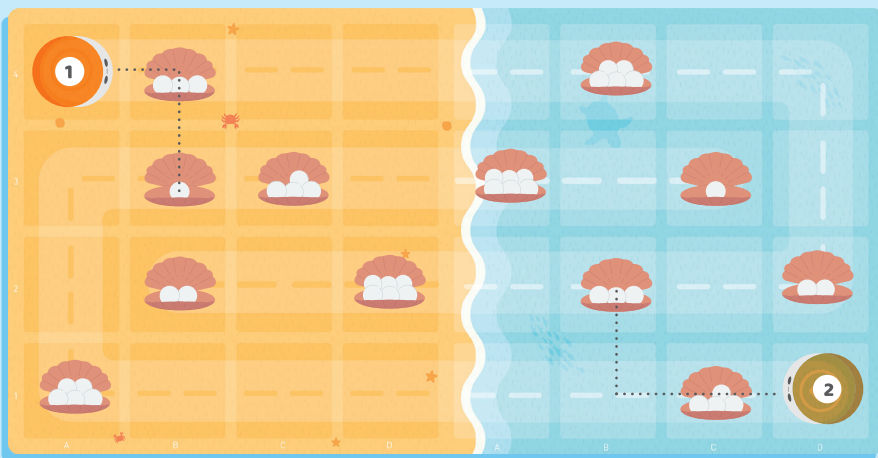
③
Shell Stickers

④
Colored Pens

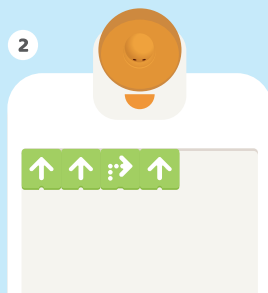
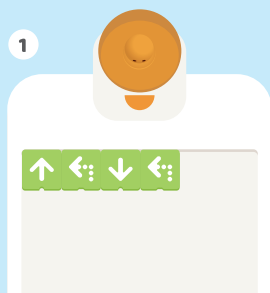
⑤
Bag

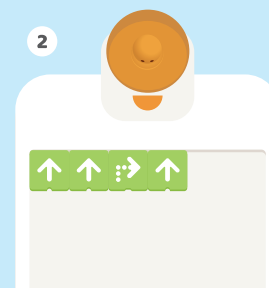
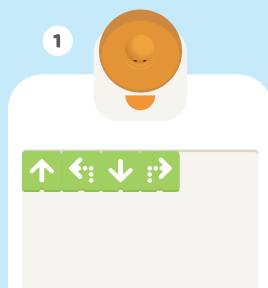
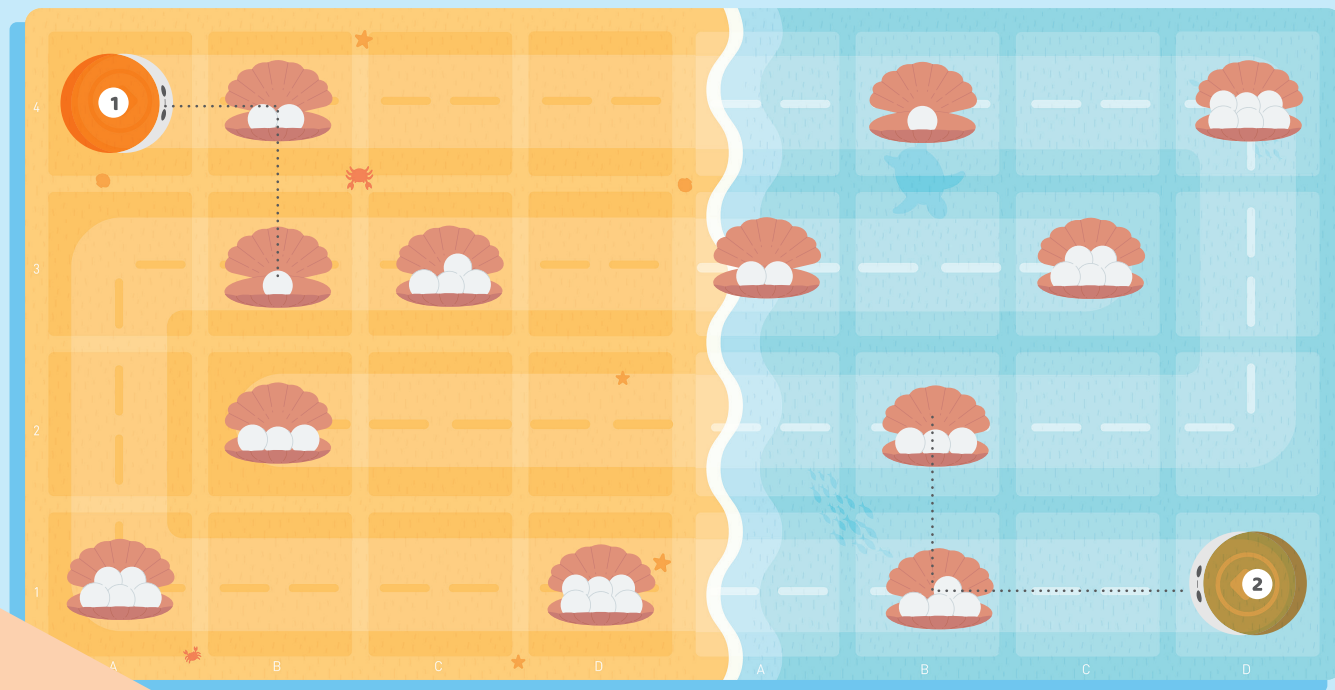
⑥
Command Tower
Control Board
MatataBot & Coding Blocks

