

## Objective

By the end of this lesson, you will be able to code your own basketball game using simple programming concepts.

## Materials and Prep

- Computer with internet access
- Code editor (could be an online platform like Scratch or Tynker)
- Basic understanding of programming concepts (variables, loops, conditionals)

## Activities

- Start by designing the basketball court using simple shapes and colors. You can create the basketball hoop, court lines, and the basketball itself.
- Code the movement of the basketball when it is thrown. You can use arrow keys to control the direction and velocity of the throw.
- Implement scoring mechanism. Make sure to keep track of the score and display it on the screen.
- Add sound effects to make the game more engaging. You can include sounds for dribbling, shooting, and scoring.
- Test your game and make adjustments as needed. Have fun playing the game you created!

## Talking Points

- **Designing the Game:** "Let's start by creating the basketball court. You can use shapes and colors to make it look realistic."
- **Coding the Movement:** "Now, let's make the basketball move when it's thrown. You can control its direction and speed using the arrow keys."
- **Scoring Mechanism:** "We need to keep track of the score. Let's make sure the game knows when a basket is scored and updates the score on the screen."
- **Adding Sound Effects:** "To make the game more exciting, let's include sounds for dribbling, shooting, and scoring. It will make the game feel more realistic."
- **Testing and Playing:** "Finally, let's test the game and see how it plays. Have fun playing the basketball game you created!"