



SCIENCE OLYMPIAD
— AT THE —
UNIVERSITY OF FLORIDA

Northern Regional: January 19th, 2019

Crime Busters B Answer Key

Name(s): _____

Team Name: _____

School Name: _____

Team Number: _____

Rank: _____

Score: _____

ANSWER KEY

QUALITATIVE ANALYSIS

1. Salt (2.5)
2. Vitamin C (2.5)
3. Gypsum (2.5)
4. Baking soda (2.5)
5. Yeast (2.5)
6. Rubbing alcohol (2.5)
7. Water (2.5)
8. Ammonia (2.5)
9. PETE / Polyethylene terephthalate (2)
10. Polyester (2)
11. Cotton (2)
12. Polyester (2)
13. Rayon (2)
14. Wool (2)

MULTIPLE CHOICE/FILL IN

1. D (2)
2. A (2)
3. C (2)
4. A (2)
5. C (2)
6. Ridges rise in the center, pointing upward or forming a triangle. (3)
7. Man-made polymer (3)
8. More than one metals melted together (3)
9. Medulla, cortex, and cuticle (3)
10. Whorls, arches, loops (3)

SHOEPRINT ANALYSIS

Suspect 4 (4)

FINGERPRINT ANALYSIS

Suspect 4 (4)

CHROMATOGRAPHY

Suspect 4 (4)

ANALYSIS (30)

Suspect 4, Shadow the Hedgehog committed the crime

Reasoning:

Shoeprint analysis

Fingerprint analysis

Chromatography

Different aspects of the qualitative analysis