

Daisy

Digital Game Design



Age-level: Daisy

Pillar: STEM

Badge Description: Playing video games is fun. They can also help you learn new things or make the world a better place. Programmers use algorithms and sequences to make games for computers. Once they design a game, they test it and look for ways to make it even better. Explore the world of digital game design and design your own maze game.

1. Explore tools used to develop digital games.
 - Play a game that does not involve words or numbers, such as Connect Four, Chutes and Ladders, or Checkers. Make sure to write down some notes about the game. How do you know how to play this game? What are the directions? What is the goal? Then, share with your family your favorite video game, your favorite characters in the game, and how you win. Lastly, talk to your family about if you would like a job making video games.
2. Plan a maze game.
 - Design your own maze by using the [worksheet](#). Then, use household objects (like pots and pans, blocks, furniture, stuffed animals, etc) to create the maze in an open space of your home. You can use blank pieces of printer paper as blank spaces in between obstacles. Pick your favorite stuffed animal or toy to move through the maze to get to a special prize: a tasty treat! Give your toy directions from the worksheet to navigate through the maze. It's OK if your toy gets lost. Help them find the way out!
3. Build, test, and improve your maze game.
 - Have a family member try to find their way out of the maze using your commands. If they have troubles, help them out. Try rearranging your maze to create new challenges. If your maze doesn't have any exits, or there's a dead end at every turn, no problem! Take a second look at your design, shift some obstacles around, and try it again.

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