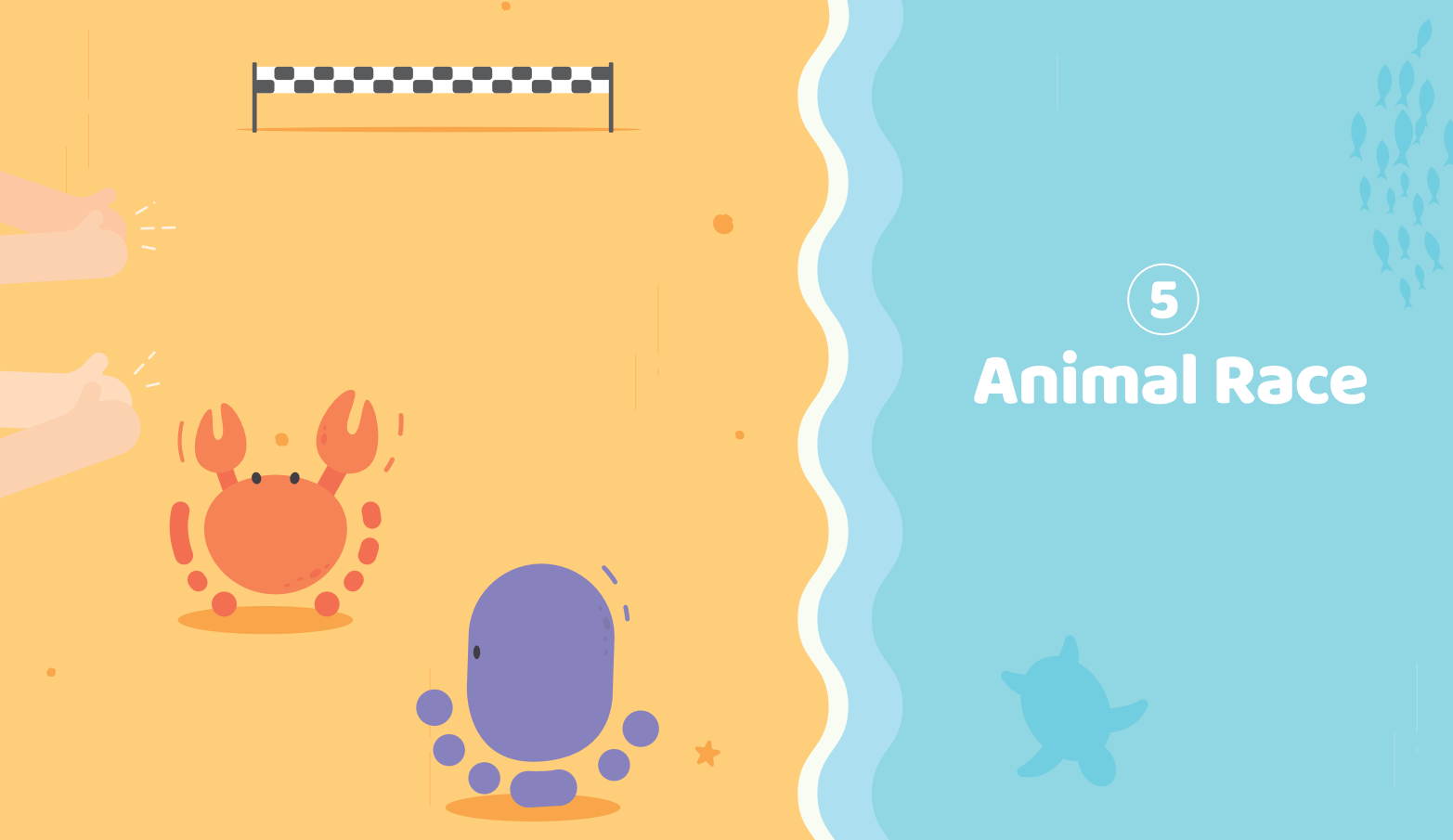
01 GAME



- 1 Place the shell stickers randomly on the map grid. Prepare the bag and put * 4, * 4, * 2, and * 2 in the bag.
- 2 Select any one of the four corners of the map as the starting point of MatataBot.
- 3 The first child randomly draws four coding blocks from the bag to program.
- 4 The first child records the total number of pearls in the shell collected on one side of the scoreboard, and then return the coding blocks to the bag to program.
- 5 If the MatataBot is out of bounds due to a programming error during the game, the program should be deemed invalidated and the child should return the shells acquired from that programming before it is the next child's turn. After all shells on the map are collected, the game ends, and the child with the most pearls wins.



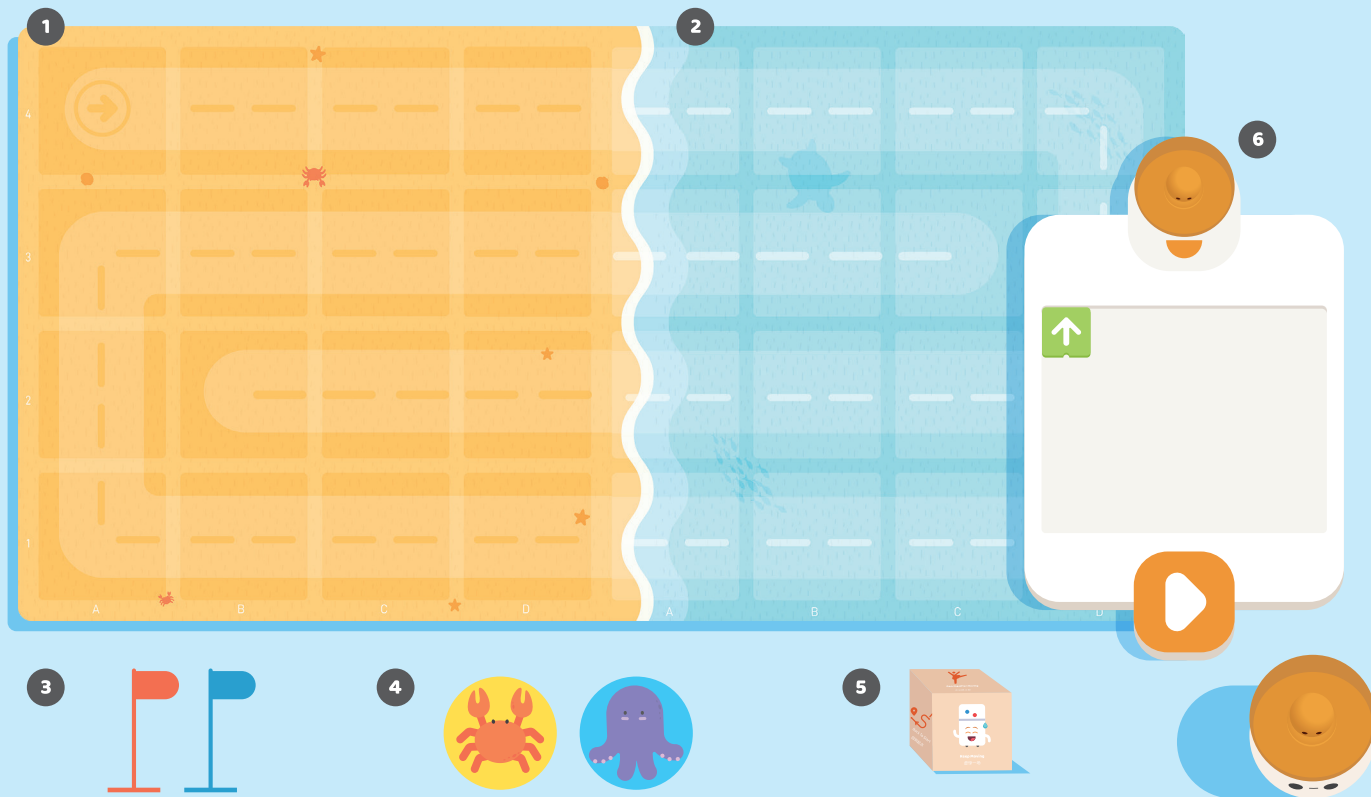




5

Animal Race

Animal Race is a two-player game in which children choose the crab character card or the octopus character card respectively and follow the route to reach the destination from the starting point, with the first to arrive winning. The rules of movements in the game are randomly determined by the dice rolled. Parents can also encourage children to design their own dice and game rules. Counting steps clearly and using number coding blocks cleverly are the keys to winning.



