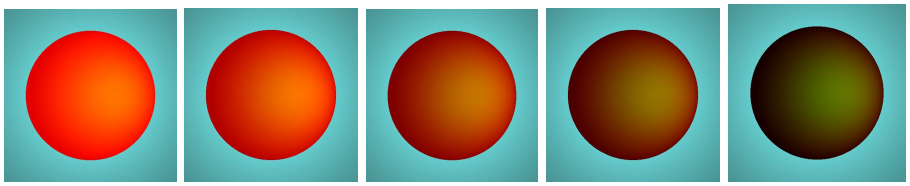
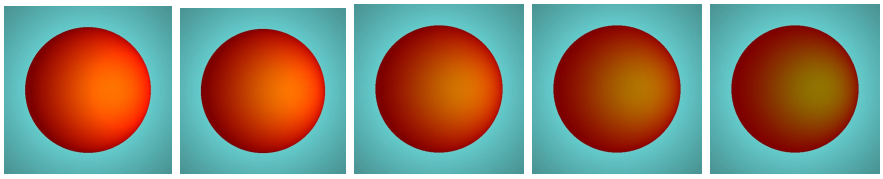
CSci 5607 - Homework 1b

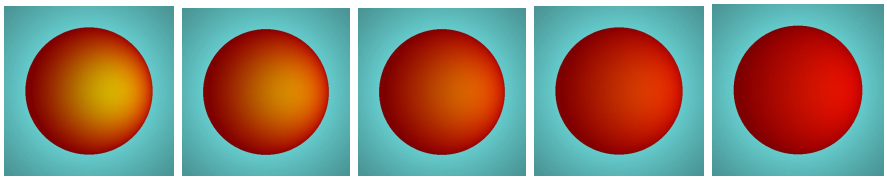
In all of the following comparisons when one parameter is changed the remaining are kept constant



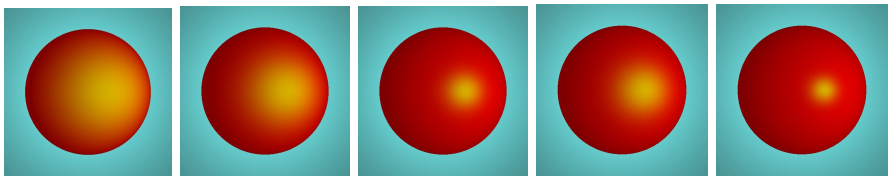
Varying ka = [0.9, 0.7, 0.5, 0.3, 0.1]
Decreasing ka darkens object as it decreases ambient color component



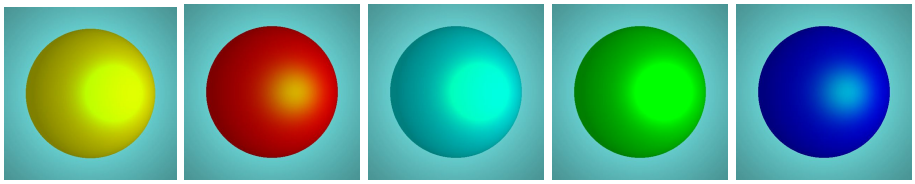
Varying kd = [0.9, 0.7, 0.5, 0.3, 0.1]
Decreasing kd darkens object as it decreases diffused color component



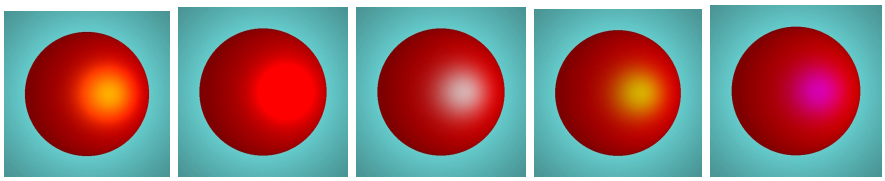
Varying ks = [0.9, 0.7, 0.5, 0.3, 0.1]
Decreasing ks decreases shininess as it decreases reflective color component



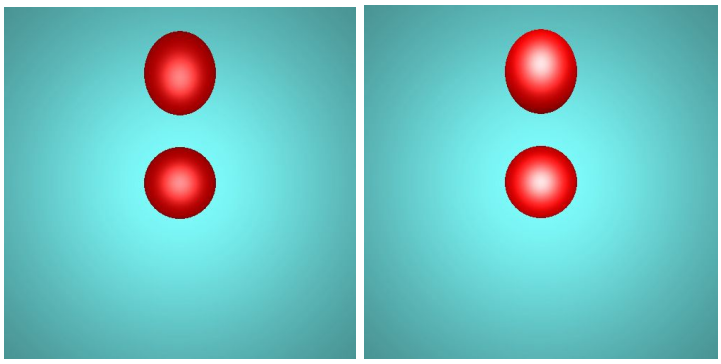
Varying n = [2, 4, 8, 16, 32]
Increasing n decreases the size of the reflected spot as higher powers of numbers less than one (coefficient of reflective color) go to zero



