# **Animated Scene Project Rubric**

| **Key Concept** | **Extensive Evidence** | **Convincing Evidence** | **Limited Evidence** | **No Evidence** |
| --- | --- | --- | --- | --- |
| **Program Development** - Program Sequence | You *sequenced the program well1* and properly separated *code in and out of the draw loop2*. | You property separated code in and out of the draw loop, however they have a few incorrectly sequenced code resulting in a few elements hidden behind others unintentionally. | You have several sequencing errors, resulting in many elements unintentionally hidden or overlapping others. Some code is improperly placed in or out of the lo | Errors in program sequencing are significant enough to keep the output from resembling the intended scene or the Draw loop is not used to create animation |
| **Modularity** - Sprites and Sprite Properties | At least 2 sprites created, each with at least one property *updating in the draw loop3.* | At least 1 sprite created with at least one property updated inside the draw loop | At least 1 sprite created. No properties updated inside the draw loop. | No sprites are used in the program. |
| **Position and Movement** | At least 2 shapes, 2 sprites, and 2 lines of text are placed correctly on the screen using the coordinate system. At least 2 elements *move in different ways4*. | At least 1 shape, 2 sprites, and 1 line of text are placed on the screen using the coordinate system. At least 1 element moves during the program. | A cumulative of at least a total of 3 elements are placed on the screen using the coordinate system *(e.g 2 sprites & 1 line of text or 1 sprite, 1 shape, & 1 line of text).* | No elements (sprites, shapes, or text) are placed on the screen using the coordinate system. |
| **Optional “Stretch” Feature** | | | | |
| **Variables** | At least 2 non-sprite variables are created and their values are updated in the draw loop and affect the program output. | At least 1 non-sprite variable is created and its value is updated in the draw loop and affects the program output. | At least 1 non-sprite variable is created and used in the program but does not update in the draw loop. | No non-sprite variables are created and used. |

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# **1. Sequenced the program well**

# If the program code is not sequenced correctly, some elements, such as shapes, sprites, and text, may be unintentionally hidden behind others.

# In the specific case of sprites, if the drawSprites() code is not sequenced correctly, some or all sprites may not appear on the screen.

# **2. Code in and out of the draw loop**

# Code inside the draw loop is for things that are changing as the program is running. This includes updating properties or non-sprite variables as well as any shapes for the background, text, and the drawSprites() block.

# **3. Updating in the draw loop:**

# Sprites are created with these two lines of code **outside** of the draw loop:

# var sprite = createSprite(200, 200);

# sprite.setAnimation("animation\_1");

# After the above two lines, a sprite property, such as the ones listed below, should be continuously updating **inside** the draw loop

# x

# y

# rotation

# scale

# tint

# alpha

# width

# height

# **4. Move in different ways**

# One element should have **random** movement using randomNumber()

# One element should move using the **counter pattern** (x = x + 1)

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