①
Beach Map

②
Sea Map

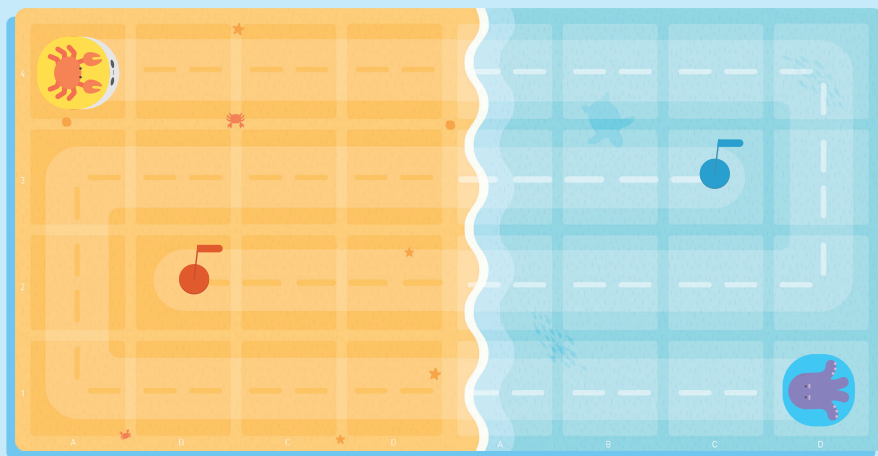
③
Flags

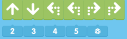
④
Character Cards

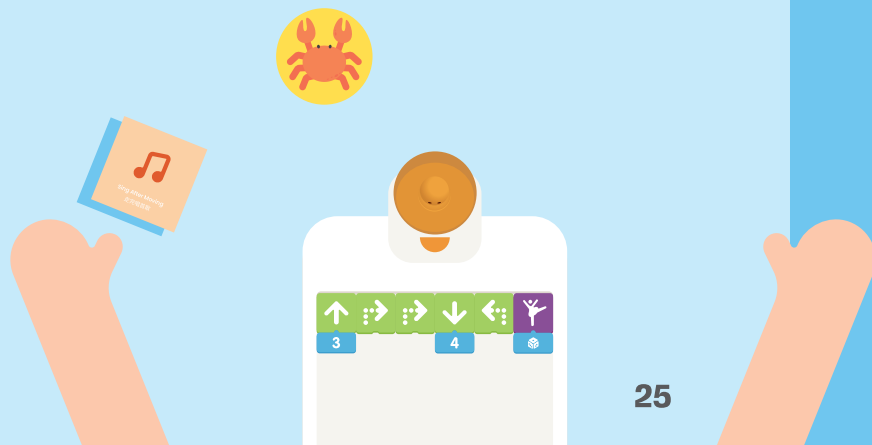
⑤
Racing Dice

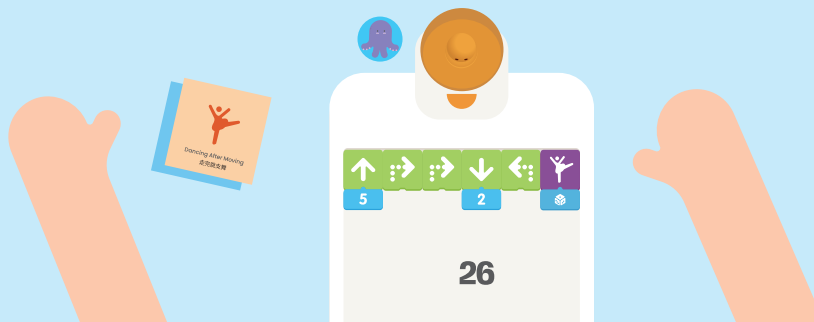
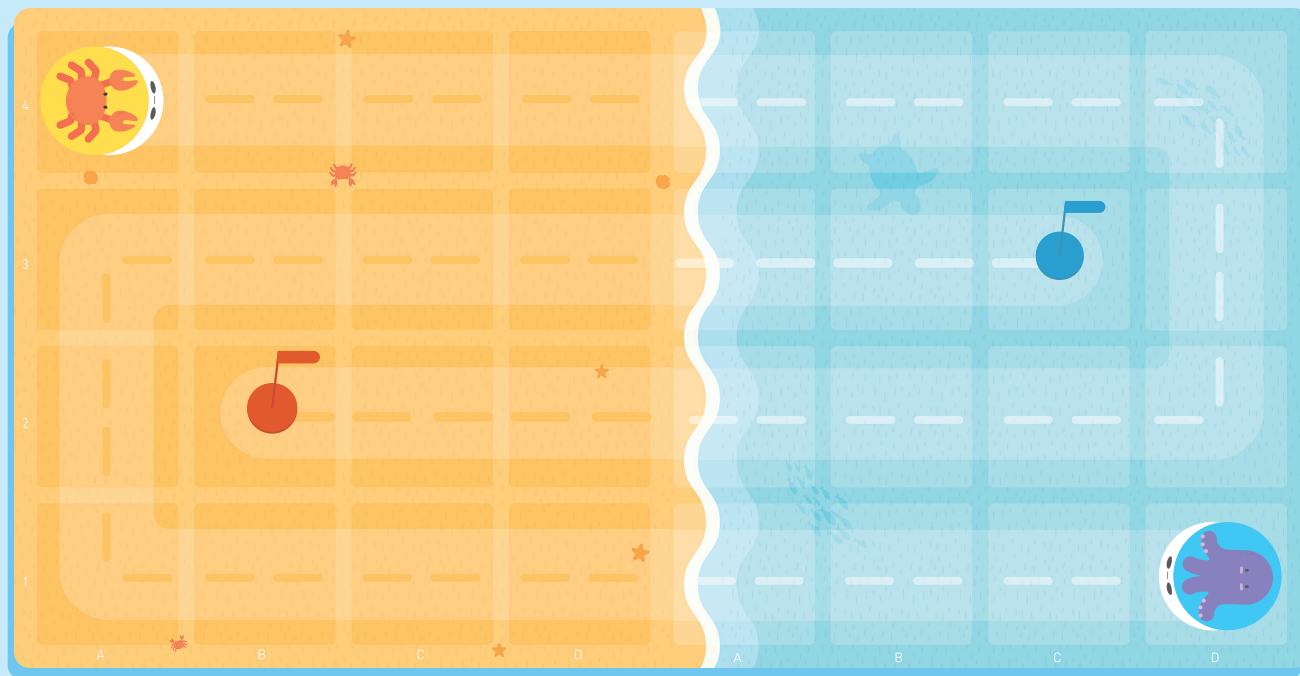
⑥
Command Tower
Control Board
MatataBot & Coding Blocks

