

getting the physics straight

source-medium-detector model of radiating

separation of perceptual colour from inbound frequencies

ray diagrams as a predictive model

inverse square law of brightness

an account consistent with a helpful description of energy

representing the topic effectively

using the act of seeing as a starting point

ray diagrams as an explicit and predictive model

using a few coherent models well

inverse square law

particular teaching challenges

a consistent model of energy

exploiting the source-medium-detector model

putting the ray model to use effectively

being clear about the descriptions of colour

keeping powerful models separate from ad-hoc analogies

specular and diffuse reflection

dealing with existing ideas

seeing as a result of something travelling from the object seen

avoiding being drawn into using the phrase 'light energy'

light needed for sight

light not running out, but travelling across the universe

the high speed of light making processes appear instantaneous

separating the real from the model

selected teaching principles

systematic use of ray diagrams model

linking ideas from different areas

colour addition and multiplication

giving an explanation as telling a story - moving from one description