

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	<i>Paddle moves up or down</i>	<i>Paddle sprite</i>	<i>Press up or down arrow</i> <i>Press w or s keys</i>	<i>When paddle gets to the top or bottom it can't move anymore</i>	<i>Left paddle</i> <i>variable: left speed</i> <i>if sprite is hitting top edge of canvas OR hitting bottom edge of canvas then</i> <i>reverse paddle movement</i> <i>When up arrow is pressed</i> <i>If paddle is moving down</i> <i>stop paddle</i> <i>else</i> <i>change direction to up</i>
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					