

# IDS - Game Analysis: Vectors

**Goal:** to observe the moving objects of a game to understand the vectors used

Vector: **Direction** and **distance** travelled in one **clock tick**

You will play 3 different school-appropriate games and analyse:

- What moving objects exist in a typical round of playing the game
- The number of different vectors used

For each vector briefly explain:

- What initiates the speed and direction of the vector
- What factors can alter the direction of a vector (gravity, bouncing etc)
- What causes each object to stop moving

*Some games are more complex than others. I recommend classic video games like Space Invaders.*

## **Example: PacMan**

Moving Objects: Pacman, 4 Ghosts

Vectors: 5

Control: Pacman Vector controlled by joystick

Ghost vectors controlled by AI

Vector Speed: Changes with power pellet.

Stop Vectors: Walls can set the pacman vector to stop