Transparent, translucent and opaque materials for Grade 5

Practice worksheet - Science · Grade 5

Name: _____ Date: _____

Show your working. Answers and explanations follow on a separate page.

Try each task before opening its answer. Give an example or reason, not only a label.

Write an answer and your reason before opening the explanation. Check the reasoning as well as the final answer.

1. A sample gives a sharp view of a printed letter.

2. A sample glows but letters behind it blur.

3. A thick wooden board blocks the view.

4. Must an opaque material be black?

5. Can coloured material be transparent?

6. Does light through a hole prove cardboard transmits light?

7. Name one condition to keep similar.

8. What can frosting do to clear glass?

Practice continued

9. Why can a stack of paper differ from one thin sheet?

10. Choose a property for a window with a clear view.

11. Choose a property for a light-blocking screen.

12. Should you test by looking at the Sun through plastic?

13. Why record clear plastic rather than just plastic?

14. How can we see an opaque object?

Answers and explanations

Answer key - Science · Grade 5

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1. Transparent in that test.

It transmits light with little image-blurring scattering.

2. Translucent.

Some light passes but the image is scattered.

3. Opaque.

Visible light does not transmit through the tested board to a useful extent.

4. No.

White and shiny objects can also be opaque.

5. Yes.

A clear coloured filter can preserve a sharp view.

6. No.

The light passes through the hole, not through the material.

7. For example: lighting or distance from the printed shape.

Different conditions can change apparent clarity.

8. Scatter light and blur the view.

The sample may become translucent.

9. More layers can reduce transmission.

Classify the tested thickness.

10. Transparency.

The viewer needs a sharp image through it.

11. Opacity.

Transmission should be blocked.

12. No.

That can harm eyes; use ordinary room light.

13. Plastic samples have different surface and transmission properties.

The sample description makes the claim accurate.

14. It reflects some light into our eyes.

Being opaque does not mean absorbing every bit of light.