

Study Guide

Learning Target LS.2: I can predict how light interacts with different surfaces

Resources:

- *Transparent, Translucent, Opaque* Foldable
- Post-lab questions (on Google Classroom)
- Discovery Education- Transmission and Absorption Reading Assignment

Big Ideas:

- *Energy can never be created or destroyed, it only changes forms (transforms to different types).*
- *Characteristics of surfaces and materials affects whether light can be reflected, transmitted or absorbed.*

Basic (Level 7) Define and provide examples of the following terms describing light and surfaces. You must get all of the items correct to earn a "7" score:

electromagnetic energy-

electromagnetic spectrum-

visible light-

transmission of light (transmit)-

absorption of light (absorb)-

reflection of light (reflect)-

transparent-

translucent-

opaque-

Proficient & Advanced (Levels 9 & 10) Provide evidence of how light interacts with different surfaces using the vocabulary terms above. You must get all of the items correct in this section and the basic section to earn a "10" score.

Example of a question similar to what will be on the *Proficient* section of the test:

Is a concrete sidewalk a transparent, translucent or opaque surface? Provide evidence to support your answer by using the words that describe how light interacts with the sidewalk.

What color is an object that reflects all colors of light? What if it absorbs all colors?

There will be an optional section on the quiz to help improve your score (i.e. raise a "7" to an "8"). You will have to apply properties of light and materials to something not explicitly discussed in the class room by answering an essay question.