01 GAME

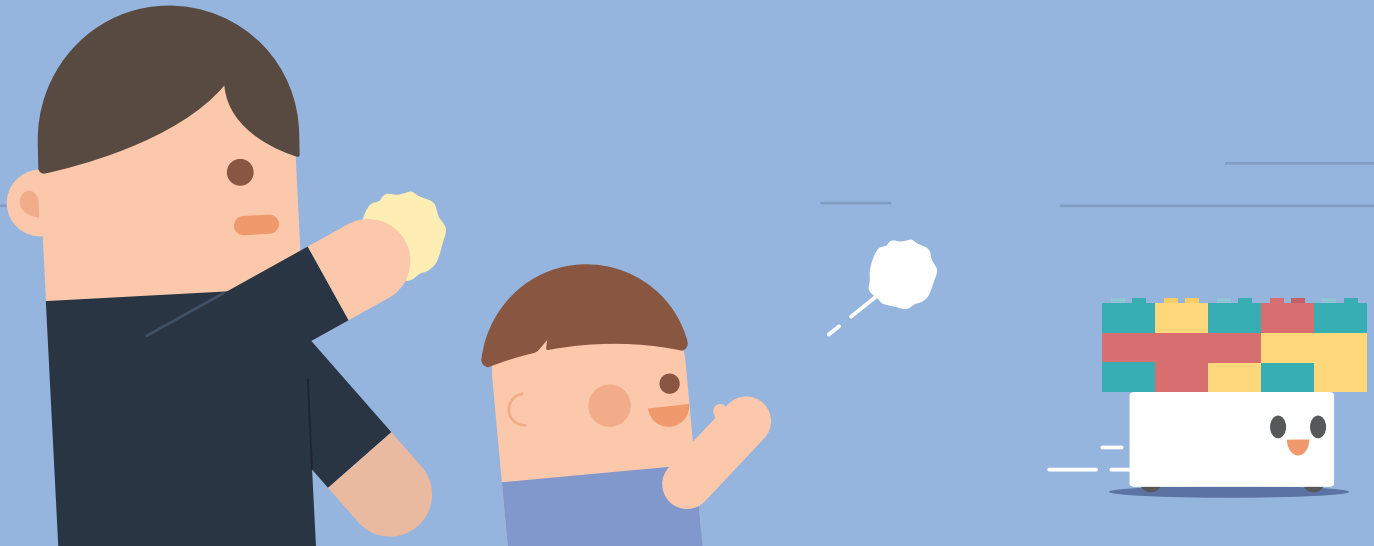


- 1 Choose animal characters, and be clear about their respective routes, starting point, and destination.
- 2 When the game starts, distribute coding blocks to each player: 
- 3 Use rock-paper-scissors game to decide who starts first.
- 4 Roll the dice and get the hint.
- 5 The first child attaches the animal character card on the top of MatataBot, and then programs it according to the result of the dice roll. After the program runs, leave the animal character card on the grid where the MatataBot last arrived, and hand MatataBot to another child.
- 6 After using the dice and preset coding blocks, put them back to the original position.
- 7 When a child reaches the finish line, the game ends and this child wins.





⑥ Throwing Competition

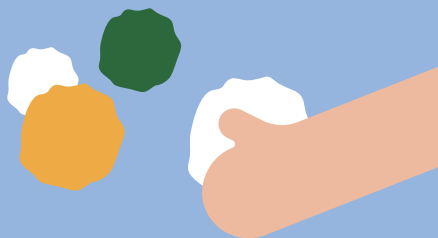


Throwing competition is a game that involves the whole family and trains kids' brain and hand-eye coordination ability. Children can use as many coding blocks as possible on the control board to design complex moving programs for MatataBot. Children participating in the game throw items representing their color at the collector above MatataBot's head from different positions, and the one makes the most throws wins. The game encourages children to create complex programs and even use nested loops to allow MatataBot to walk to a wider space. At the same time, children are encouraged to use extension materials such as Lego and paper cups in combination with MatataBot to create more activities.

Make a Colored Ball Collector



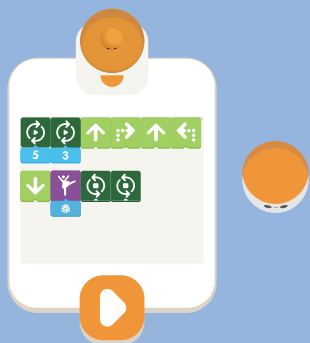
Make Colored Paper Balls



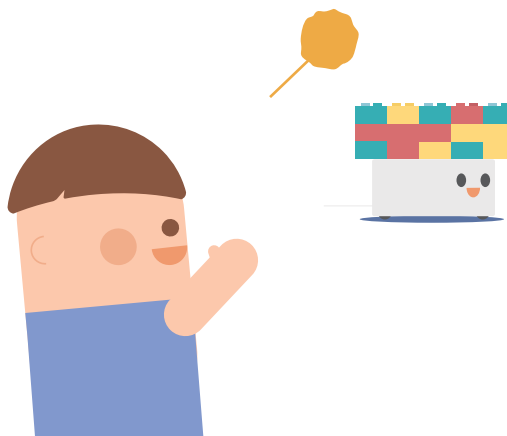
Shooting Competition

Shooting Competition shall be conducted on a wide ground space. Children will first be asked to design MatataBot's moving program, build a colored ball collector attached on top of MatataBot, and make paper balls out of different colored paper. When the program starts, children in the fixed position shoot colored paper balls at the moving MatataBot, and the one who makes the most shoot wins.

Programming for MatataBot



Shooting in a Fixed Position



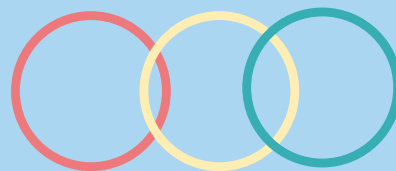
Ring Toss Competition

Ring Toss Competition shall be conducted on a wide ground space. Children will be first asked to design a moving program for MatataBot, build a colored ring collector attached on top of MatataBot, and make colored paper rings out of different colored paper. When the program starts, children in the fixed position throw a paper ring to capture the moving MatataBot, and the one makes the most throws wins.

