**GameMaker – Coding Sheet # 1 – Sprites**

**Sprite Functions**

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| **Function** | **Purpose** | **Example** |
| sprite\_index | Choose which sprite you want to be displayed in this object | sprite\_index = sprMarioLeft |
| sprite\_width | Gives the width (in pixels) of the sprite an object is using | if sprite\_width < 32 …. |
| sprite\_height | Gives the height (in pixels) of the sprite an object is using | if sprite\_height> 128 … |
| sprite\_xoffset | Gives the x component of the sprite’s origin |  |
| sprite\_yoffset | Gives the y component of the sprite’s origin |  |
| image\_alpha | A value from 0 to 1 that represents the transparency of the object, with 0 being completely transparent and 1 being solid. | image\_alpha = 1; |
| image\_angle | The rotation of an object,  right =0°, up = 90°, left = 180°, down = 270° | image\_angle = 90; |
| image\_index | Choose which frame of an animated sprite you want to be displayed | image\_index = 0; |
| image\_speed | Used with animated sprites. It will slow down or speed up the animation by whatever factor you set it to | image\_speed = 0 (stops animation)  image\_speed = .5 (slows animation in half) |
| image\_xscale | Changes the scaling of the x value of an image  Setting it to -1 will mirror the image. | image\_xscale = 2; (doubles width of image) |
| image\_yscale | Changes the scaling of the y value of an image  Setting it to -1 will flip the image. | image\_yscale = .5 (image is ½ original height) |

**Sprite Skills to Master**

1. Start/Stop/Change speed of the animation of a sprite
2. Making a sprite fade in and out
3. Rotating a sprite
4. Choosing a particular frame of the animation sequence to display
5. Resize a sprite
6. Be able to determine and use the height and width of a sprite to position it appropriately in a room.