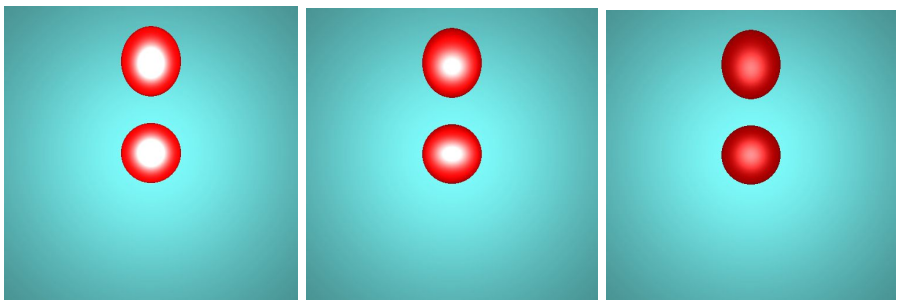
Varying Od = [yellow, red, cyan, green, blue]
Changing Od changes base ambient and diffused color of object but keeps reflective color same



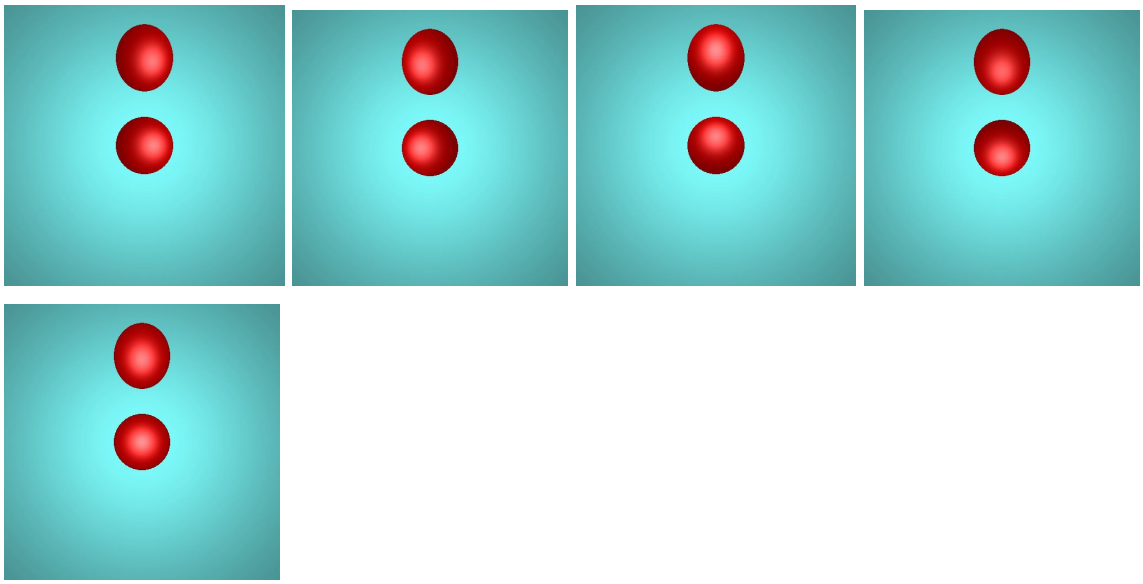
Varying Os = [yellow, red, cyan, green, blue]
Changing Os changes reflective color of object but keeps ambient and diffused color same



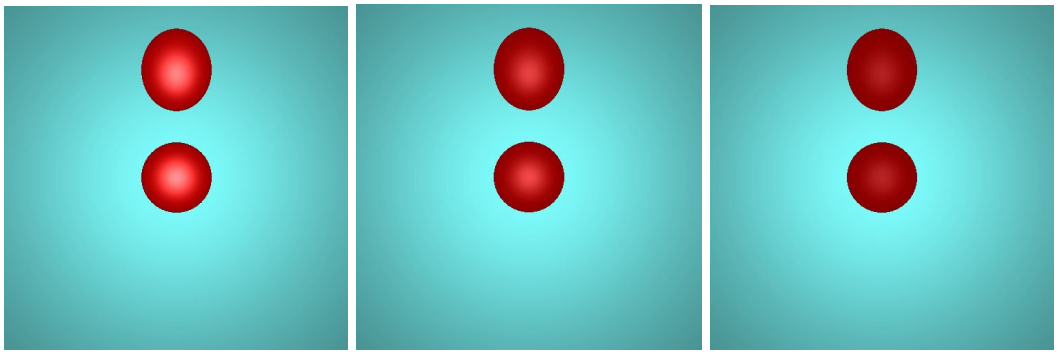
Varying type = [positional (at eye) , directional (towards view dir)]
Positional light reflections are more focused than directional light



Varying no of lights = [5, 3 ,1]
Decreasing number of lights decreases intensity of reflections



Varying light position = [right, left, up, down, center]
Changing position of positional light moves the reflection spots towards the light as expected intuitively



Varying light rgb=[(1,1,1),(.5,.5,.5),(.25,.25,.25)]
Decreasing light rgb intensity decreases intensity of diffused, ambient and reflected colors