Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Latent Fingerprints: Using Cyanoacrylate Fuming**

Safety Precautions: Cyanoacrylate is an irritant and can fuse skin together. Wear gloves, and perform fuming in a fume hood. Wash hands after handling all materials.

Procedure:

1. Work in groups of 4.
2. One group member should plant a full handprint (including all fingers and thumb) on an aluminum can.
3. Carefully (using gloves) place the can in the fuming chamber in the fume hood.
4. Add a small amount of cyanoacrylate (on small piece of foil, warmed on a hot plate) and water to the fuming chamber. You do not need a lot of cyanoacrylate.
5. Wait approximately 30 minutes for the reaction to take place.
6. Upon development, carefully remove the can from the fuming tank.
7. Identify where the prints are on the can, and dust with black powder.
8. Tape your dusted/lifted print in the space below.
9. Identify the ridge pattern and 5 minutiae.

Tape developed print here:

Questions:

1. What kinds of materials could be developed in this way?
2. What are the advantages to this method of latent print detection?
3. What are the limitations of this method of latent print detection?
4. How could this technique be useful to a forensic scientist?