

Pong Program Preparation Planning

We're ready to write our first game! Part of programming is breaking down a problem into smaller pieces that you can solve separately. You then combine these smaller pieces into larger components until you have the whole program put together.

For the Pong game, use this planning worksheet to help design your code BEFORE you start writing. Read over **all** the requirements in the left column. Take a few minutes to think before filling out the rest of the worksheet. The first row is an example.

Game component	What's going on?	What owns the logic?	What triggers the change?	What could be tricky?	Pseudocode
Players can control paddles with required keys	Paddle moves up or down	Paddle sprite	Press up or down arrow Press w or s keys	When paddle gets to the top or bottom it can't move anymore	Left paddle variable: left speed if sprite is hitting top edge of canvas OR hitting bottom edge of canvas then reverse paddle movement When up arrow is pressed If paddle is moving down stop paddle else change direction to up
Ball begins play at middle of field at start of game and after each point					
Ball bounces correctly off upper and lower edges of paddles					

Ball increases speed each time it bounces off a paddle					
Score a point for the opponent when the ball touches the left or right edge					
Game ends when one player reaches five points					
Winning player is shown when the game ends					

Players can begin a new game					