
BURCU KARABINA, University of Waterloo

Thinking Dice

Engaging students in meaningful mathematical thinking often begins with inviting them to play. In my calculus classes, I use a simple tool I call Thinking Dice: oversized dice with transparent side pockets that hold interchangeable prompts. Depending on the lesson, the dice become a lesson opener, a reflective closing activity, or a way to guide students through “thinking levels.” Each roll creates an element of surprise and curiosity, encouraging students to articulate reasoning, make connections, and explore ideas collaboratively. This brief presentation will showcase how “Thinking Dice” brings joy, creativity, and active learning into the calculus classroom.