Teacher Guide

Welcome to SpriteBox!
spritebox.com/hour.html

SpriteBox is a new logic puzzle game from the creators of Lightbot that combines the fun of ‘platformer’ games (like Minecraft and Super Mario Bros) with learning the basics of coding.

SpriteBox covers **basic algorithms**, instruction **sequencing**, instructions with **parameters**, simple to complex **loops**, and **debugging**.

**Controls (Web):**
*Arrow Keys*: Run Left / Right, Jump, Climb ladders
*Mouse/Trackpad*: Interact / Code
Controls (Android/iOS):
*Gamepad* (Bottom Left): Run Left and Right / Climb ladders
*Jump Button* (Bottom Right) : Jump
*Screen* : Interact / Code

**To Start**
Run over to the green box. It will open and you can then jump inside to start. Other boxes start off locked and are unlocked as more sprites are collected.
SpriteBox alternates between two modes: exploration and coding.

**Explore Mode**
Players can run, jump and climb, to find bottled sprites and collect stars.

Players will find that some platforms are out of reach or some sections impassable. At that point, they should search for a yellow SpriteBox, jump, and bump it from below. This will call over Sprite who will try to help you in....
**Code Mode**

Players can control Sprite, a little ghost-like character that’s sporting a box-hat, using code. Sprite can then help the player progress by modifying the game environment and making previously impassable sections passable.

Sprite will introduce several instructions over a few levels. Where an instructive hand animation appears, players should try to copy what the hand does, whether it be clicking a button or dragging over an instruction.
Example Puzzle

Sprite will have already introduced the SET and MOVE instructions.

**SET:** Sprite will set a block down at the current location.

**MOVE:** Sprite will move one space in the direction of the arrow

Sprite will ask that the player rearrange the instructions so that the player can later advance in the world.
Players can rearrange commands in the code area, and then press play.

Upon pressing Play, Sprite will perform the instructions from top to bottom. Here, Sprite will MOVE LEFT, MOVE LEFT, MOVE UP, MOVE UP, SET.
1. GRASS - TUTORIAL
Sprite will introduce how coding works and the commands SET and MOVE.

The MOVE instruction tells to move one space over.
2. SNOW - PARAMETERS & GET
Sprite will introduce how to change the parameters for the MOVE instruction.

Sprite will also introduce a new GET instruction that copies a tile.
3. DESERT - LOOPS
Sprite will introduce the LOOP construct. A loop allows players to repeat instructions that exist within the loop any number of times.
4. UNDERGROUND - CHALLENGE PUZZLES

Sprite will ask that the player copies the patterns shown in each puzzle. These puzzles will only unlock once all the other levels are solved and sprites found. Here, players will have a limited amount of space, and so must utilize loops within loops to solve the puzzles.