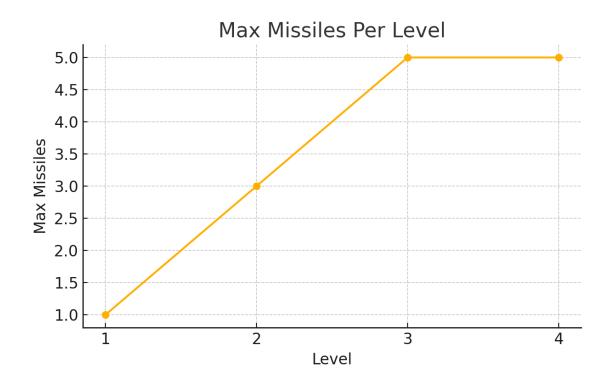
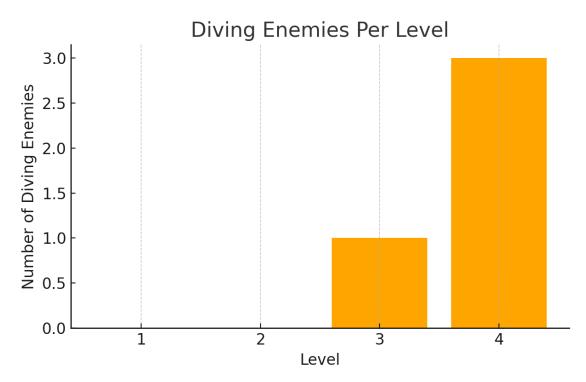
Level Progression Design: Stat Changes & Enemy Movement

Overview

This design document outlines how the game's difficulty increases across levels through stat scaling and enhanced enemy behavior, including new movement styles and attack patterns.

Difficulty Scaling Visual Charts





Difficulty Scaling Summary Table

Level Max Missiles Enemy Movement Diving Enemies			
1	1	Horizontal (simple) 0	
2	3	Row-based formations 0	
3	5	Sine wave dive (new type) 1	
4	5	Faster, same pattern 1-3	(random)

Level-by-Level Behavior Summary

Level 1

- Enemy ships only shoot 1 missile at a time.
- Enemy ships move horizontally in a back-and-forth pattern.

Level 2

- Enemy ships now enter row-by-row, as grouped formations.
- Maximum of 3 enemy missiles can be present on screen simultaneously.

Level 3

- A new type of enemy appears from the top, attacking in a sine wave motion.
- This new ship type cannot shoot missiles.
- There is a 3-second pause between wave completion and the next dive from this new ship type.
- Maximum of 5 enemy missiles can be active at once.
- 1 kamikaze-style diving enemy appears per cycle.

Level 4

- Up to 3 diving enemies may attack in random order.
- These enemies use the same sine wave movement as Level 3.
- The diving behavior becomes faster and less predictable.
- Missile cap remains at 5.

Update Logic Placement

Diving behavior and movement enhancements are added after the wave-cleared check in the game loop to ensure correct targeting of new enemies and avoid logic conflicts with outdated enemy data.