JUMPING JULIA

ACTIVITY GUIDE
BEGINNER VERSION

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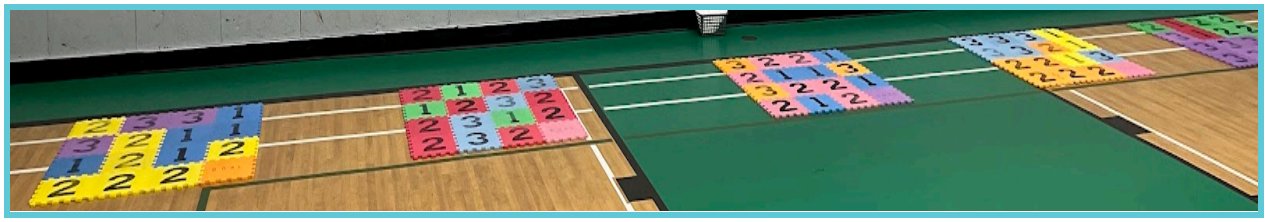
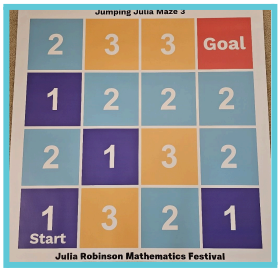
Materials and Setup

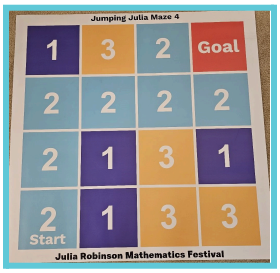
You will need a large space where you can place 4 floor mazes:

Per Table/Area	Material Preparation	
4 Jumping Julia floor mazes	Create your own or purchase.	
4 copies of Tasks with Instructions	4 different 1 page sheets *Print single-sided and place near the mat*	p. 5-8
1 copy of Table sign	1 page sheet *print on cardstock for sturdiness*	p. 9

Per Table	Purchasing Materials		
4 floor mats	Create your own or purchase		
4 plastic sheet protectors	pack of 100 for $7.67	pack of 500 for $26.99	These are recommended in order to protect the documents that students will be handling.







What does “beginner version” mean?

This version of Jumping Julia was created with PreK - 2nd grade students in mind. However, “beginner” does not mean “easy,” and this version of Jumping Julia can be an effective way to engage students of any age who:

- Have strong math anxieties
- Don’t feel confident with math or math puzzles
- Have learning differences
- Want a gentler start to the activity

Older students and parents at our events often engage with this beginner version and move on to the regular version when they feel ready.

Objective

Reach the top-right corner labeled “Goal”.

Rules:
1. Start on the bottom-left corner.
2. The number you’re standing on tells you the number of squares you have to jump. For example, if you are standing on a 3, you must jump 3 times.
3. You can jump in any direction as long as you count the right number of squares.

Materials

Each Jumping Julia table/area should be prepped with:
1. One floor maze.
2. Jumping Julia instructions and task sheet posted near the corresponding floor maze.

How to Play

Introduce the activity without overexplaining it and without telling what strategies students might want to use. As much as possible, avoid giving away answers. Students should be encouraged to explore, experiment, and learn from their mistakes.

1. Have the student stand on start.
2. Demonstrate the rules by having them take the number of steps that corresponds to the tile they are standing on..
3. Have the student explore another maze.

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Standards

1. Make sense of problems and persevere in solving them. CCSS.MP1
2. Construct viable arguments and critique the reasoning of others. CCSS.MP3
3. Model with mathematics. CCSS.MP4
4. Attend to precision. CCSS.MP6

Asking Good Questions

1. Ask questions about confidence.
   a. When a student asks you "Is this right?", instead of saying "yes" or "no" right away, ask them how confident they are in their answer. Here are some examples:
      i. "Maybe. What do you think? How confident are you?"
      ii. "On a scale of 1-5, how confident are you in your answer?"
   b. If a student is not confident in their answer, follow up by asking "What would help you feel more confident in your answer?" or "Why do you not feel confident?" This helps you determine how best to help the student through their explorations.

2. Ask students about choices.
   a. When a student is stuck or shows you a wrong answer, instead of showing the student the correct answer, start by asking about the choices that the student made along the way. Here are some suggested steps to follow:
      i. Ask students to show you what they've tried so far.
      ii. When the student gets to a point where they have different choices, ask the student "What other choices can you make here?"
      iii. If you're familiar with the puzzle or a particular solution, stop the student only when a different choice will help them get to the solution. This will help them feel successful faster without you giving away too much of the answer.

3. Ask students about strategies.
   a. If a student is getting into the activity and has been doing it for a while, ask the student if there are any strategies they've come up with to help them solve the puzzle or win the game.
   b. Follow up by asking if they think their strategies will work for all puzzles and/or larger puzzles, more complex puzzles, etc. Have the student explore more complex puzzles to test out their strategies.

Answers

Mazes have more than one solution, so answers will vary.

Jumping Julia Maze 1
(Beginner Version)

BEGINNER

Rules:

1. Start on the square that says “Start.” Your goal is to land on the square that says “Goal.”
2. The number you’re standing on tells you the number of squares you have to jump.
3. You can jump in any direction as long as you count the right number of squares.

Jumping Julia Maze 1

1	3	1	Goal
1	1	1	1
3	2	1	3
3 Start	2	2	1

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Jumping Julia Maze 2
(Beginner Version)

BEGINNER

Rules:

1. Start on the square that says “Start.” Your goal is to land on the square that says “Goal.”
2. The number you’re standing on tells you the number of squares you have to jump.
3. You can jump in any direction as long as you count the right number of squares.

Jumping Julia Maze 2

1	3	1	Goal
2	2	2	2
2	1	2	1
3 Start	2	3	2

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Jumping Julia Maze 3
(Beginner Version)

BEGINNER

Rules:

1. Start on the square that says “Start.” Your goal is to land on the square that says “Goal.”
2. The number you’re standing on tells you the number of squares you have to jump.
3. You can jump in any direction as long as you count the right number of squares.

Jumping Julia Maze 3

2	3	3	Goal
1	2	2	2
2	1	3	2
1 Start	3	2	1

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Jumping Julia Maze 4
(Beginner Version)

BEGINNER

Rules:

1. Start on the square that says “Start.” Your goal is to land on the square that says “Goal.”
2. The number you’re standing on tells you the number of squares you have to jump.
3. You can jump in any direction as long as you count the right number of squares.

Jumping Julia Maze 4

1	3	2	Goal
2	2	2	2
2	1	3	1
2 Start	1	3	3

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1	3	1	Goal
3 Start	2	2	1

Play for free at
jrmf.org/puzzle/jumping-julia

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JUMPING JULIA

1	3	1	Goal
3 Start	2	2	1

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