AP Computer Science A Unit: Java Game Design with Processing

Lesson Title	G7: GENERATING ANIMATED SPRITES
Objectives	 SWBAT create an animated Sprite SWBAT use the online tools to find, create, and cut spritesheets
Standards	 9-12.CT.9 Systematically test and refine programs using a range of test cases, based on anticipating common errors and user behavior. 9-12.CT.10 Collaboratively design and develop a program or computational artifact for a specific audience and create documentation outlining implementation features to inform collaborators and users.
Materials	 Student Computer (Setup with VSCode + Git) Digital Materials: Instruction Slides/Notes Project Reference Sheet Links to Online Tools
Agenda	1. Warmup a. Prompt students to find an online for a free "spritesheet" & download! iPNG file ii. Less than 20 individual sprites iii. All the same character b. There should be a wide variety of times it takes students to accomplish this. c. Have them paste what they come up with in the class chat. 2. Chop Up Sprites Activity a. Students follow instructions to create a folder of sprite images. 3. Pack Sprites Activity a. Students follow instructions to create spritesheets & generate .json files that indicate where. 4. Coding AnimatedSpritesActivity a. Students will edit starter code horse to make their new animated sprite.
Assessment	 Share in class chat about spritesheet Push updated code to Github repo Teacher walks around checking throughout each step