**Paint Layer Determination Lab Key**

1. Answers will vary depending on the class. Although it is tedious, students should be able to match the sample to the crime scene.
2. Yes, it is possible to have more than one group match the crime scene if the layers were painted in the same sequence. This could happen, such as with cars that happened to be painted more than once with the same sequence of colors.
3. It would be difficult to allow color layers alone to be considered an exact match for reasons such as the explanation in #2 above. However, sometimes paint chips have a shape that may be matched to the source, much like a jigsaw puzzle. Most likely, if layers match a source, further testing would decide exactness.