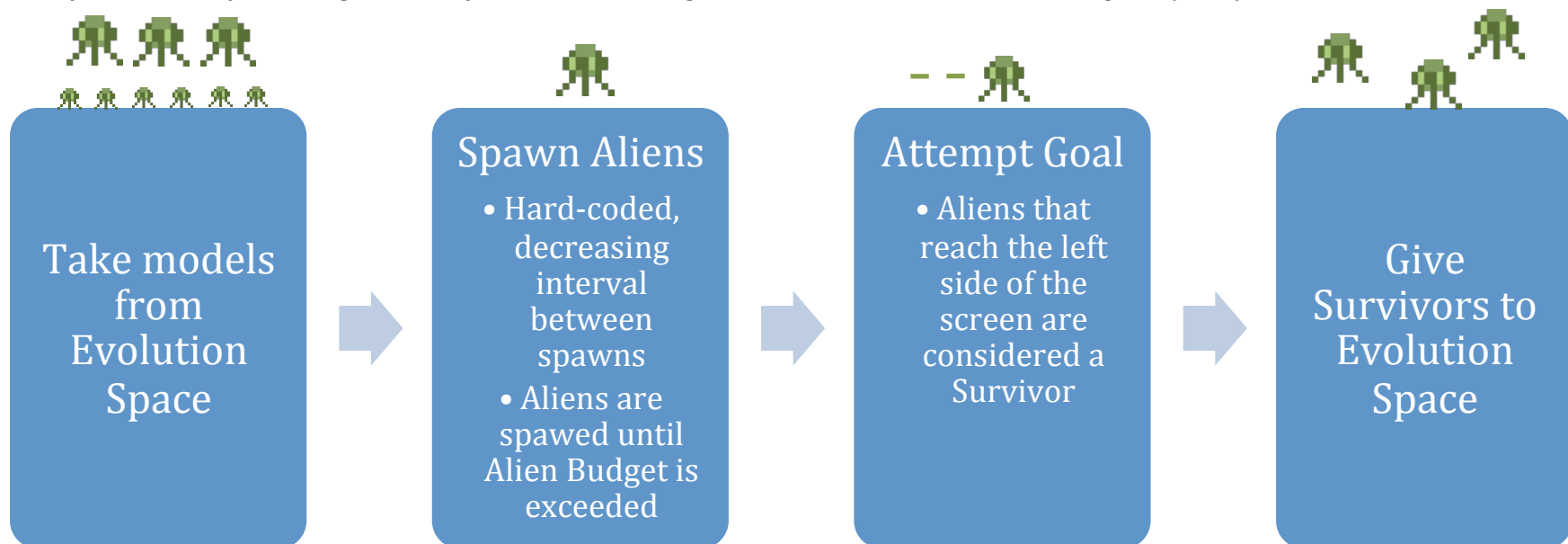# Play Space Diagram

Each round begins and ends in the Play Space (state) where the player (Ship) attempts to prevent Aliens from reaching the left side of the screen by shooting bullets. After this state, the game transitions to the Evolusion Space (state).

Take models from Evolution Space	→	**Spawn Aliens** • Hard-coded, decreasing interval between spawns • Aliens are spawed until Alien Budget is exceeded	→	**Attempt Goal** • Aliens that reach the left side of the screen are considered a Survivor	→	Give Survivors to Evolution Space

- *Alien Budget is a $ limit set for each round. The first few rounds start with a set budget, then starting around round 3 the budget increases each round. The amount of the budget spent each spawn is equal to the total $ Cost of the spawned Alien.*
- *When Attempting Goal, the Aliens can be shot by the Ship or they can run out of Battery Energy.*
- *Aliens are spawned at a random y position on the right side of the screen.*
- *If there are no Survivors from the previous round (e.g. first round of play, or they were all killed last round) then each spawn will be randomly created*