

Scratch and Pico Board Game Design Project

Task: Create a Game in Scratch Using the PicoBoard Sensors as Input. You must use at least three of the sensors to control action in your game.

Examples:

- A. Use the Slider to control the Speed of a Sprite
- B. Use the Potentiometer to control the direction or size of a Sprite
- C. Use the Pushbutton to enable Action
- D. Use the Resistance Sensors and Foil to build your own controller
- E. Use Slider values to control the sound, size, color, or location of a Sprite

Game Types:

- A. Chasing / Eating Game (Like PacMan)
- B. Racing Game
- C. Projectile Game - once Sprite "throws" another
- D. Interactive Artwork
- E. Pong or Soccer Type Game

Game Must have at least 3 Sprites and use at least three Variables.

Variable Examples Include:

- A. Keeping Score
- B. Speed
- C. Direction

Required Files:

The Scratch Game File and a Jing recording your playing and explaining your Game must be uploaded to your shared SkyDrive.

Extra Credit will be given for creating an "Educational Game." (Up to 10 Points)

PicoBoard and Scratch Programming Score Sheet (Maximum: 100 Points)

| Feature | Points | Points Awarded |
|--|----------------------------|----------------|
| On Time? (Game and Jing File Uploaded to SkyDrive) | -10 Points per day if late | |
| Game has at least 3 Sprites | 20 Points | |
| Game has at least 3 Variables (Examples include keeping score, speed, direction, lives) | 20 Points | |
| Game uses PicoBoard Sensors for Input to control Sprite Animation, properties, sound, or location. (Examples include Slider, Potentiometer, Pushbutton, Light, Sound) | 20 Points | |
| Sprites have meaningful names. | 10 Points | |
| Game objective is clear to the player. | 10 Points | |
| Jing Recording explaining and demonstrating your Game. | 10 Points | |
| Extra Credit: -Use of Sound or Music -Educational Game -Game Shared on Scratch.mit.edu website -Other Creative Ideas or Discoveries | 10 Points | |
| | Total: | |

Student Name:

Grade: