

Coding Critter

By: Jody Durst

Grade Level: Pre-kindergarten-2

Standards Addressed: 2.AP.A.01, 2.AP.C.01, 2.AP.M.01

Objectives:

1. Review the term algorithm.
2. Create an algorithm for the critter to make its way through the maze.
3. Input the algorithm into the critter.
4. Watch the critter make its way through the maze.

Pre-Test/Post-Test Questions:

What is an algorithm? What do we need to do in order for the critter to get through the maze?

Catch/Hook:

Coding critter sitting on the table with a maze for the critter to go through.

Activity Instructions:

In a small group of two or three students, I will tell the children that the coding critter needs to get through the maze, we need to figure out an algorithm to help the critter make its way through the maze. I will self-talk my way through how I would get the critter through the maze while laying out the arrow cards to create the algorithm. Ex: "I see that the critter needs to move straight forward two spaces (lay down two arrow cards), then I see that the critter needs to turn left (lay down left arrow card), next I see that the critter needs to go straight for three spaces (lay down three straight arrows), then the critter needs to make a right turn (lay down right arrow card), finally the critter needs to move forward two more spaces (lay down two straight arrows). That should get the critter through the maze. I will now press the straight arrow on the critters back two times, the left arrow one time, the straight arrow three times, the right arrow one time and the straight arrow two times. Now I will press start" Watch as the critter works its way through the maze. I will then guide the students to work together to recreate the algorithm and watch the critter move. Finally, I will give each student their own turn to program the critter to move through the maze.