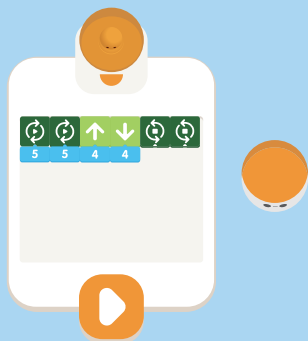
Make a Colored Ring Collector



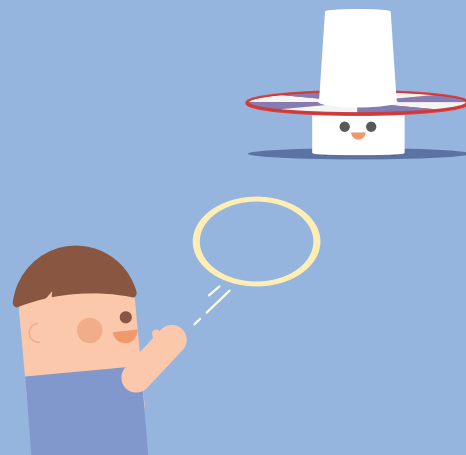
Make Colored Paper Rings



Programming for MatataBot



Toss the ring in a Fixed Position

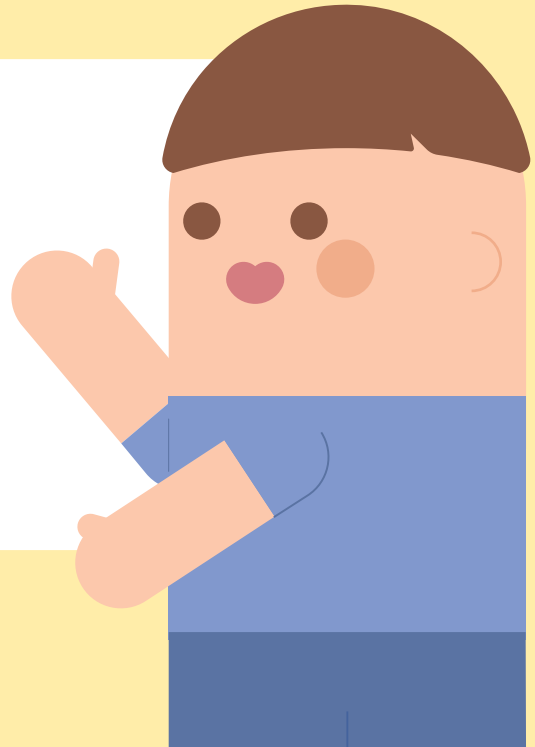


7 Game Designer

Children often play games, but rarely participate in the design of games. Game design requires children to understand the game from another perspective, and to reflect and debug their own thinking process. MatataBot is more than just a programming learning tool. Children can dress up MatataBot as a character of their choice and create their own story or game.

In the following content, children can follow step by step to light up the following skills and become a little game designer:

- ★ Create a story scene for the game
- ★ Build game scenes to make imagination a reality
- ★ Develop game rules
- ★ Add auxiliary elements and tools
- ★ Show your game to others
- ★ Debugging to improve games



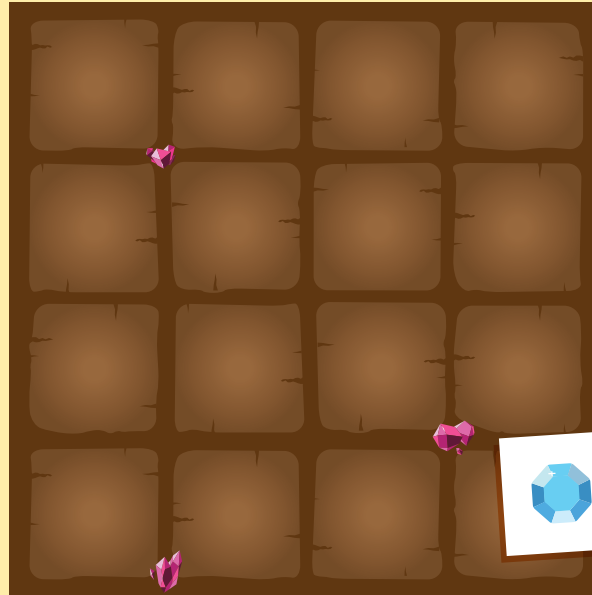
★ Create a story scene for the game

Most games have a story scene. Please draw your favorite scenes, and create the protagonist and villain you want.

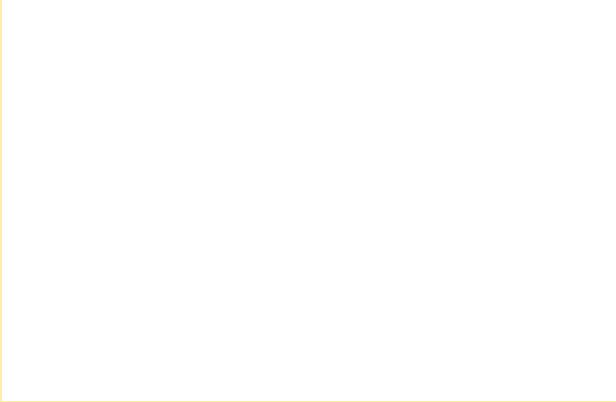
Do you like adventure stories? How about the treasure cave? What happened in the cave? Please first draw a background of a treasure cave on the grid, and draw the mouse who likes treasure hunting and the old cat who is guarding gems. The task of the little mouse is to avoid the old cat and find the gem.



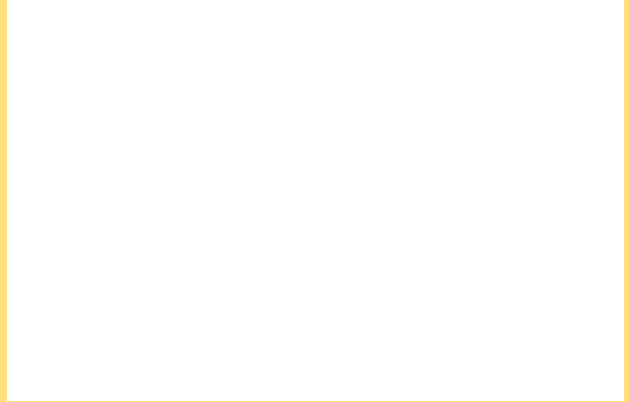
The little mouse
can only handle
the task when the
old cat is asleep. If
the old cat wakes
up, run!



1 Please design a game scene map.



2 Design your game characters.



3 Design your villain character.



After hearing my
ideas, now it's
your turn to
create your own!

Tips


The first step for a game designer is to design a game interface. They often write down the plot of the game and draw the game interface characters.



- ★ Build game scenes to make imagination a reality



Use toys and waste materials at home to enrich the game scene. The map of the game is not necessarily flat. Use your creativity to let MatataBot navigate through a three-dimensional world!



Please use your toys and materials to make
your game scene more three-dimensional!
Record what three-dimensional elements
you have added to Matatalab.

★ Develop game rules

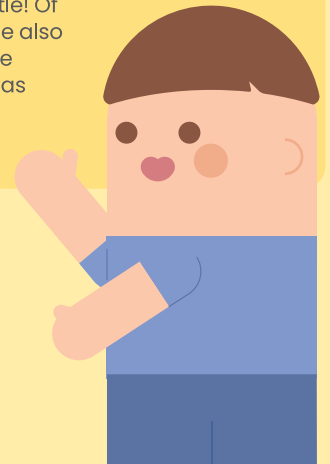
Rules are common in every game and should be easily understood by others. Designers need to consider every operation detail when designing the game. Please write down all the rules so that children can review them repeatedly.

You can also design challenging levels so that players who pass the easy levels can try more difficult challenges. Don't forget to design game rewards to make it more fun for the players involved!



Tips

Making rules for the game is the most critical part. With rules, game design is half the battle! Of course, the rules of the game also include methods to motivate participants' interests, such as reward mechanisms.

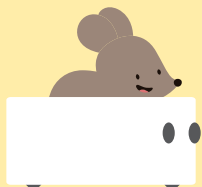


1

List the game levels you designed :

Example:

- ◇ Lv. 1: find 3 gems.
- ◇ Lv. 2: find 6 gems.
- ◇ Lv. 3: find all gems



2

Add obstacles to your map and set higher difficulty levels!

Example:

◇ Lv.4: avoid obstacles to find all gems.

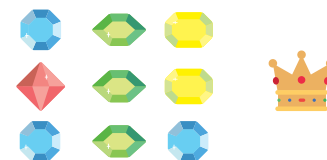
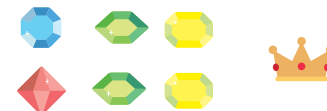
When placing obstacles, be careful not to completely block the target!

