Answer Key: Color Matching Paint Video Questions

Instructions
While watching the video, Color Matching Paint, answer the following questions:

1. Give an example of a situation where specifically matching the color of a paint would be important:
   Answers will vary. Examples:
   - Car accident—need to repaint scratches/damages area on vehicle.
   - Painting a house, and want to match it to a specific/favorite color.

2. What are the 4 basic components of paint?
   Solvent, pigment, binder and additives.

3. In order to match an exact paint sample perfectly, you will need to determine the wavelength of light that the pigments are absorbing.

4. The “spectro” in Spectrophotometer is referring to what?
   The “spectrum” in the electromagnetic spectrum—specifically the spectrum of visible light that our eyes can see.

5. A laboratory spectrophotometer works by splitting a beam of white light into the rainbow of different colors or wavelengths, using a prism.

6. True or False? The spectrophotometer determines which wavelengths are in the light coming off of a sample. This allows it to determine the exact spectrum of light the new paint needs to produce.