## Objective

By the end of this lesson, you will be able to understand basic concepts of geometry and dimensions through the lens of Flatland by Edwin Abbott.

## **Materials and Prep**

Materials: Paper, pencil, ruler, scissors

Prep: Read a summary of Flatland to familiarize yourself with the story

## Activities

1. Create your own Flatland: Draw a square on a piece of paper and imagine it as a Flatland world. Add geometric shapes as houses, trees, and characters.

2. Explore dimensions: Cut out different sized squares and rectangles. Discuss how these 2D shapes can represent different dimensions in Flatland.

3. Role-play as characters from Flatland: Act out scenarios from the book to understand how beings in different dimensions interact.

## **Talking Points**

- Imagine living in a world called Flatland, where everything is flat like a piece of paper. You would only see shapes like squares, triangles, and circles.
- In Flatland, beings can only move left, right, forward, or backward. They cannot move up or down like we can in our 3D world.
- Just like how a square in Flatland would see another square as a line, beings in higher dimensions would see us as flat shapes if they looked at us from above.
- Think about how difficult it would be for a Flatlander to understand the concept of height or depth, just like how it might be hard for us to understand higher dimensions.