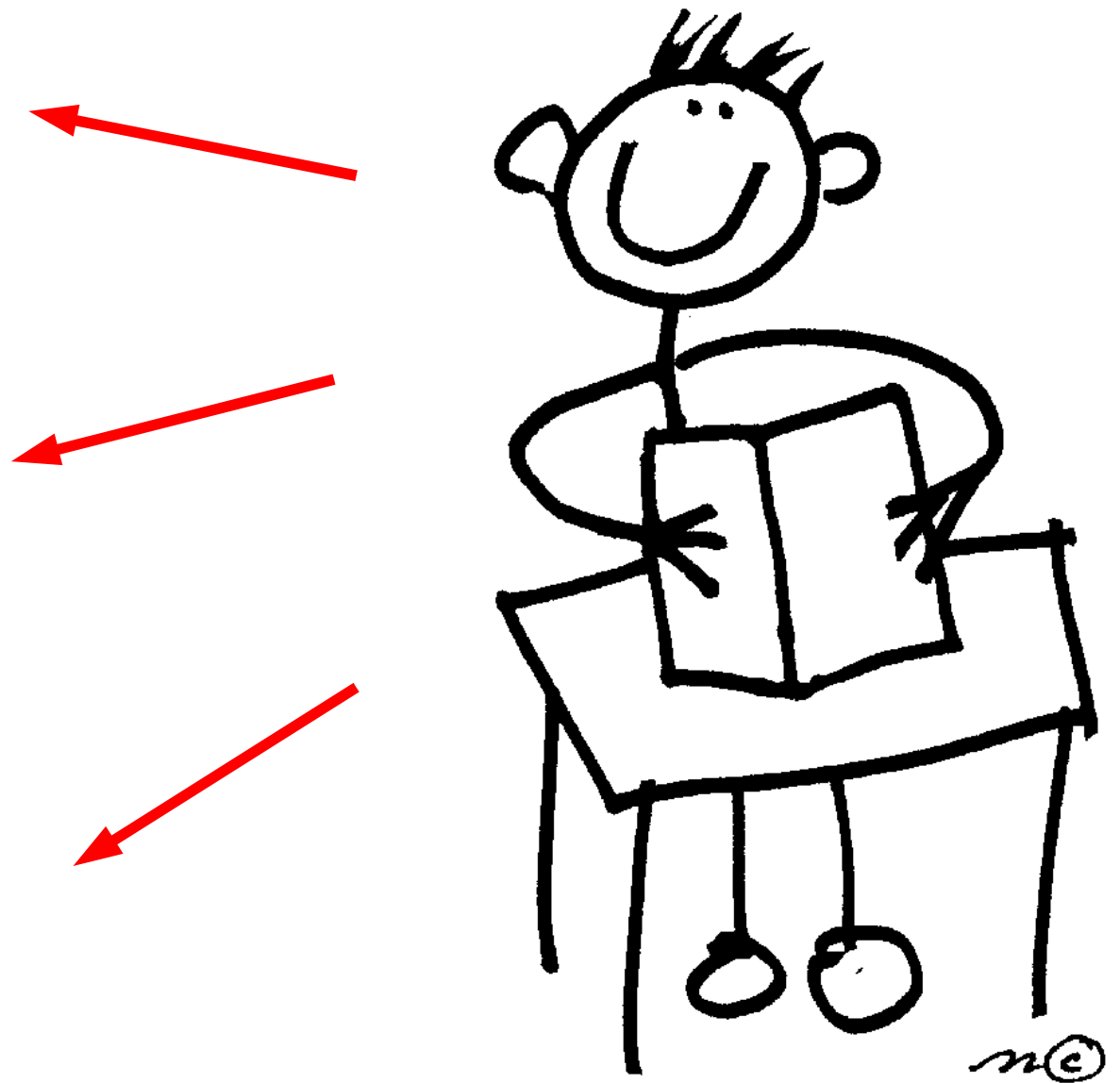


How does an infrared thermometer work?

