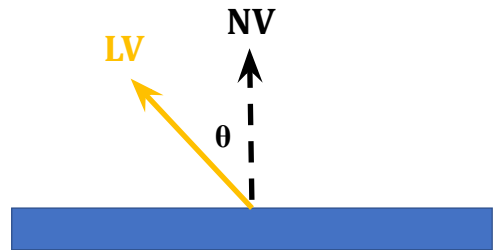


$L_{\text{amb}}, L_{\text{diff}}$: intensity of ambient, diffuse light
 $k_{\text{amb}}, k_{\text{diff}}$: fraction of ambient, diffuse light
 reflected from surface

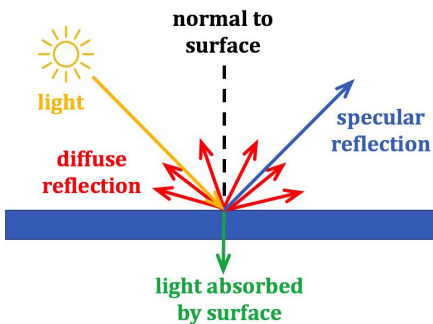
Lambertian Model



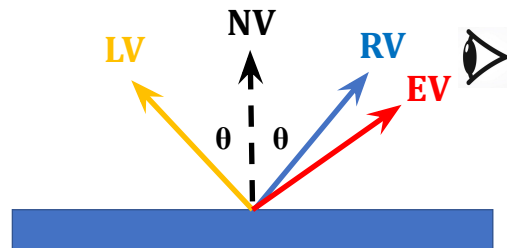
$$I = L_{\text{amb}} k_{\text{amb}} + L_{\text{diff}} k_{\text{diff}} (\cos \theta)$$

$$I = L_{\text{amb}} k_{\text{amb}} + L_{\text{diff}} k_{\text{diff}} (\text{NV} \cdot \text{LV})$$

All parameters have
RGB components!



Phong Model



$$I = L_{\text{amb}} k_{\text{amb}} + L_{\text{diff}} k_{\text{diff}} (\text{NV} \cdot \text{LV}) + L_{\text{spec}} k_{\text{spec}} (\text{EV} \cdot \text{RV})^e$$

L_{spec} : intensity of “specular” light source
 k_{spec} : fraction of specular light reflected from surface
 e : exponent captures “shininess” of surface

All parameters have
RGB components!