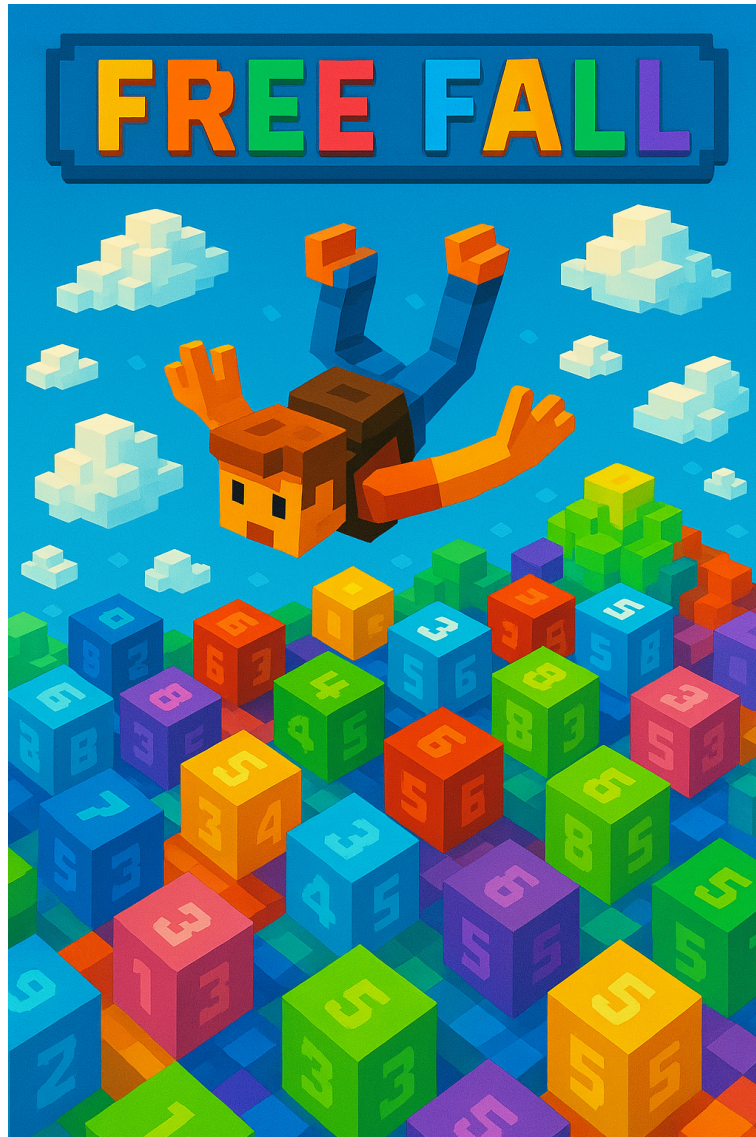


# Free Fall Math

## Teacher Lesson Plan



Grade Level: 2nd-5th Grade

Subject: Mathematics - Arithmetic (Addition, Subtraction, Multiplication, Division)

Duration: 45-60 minutes

Learning Objectives:

- Solve 10 arithmetic problems with increasing difficulty
- Practice fast-paced decision-making through interactive gameplay
- Demonstrate understanding of core math operations through applied problem-solving
- Engage in a collaborative debrief and discuss strategies used during gameplay

Standards Alignment:

- CCSS.MATH.CONTENT.2.OA.B.2: Fluently add and subtract within 20
- CCSS.MATH.CONTENT.3.OA.C.7: Fluently multiply and divide within 100
- CCSS.MATH.PRACTICE.MP1: Make sense of problems and persevere in solving them
- CCSS.MATH.PRACTICE.MP7: Look for and make use of structure

Materials:

- Devices (computer/tablet)
- Headphones (optional)
- Internet access
- How to Play Guide
- Scratch paper

Game Setup:

1. Launch using 'npm run dev' (desktop) or 'npm run mobile' (mobile)
2. Distribute the link
3. Demonstrate controls and explain audio setup for mobile

Lesson Procedure:

- Introduction (10 min): Demo & explain
- Gameplay (25 min): Play Free Fall Math
- Debrief (10 min): Discuss strategies

- Extension (Optional): Custom game idea or leaderboard

#### Assessment:

- Observation & gameplay results
- Post-play reflection or discussion