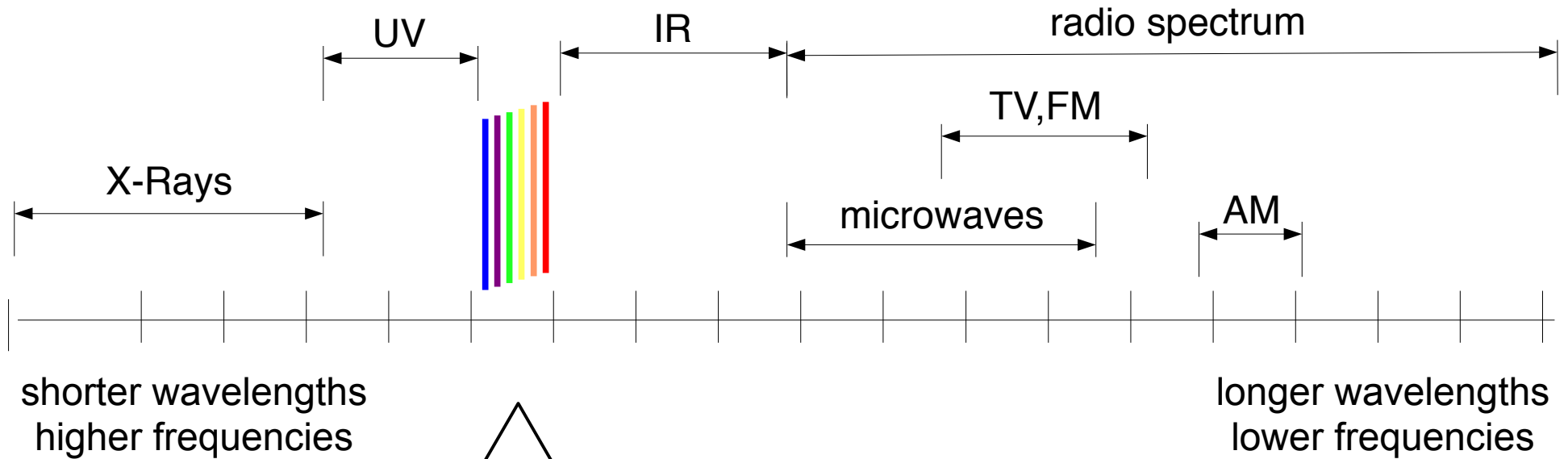


?



