

Science Experiment: Toolmarks

Project: Foods, Animals, Entomology, Collections, Wildlife, Woodworking, Etc.

Introduction:

When two objects come in contact with each other, the harder object will leave an impression in the softer such as in the case of toolmarks. Toolmark analysis is used to compare tools to toolmarks found at the crime scene. This can be adapted to also be used for projects to identify tools that you use in those projects and the marks that they make

Toolmark Analysis

Materials needed:

Variety of tools, clay, card stock, ruler, magnifying glass, pen/pencil

Lab Safety:

Wear safety goggles. Choose youth-appropriate tools Remind youth how to exchange tools

Analysis Questions:

How might the marks of a new tool differ from a used tool? How could one screwdriver produce two very distinct markings? Do you think the markings of two identical tools (new and from the same manufacturer) would leave identical markings?



Adapted from: Presentation by Jocelyn Koller at NAE4-HA, "4-H Affordable Forensics Fun".