3

List the game rewards you designed:

Example:

- ◇ Collect 3 gems to make a small crown.
- ◇ Collect 6 gems to make a medium-sized crown.
- ◇ Collect all gems to make a stunning crown!



★ Add Auxiliary Elements and Tools

Fun Dice

Dice is a random tool commonly used in games. What kind of dice have you seen?

1

Rolling is one of the most common uses of dice in a game.



2

The spinning paper gyro is also a dice.



3

Attaching a dice on the top of MatataBot's head allows you to not only perform the function of dice, but also play rock-paper-scissors game.

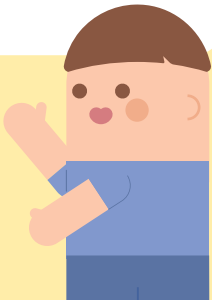


















Matatalab Positioning Spin Wheel

Do you still remember the spin wheel in the candy game? Adding spin wheels in this game and letting MatataBot walk on the grid line can make it more challenging.

Tips

Add some interesting elements can make your game more attractive!





2-1	1+1	1+0	3-0
5-2	2+2	1+2	5-1
3+1	2+1	7-6	2+0
6-4	8-7	6+3	8-4

★ Show your game

Next, please show your designed stories and games to your family and friends, and invite them to play!



Tips

Don't forget to tell everyone the name of the game designer! You own the copyright of this game.



1

Prepare your game tools

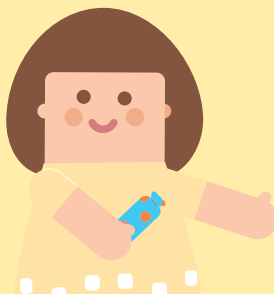
Lay out the game scenes, characters and tools you designed, and set up the playing field.



2

State your game rules

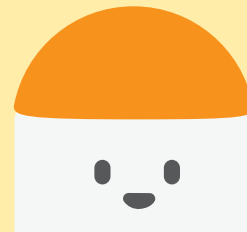
You can make clear your rules of the game through verbal, written or illustrated explanations.



3

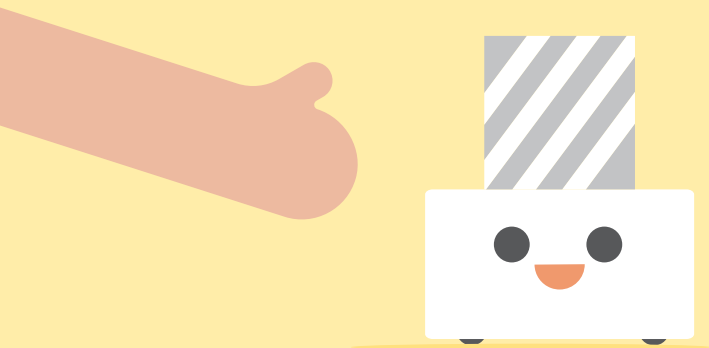
Play with friends!

Join the game or become a referee of the game! Remember to record the bugs you encounter in the game, because we need to improve the game according to the actual situation!



★ Debugging to Improve Games

In the process of the game, you may encounter some problems. You can ask your family and friends to help you think about how to solve these problems. What to do in case of special circumstances? How can games be fairer?



Tips

Game designers always set aside a lot of time to test and modify their games. Sometimes it takes longer to debug than to design a game. It is better to invite everyone to help you test and suggest changes.



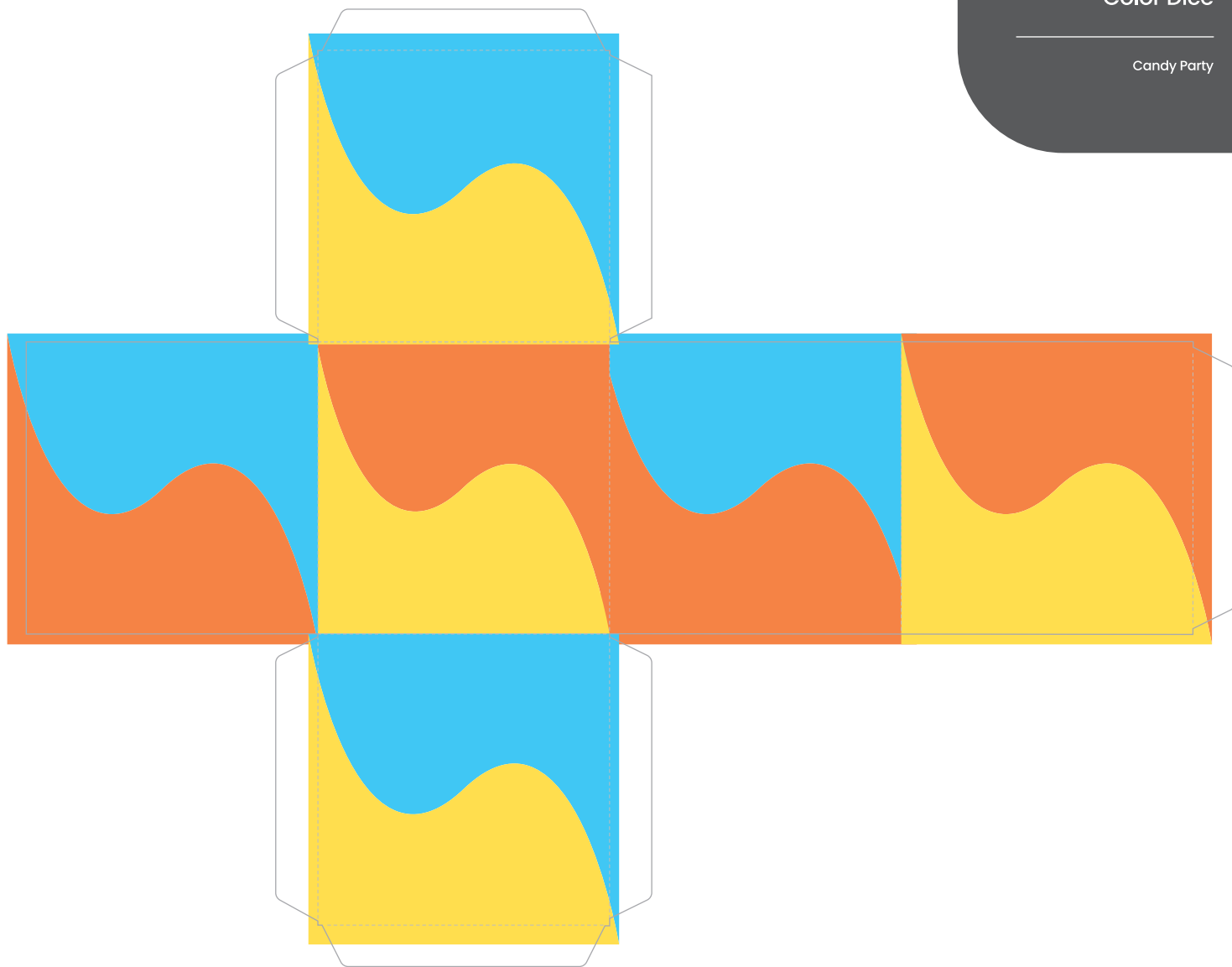
Record or draw the found problems and solutions.

