**Tool Marks Analysis Worksheet**

**Student Names:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date: \_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objective:** Your team will need to examine and document the tool marks made by each tool.

**At each station**

1. To prepare for the experiment, roll the modeling clay flat so that it is flat inside the plate. Make several impressions of each tool in your slab of modeling clay.
2. Use a ruler to record the measurements for each tool and its impression surface.
3. Document any unique characteristics you notice on each tool or its impression. Write your observations in the Data Table (see below).
4. After you have documented both of the tools at the station, roll the clay into another ball to prepare for the next group and wait until it’s time to rotate to the next station.

**Analyze**

* Dimensions of the impression
* Ridges and/or patterns
* Defects and/or unique characteristics
* Paint chips or metal shards left on the tool

**Data Table**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Width of Tip** |  |  | **Length of Tip** |  |  |  |  |  |  |
|  | **Tool #** |  |  |  |  |  |  | **Characteristics of Tool** |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | **(mm)** |  |  | **(mm)** |  |  |  |  |  |
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|  | **3** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **4** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **5** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **6** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **7** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **9** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **11** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **12** |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  | (adapted from T. Trimpe hht://sciencespot.net & R. Saferstein - Forensic Science) |  |