Lesson 5: Enhancing Gameplay with the Mid-Background and Trigger Tab

Grade Level:

4th – 5th Grade (Optional extension for advanced 3rd grade groups)

Overview:

In this final lesson, students explore Bloxels' **advanced design tools** to add visual depth, event-based effects, and cinematic elements to their games. Using the **Mid-Background tab**, students can layer scenery and atmosphere between the foreground and sky. With the **Trigger Tab** (the icon that looks like an on/off switch), students can configure in-game events like music changes, weather shifts, door/key mechanics, and dramatic camera effects.

These tools allow students to go beyond basic game design and focus on creating **immersive player experiences**. After implementing at least one of these tools, students reflect on how their design choice changed the way the game feels.

Objectives:

- Students will use the Mid-Background tab to add depth and atmosphere to their level.

- Students will use the Trigger Tab to apply special events like music, weather, camera angles, and door/key systems.

- Students will test and revise their changes based on gameplay impact.

- Students will reflect on how these tools improved storytelling, tone, or challenge.

Materials:

- Devices with Bloxels app

- Previously completed game file

- Optional: Reflection sheet or digital journal

Tools Introduced:

Feature	Description
Mid-Background Layering	Adds visual depth behind the terrain. Great for creating forests, mountains, buildings, etc.
Trigger Tab *(on/off switch icon)*	Allows students to trigger in-game events when touching a block, such as:
– Change music	
– Change weather	
– Lock a door using a key	
– Zoom camera in or out (Vista, Shrink Ray, etc.)	

Procedure:

1. **Teacher Modeling (10–15 minutes):**

   ○ Show how to access the **Mid-Background tab** to add scenery between the background and game blocks.

   ○ Show how to open the **Trigger Tab** (on/off switch icon) to configure blocks with special effects:

      ■ Trigger a **music change** when touching a block

      ■ Add **weather effects** (fog, rain, darkness)

      ■ Set up **key and door logic**, including inventory settings

      ■ Demonstrate **camera effects** (e.g., Vista, Shrink Ray, Super Jump)

   ○ Emphasize using just **one or two features** thoughtfully, not all at once.

2. **Student Exploration & Implementation (20–25 minutes):**

   ○ Students choose **at least one advanced tool** to apply to their game

   ○ Encourage purposeful placement — for example:

      ■ Change music when approaching a boss

      ■ Use fog or rain when entering a cave

      ■ Trigger a camera zoom at the final jump

      ■ Create a locked area that requires a key

3. **Testing & Reflection (10–15 minutes):**

   ○ Students test their game with the new elements and reflect on:

      ■ What tool they used and why

      ■ How it affected gameplay or storytelling

      ■ Any adjustments they made after testing

Differentiation:

All Grades (when used)

Support   Allow students to try one feature at a time. Offer step-by-step visuals or pause modeling for reinforcement.

Assessment:

- Observe student testing and use of the Mid-Background and Trigger tools.

- Review student reflections for evidence of purposeful design choices.

- Optional: Peer feedback or sharing session to showcase creative use of advanced tools.