Cycles Light and Magic
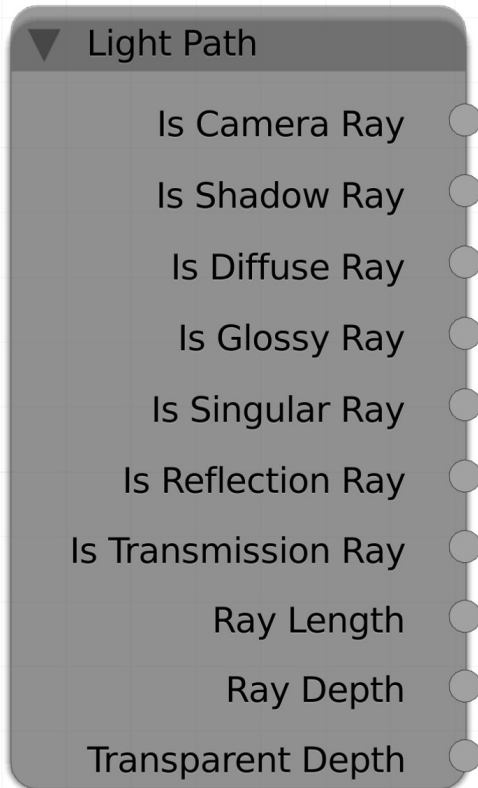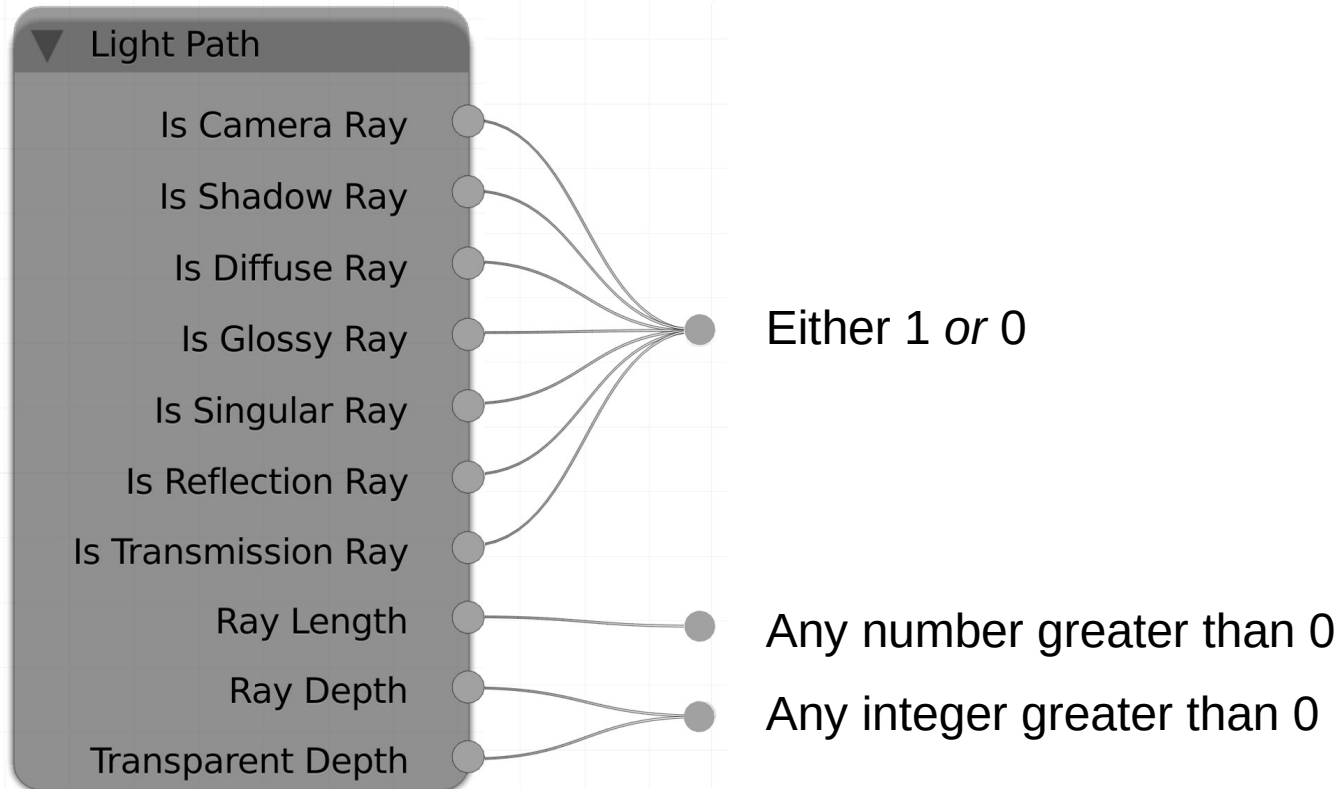
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BlenderDiplom.com