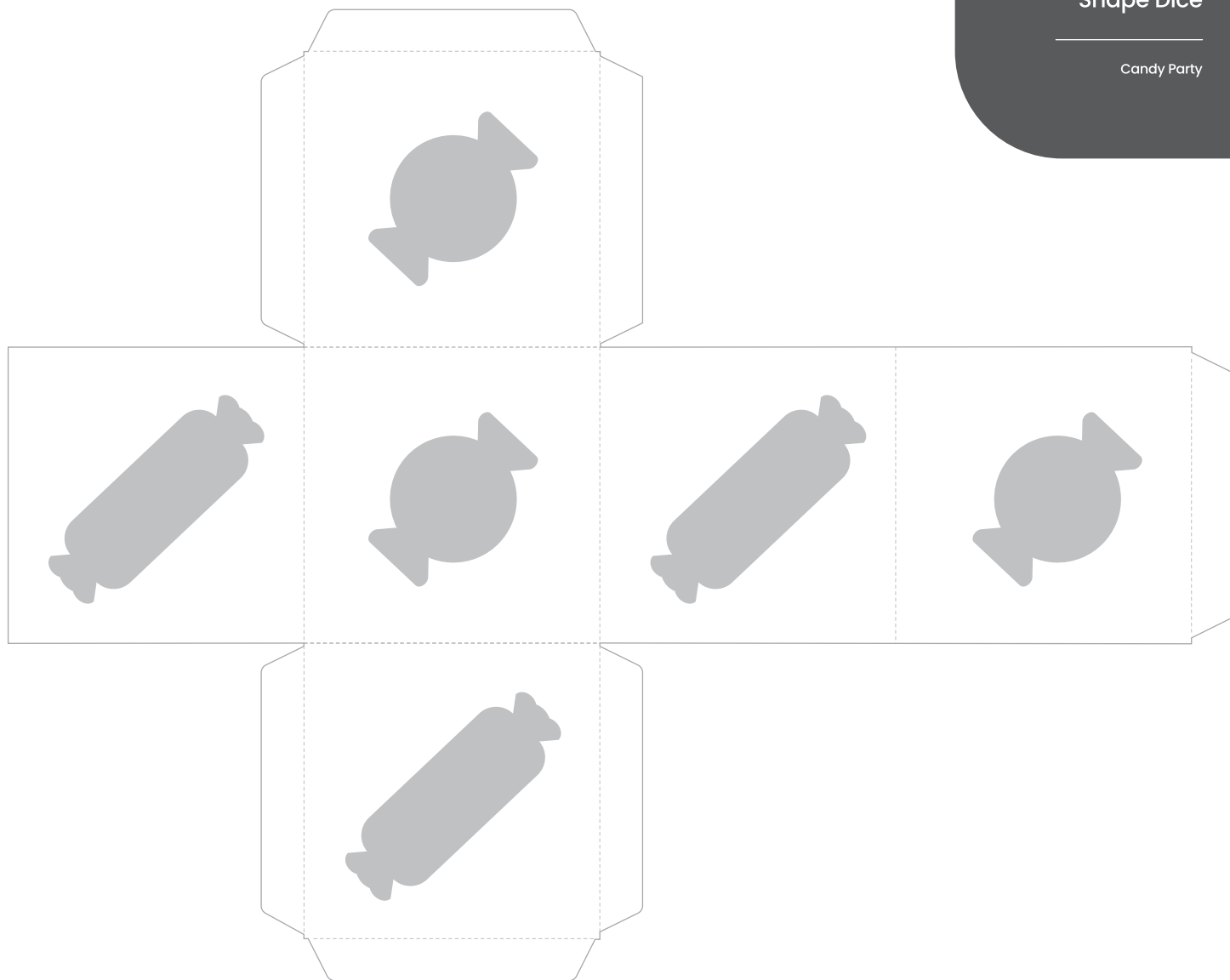
Test after modification.

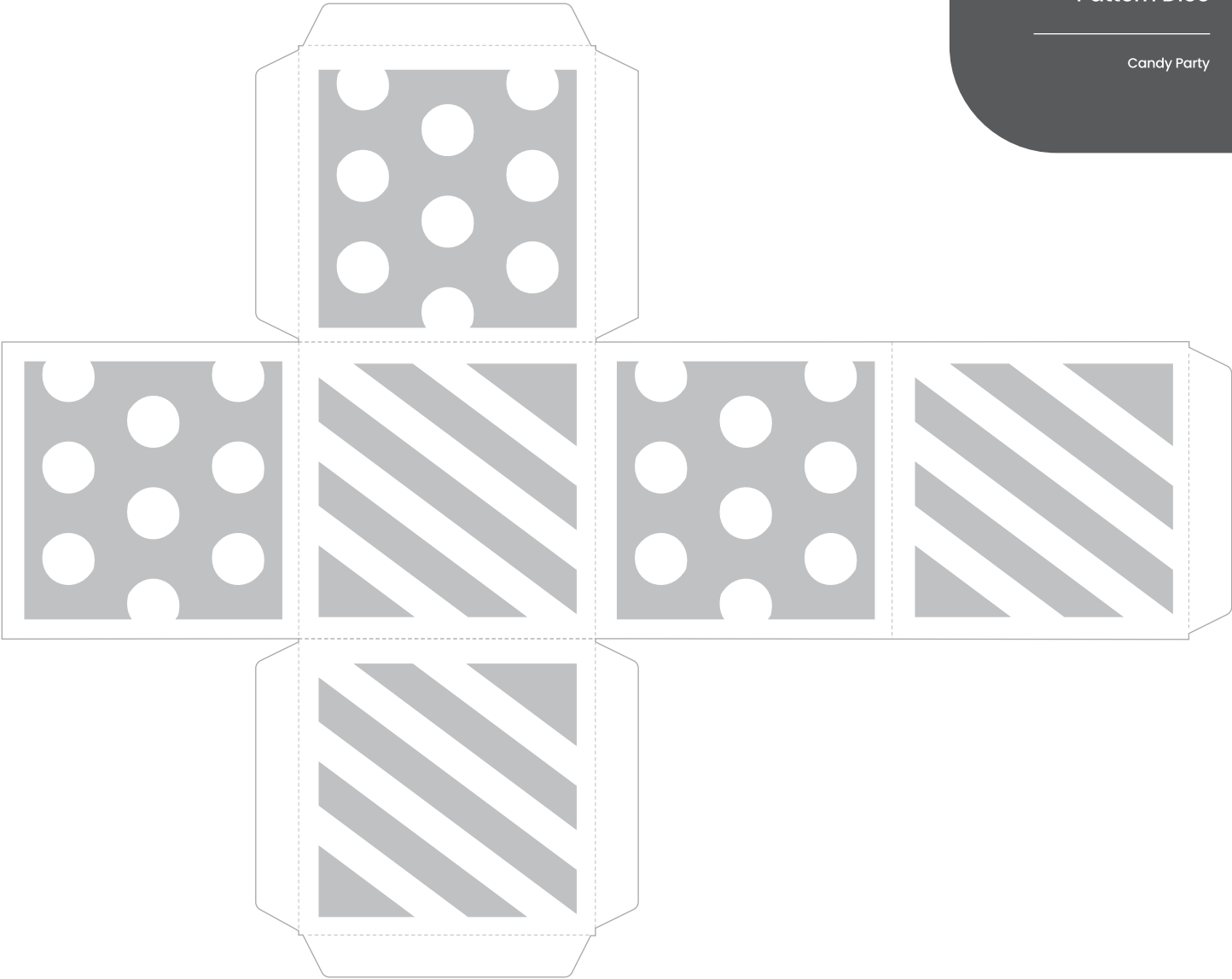
Example:

