

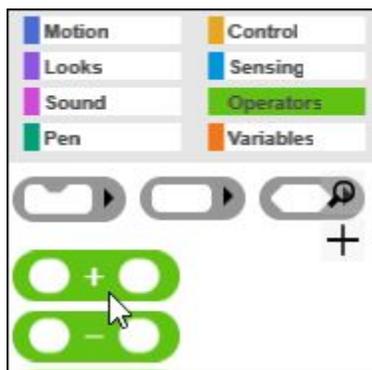
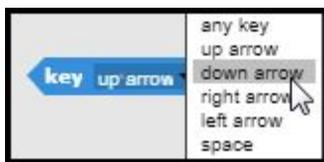
## Arcade Games (Part Two)

### Increasing the Responsiveness of the Paddle Control

The blocks that detect a keypress check the keyboard approximately three times a second. In most cases, this rate is adequate. If the arrow keys are used to control the movement of the paddle, the responsiveness of the paddle can be improved by using an enhanced version of the procedure that checks the keyboard more frequently.



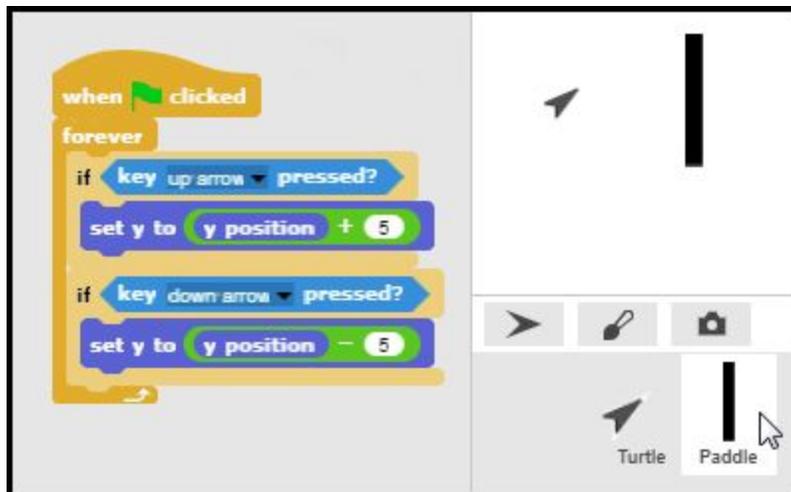
In the enhanced version, the *Key* command (located under the *Sensing* command palette) is still used to detect a keypress.



However, the keypress detection block is embedded in a procedure specifically written to control the paddle. The logic of the enhanced procedure that moves the paddle states that “If the *Up Arrow* key is pressed, then set the Y (vertical) position of the paddle to its current position plus 5 more steps.” This effectively moves the paddle up 5 turtle steps each time that the *Up Arrow* key is pressed. (The *Addition* code block is found under the *Operators* palette.)

If Key *Up Arrow* is Pressed?  
Then Set Y to Y Position + 5

Similar logic is used to move the paddle down when the *Down Arrow* key is pressed. Note that this script must be placed in the script space for the paddle sprite (and not the turtle sprite). This script space can be accessed by clicking the Paddle icon below the stage.

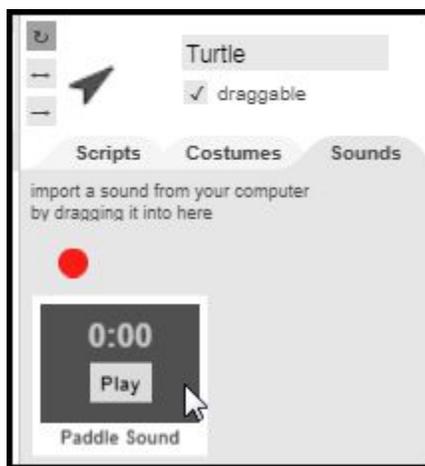


### Additional Enhancements - Sound

The basic program logic and procedures are now in place. Several enhancements will increase the play value. The Atari Pong game is instantly recognizable because of the electronic blip that occurs when the ball strikes the paddle.

#### [Pong Sounds Folder](#)

Select the *Sounds* tab of the turtle. Then drag the sound labelled *Paddle Sound* from the *Pong Sounds Folder* into sounds space of the turtle sprite.



Once the paddle sound is available, the *Touching Paddle?* script can be updated to play the Pong paddle sound each time the turtle sprite collides with the paddle.