The Node Itself
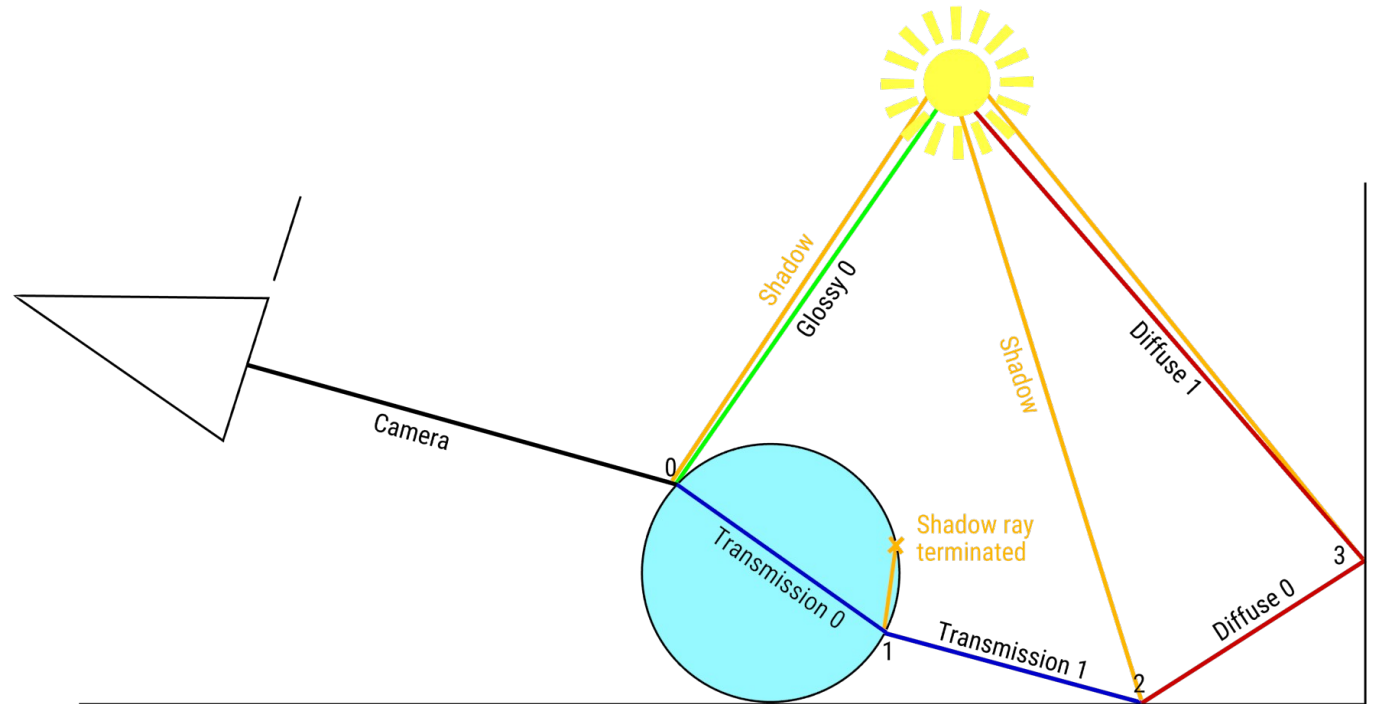
The Outputs

Light Path

- Is Camera Ray
- Is Shadow Ray
- Is Diffuse Ray
- Is Glossy Ray — Either 1 *or* 0
- Is Singular Ray
- Is Reflection Ray
- Is Transmission Ray
- Ray Length — Any number greater than 0
- Ray Depth — Any integer greater than 0
- Transparent Depth