All things emit ***radiation!***

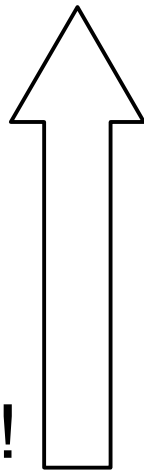
electromagnetic radiation



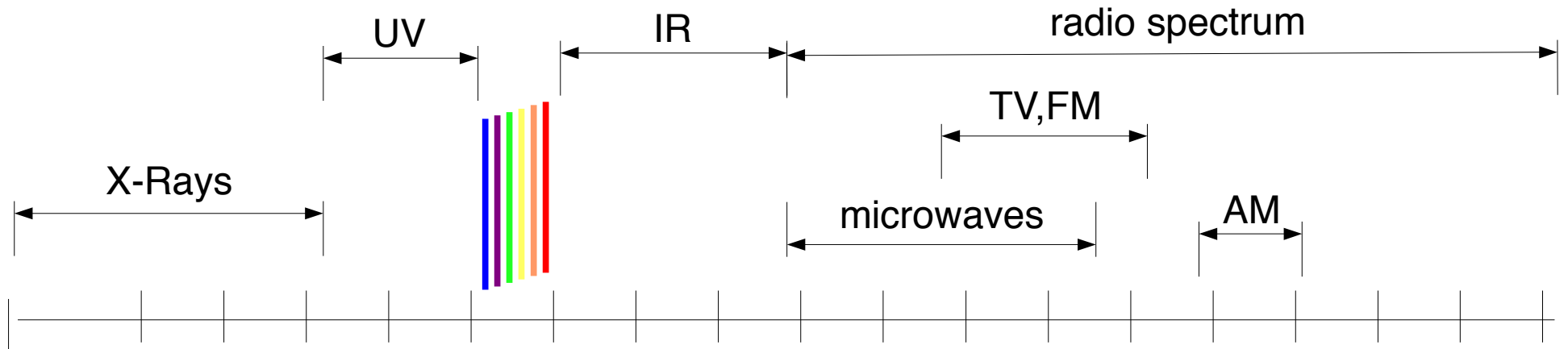
shorter wavelengths
higher frequencies

longer wavelengths
lower frequencies

visible light
we can see
with our eyes!



electromagnetic radiation



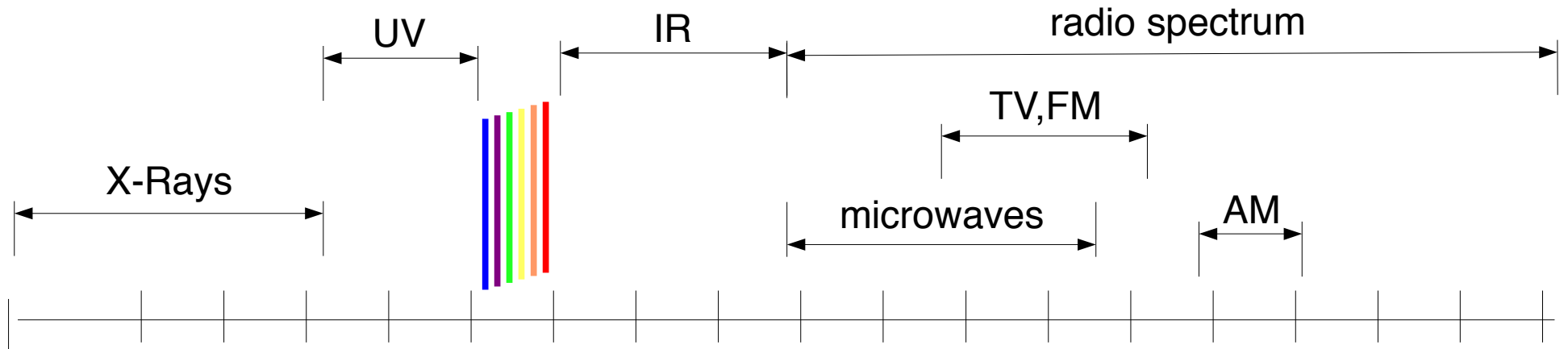
shorter wavelengths
higher frequencies

longer wavelengths
lower frequencies

visible light
we can see
with our eyes!

infrared radiation
(temperature)

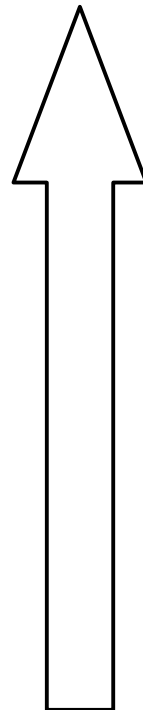
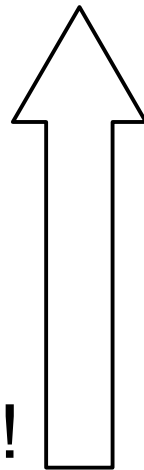
electromagnetic radiation



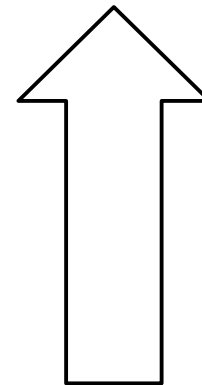
shorter wavelengths
higher frequencies

longer wavelengths
lower frequencies

visible light
we can see
with our eyes!



infrared radiation
(temperature)



microwaves
(water)

An infrared thermometer
is one kind of remote sensing instrument...

an instrument that uses
electromagnetic radiation
to measure things *without touching them!*

**There are other types
of remote sensing instruments!**