

# Phototropy

Phototropy is a game about using light/darkness and their interaction with plantlife to solve puzzles and traverse obstacles.

The game is a sidescroller with platformer elements and relies on logic and reflexes.

The game takes place in an abandoned, overgrown lab containing genetically altered plantlife.

The player starts off the game without any tools and s/he has to use switches to manipulate point lights, spot lights and lights that affect the entire room causing the plants to have varying effects.

There are different types of plants that have different effects when they are grown or shrunk.

The off-colored plants that are introduced later in the game shink when affected by light and grow in its absence.

## Plants

Two colors: **green** and **purple**.  
Two states: grown (or active)  
shrunk (or passive).

Green plants become active in light.  
Purple plants become active in darkness.

## Types of Plants

**Platform Plant:** Provides players something to step on when grown.

**Attacker Plant:** Attacks the player if s/he's holding the light tool for green plants and the antilight tool for purple plants. Also attacks inactive pellets. If two plants attack the same point they will entangle, forming a bridge. Will not attack if main body is in activator light.

**Vine Plant:** Provides players something to climb on when grown.

**Shooter Plant:** Shoots at 1/multiple directions at set time intervals as long as it's active.

**Blocker Plant:** Acts as an obstacle, preventing the player from getting to certain places as long as it's active.

For lighting, the priority is Pellet > Point and Spot > Room

## Tools

**Light Tool:** Shoots light pellets in an arc that when stuck to a surface, emit light for a period of time\*.

**Anti-Light Tool:** Similar to the Light Tool, however the pellets emit darkness (or simply, block light around itself)

\*:Maybe the time period can scale with how long the player held down the mouse button before releasing?

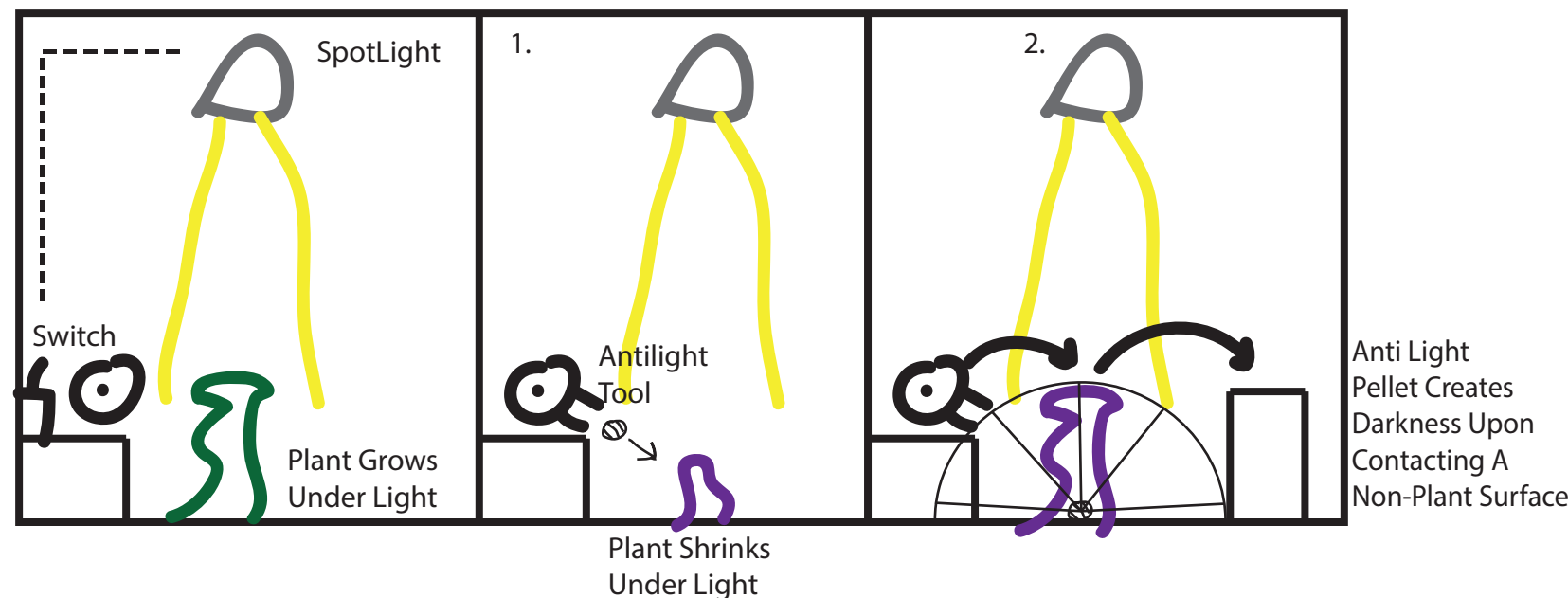
## Static Lighting

**Point Lighting:** Provides light/anti-light in a radius around the bulb.

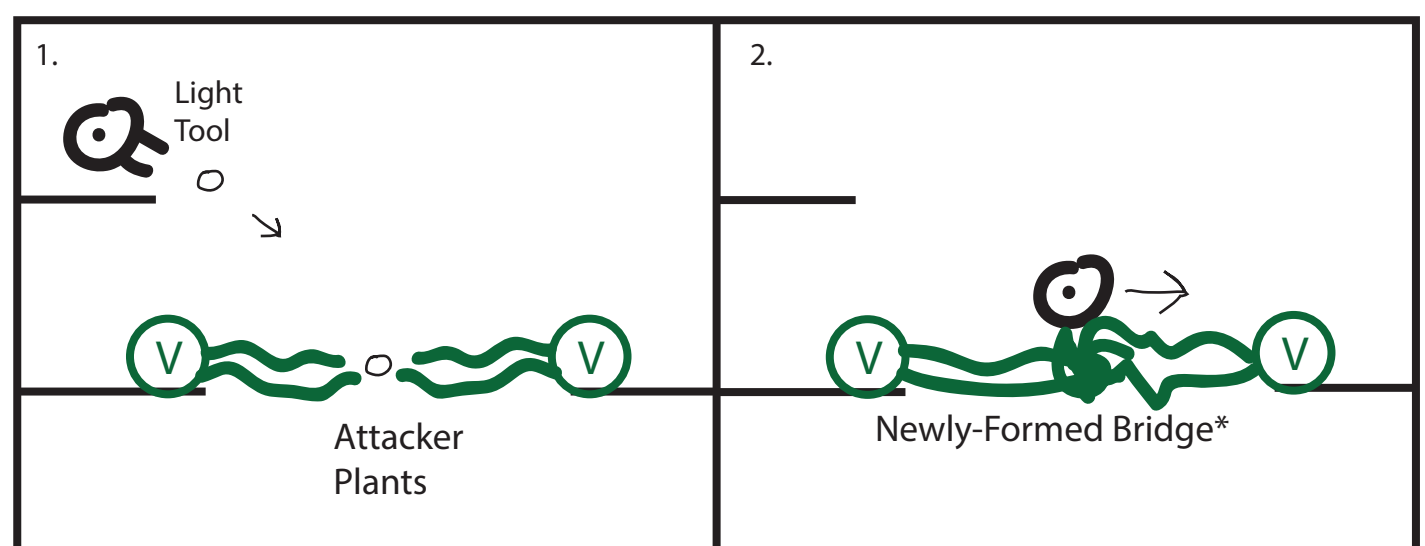
**Spot Lighting:** Provides light/anti-light in the direction it's pointed at.

**Room Lighting:** Sets the base lighting situation for the room.

## Platform Plant - Antilight Tool



## Attacker Plant - Forming Bridges



\*:May be temporary?