

Supporting Information Appendix

Description of Rubric-Scored Writing Dimensions

Evidence	This dimension evaluated how well the evidence provided supports and explicates the main points regarding the interaction of light with different materials. Evidence may include examples of materials that interact with light in particular ways, or examples of the characteristics of materials that affect the interactions.
Introduction	This dimension evaluated how well the opening sentences of the piece introduce the statements that follow.
Clarity	This dimension evaluated how well the writer communicates ideas using understandable sentences and a transparent (easy-to-follow) structure.
Conclusion	This dimension evaluated how well the opening sentences of the piece summarize the preceding statements.
Vocabulary Definition	This dimension evaluated the extent to which the writer uses science words correctly and explained the meaning of the words.
Science Concepts	This dimension evaluated the extent to which the writer provides a complete and correct conceptual explanation of the interaction of light with different materials.