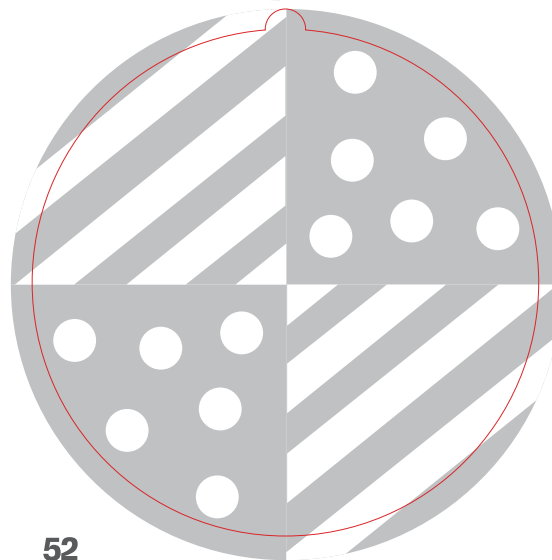
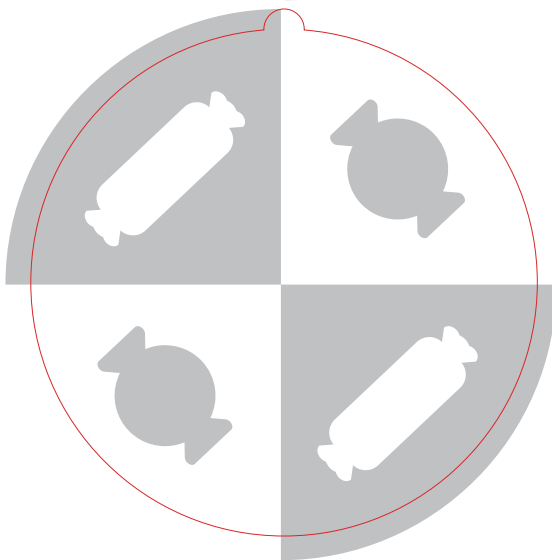
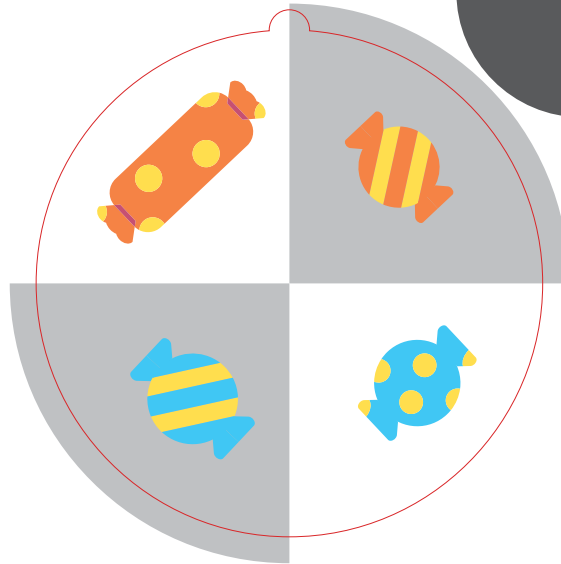
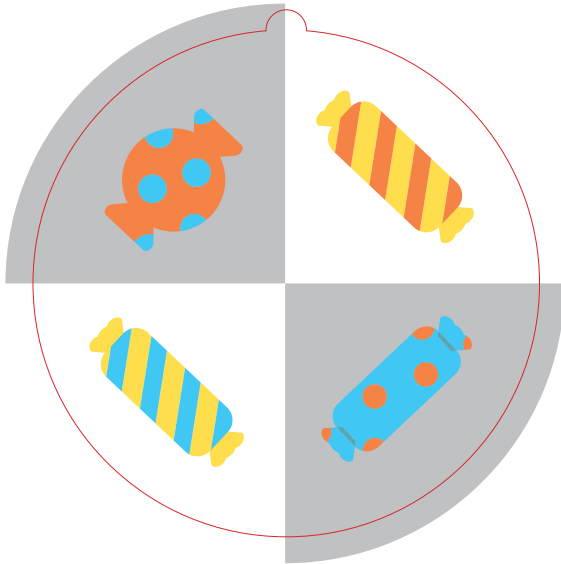
- ◇ There must be no gems in the old cat's grid.
- ◇ If MatataBot moves out of the grid map, you must go back to the starting point and reprogram.







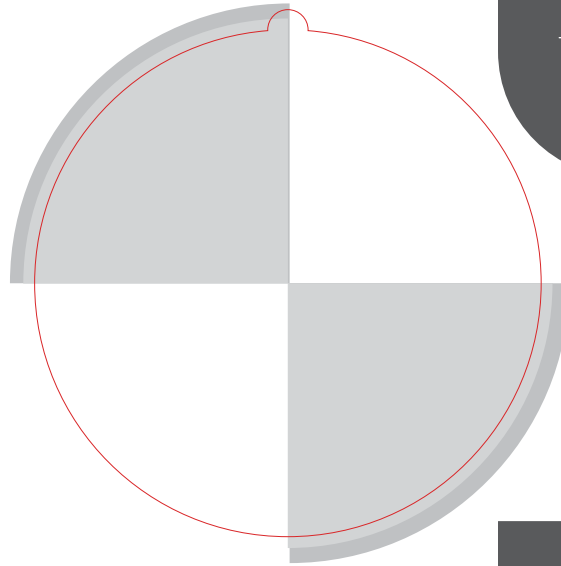
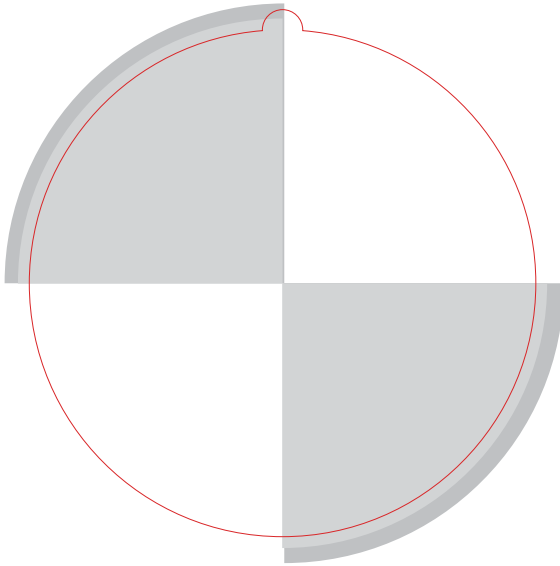






Candy Spin Wheels

Candy Spin Wheel



Character Cards

Animal Race

