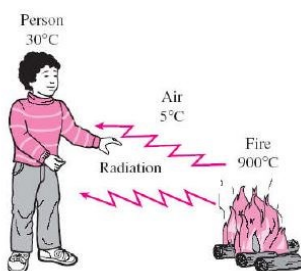


Week4- Maryam hajhashemi

$$U_{\text{total}} = u_{\text{wood}} * A_{\text{wood}} / A_{\text{total}} + U_{\text{ins}} * A_{\text{ins}} / A_{\text{total}} =$$

$$1/R_{\text{wood}} * 0.25 + 1/R_{\text{ins}} * 0.75 = 1/1.109 * 0.25 + 1/4.007 * 0.75 = 0.412$$

$$Q_{\text{total}} = 0.412 / 1000 * 100 * 2.4 = 988.8$$

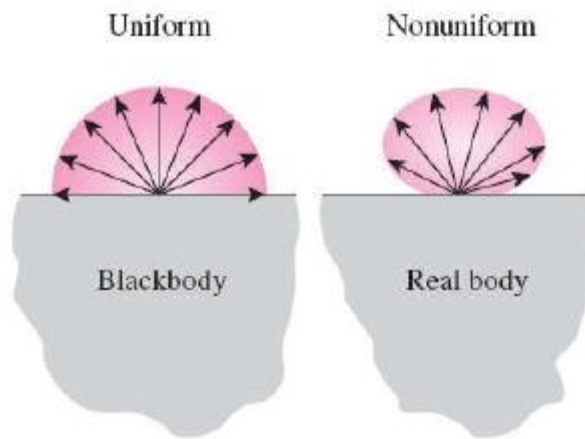


Radiation is a way of heat transferring. it is a form of energy transferring with electromagnetic waves with light speed

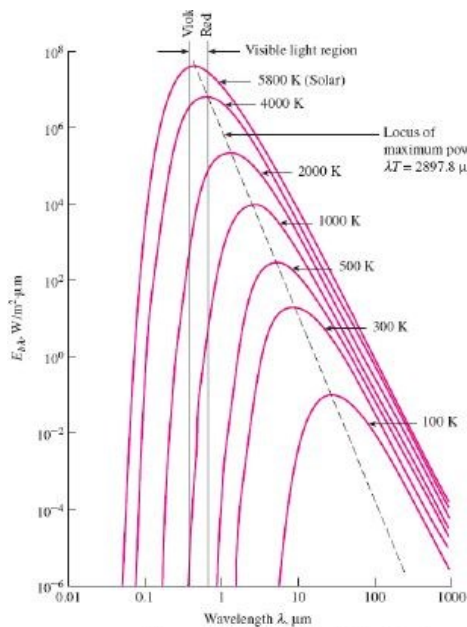
Electromagnetic radiation depends to waves

$$\lambda = \frac{c}{\nu}$$

There is a surface with a name of blackbody that absorbs all energy



The highest temperature the lowest wave length. there is relation between frequency and temperature.



The variation of the blackbody emissive power with wavelength for several temperatures.