The Principle of Path Tracing

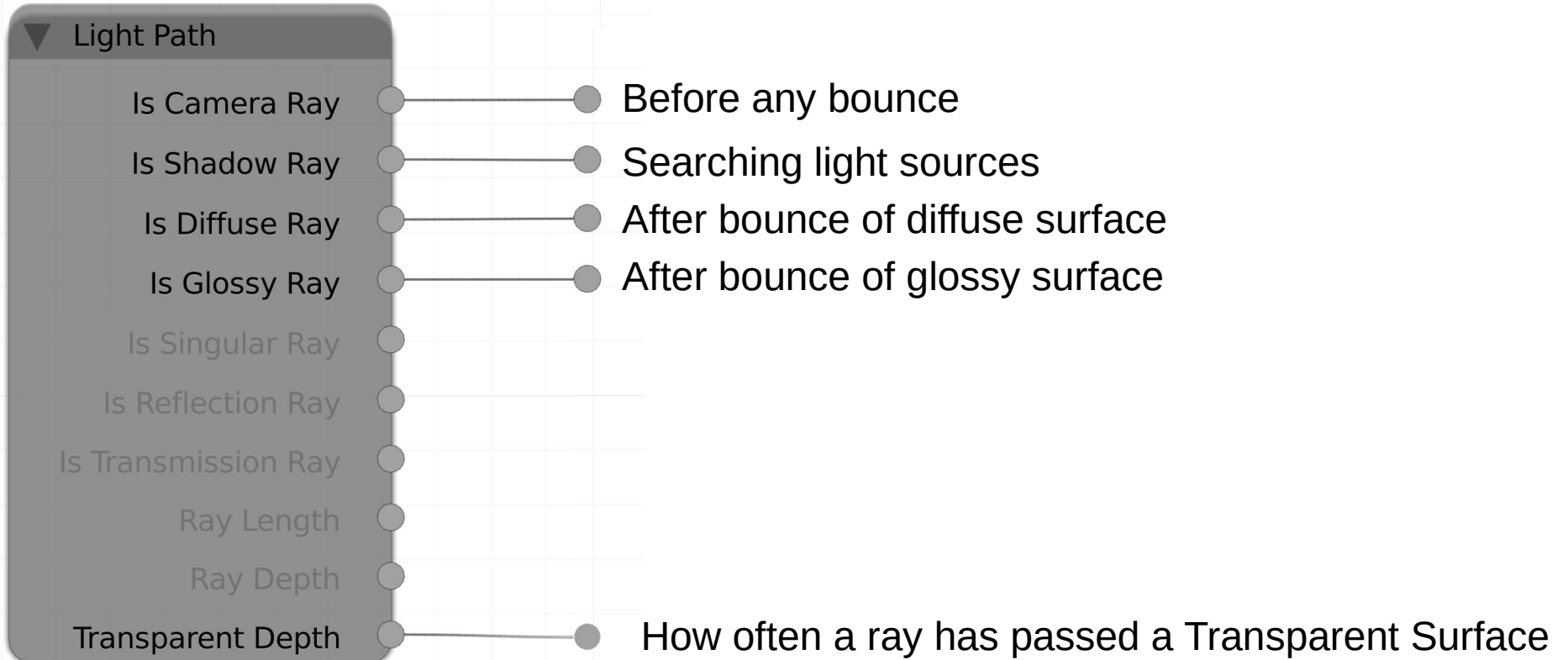Ray types in a simple scene, the turquoise circle represents a glass sphere, the black lines are a diffuse floor and wall respectively.
Source: The Cycles Encyclopedia

Today's Focus

Light Path
Is Camera Ray ○
Is Shadow Ray ○
Is Diffuse Ray ○
Is Glossy Ray ○
Is Singular Ray ○
Is Reflection Ray ○
Is Transmission Ray ○
Ray Length ○
Ray Depth ○
Transparent Depth ○

The Outputs

Light Path

Is Camera Ray ○━━━━○	Before any bounce
Is Shadow Ray ○━━━━○	Searching light sources
Is Diffuse Ray ○━━━━○	After bounce of diffuse surface
Is Glossy Ray ○━━━━○	After bounce of glossy surface
Is Singular Ray ○	
Is Reflection Ray ○	
Is Transmission Ray ○	
Ray Length ○	
Ray Depth ○	
Transparent Depth ○━━━━○	How often a ray has passed a Transparent Surface

Shadow Rays

Shadow

Glossy 0

Shadow

Diffuse 1

Shadow

Camera

Transmission 0

Shadow ray
terminated

Transmission 1

Diffuse 0

0

1

2

3

Source: The Cycles Encyclopedia