

An Experiment with Three Indigenous Tool Types

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Abstract

We learned about indigenous people and learned how their lives were affected by the tools they could get from their natural habitat. This test was to find out what raw material scrapes, cuts and drills raw carrots the best. We took a piece of wood, stone flake and bone. We sharpened them and got raw carrots to test which tool worked the best. For our results We learned that each of the tools are used for their own purpose.

Introduction

Over the period of time at archeology we learned about Indigenous people and how they lived and what they used like raw materials like bone, wood, stone/flake. The purpose of our experiment was to determine which tool raw material scraped, cut, and drilled the best. The hypothesis we came up with was that we think flake will cut, scrape and drill the best. We decided to scrape, cut and drill with all the materials (flake, bone, wood). We scraped the raw material (carrots) five times with each material and then we cut the carrots 5 times and then for the drilling we turned each material five times in a twisting motion except wood because wood wouldn't work at all. That allows there to be a fair competition between all of the materials.



Photo 1-All the raw materials we used.



Photo 2-Scale with the raw material (carrots)

Methods

We tested our hypothesis by doing an experiment. Our experiment was seeing which tool type could do three actions the best. Those three actions were (cutting, scraping and drilling). These are how we did them. Our hypothesis was that the bone would work the best with cutting, scraping, drilling.

- Scraping: We took the three tools and used a scraping motion on a carrot 5 times. Then we took our scrapes then weighed them.
- Cutting: We took the tools which were bone wood and flake and used a cutting motion on the carrot 5 times in one area. Then we measured how deep the cuts went into the carrot.
- Drilling: We took the three tools and used a drilling motion on a carrot 5 times. Then we took a micrometer to measure the depth of the hole we made.
- All data was recorded as we planned so we could compare charts and graphs together to establish which tool was the most efficient.



Photo 1. Scraping



Photo 2. Cutting



Photo 3. Drilling.

Results

We tested what raw material would cut raw carrots the best. Our hypothesis was that flake would cut the best. We did a series of tests and here are our results.

- Scraping showed 50% of the total weight was with flake
- Cutting showed that wood is the best for cutting
- Drilling showed bone was the best for drilling

We were not correct because they all are good for different things.

Discussion]

These are our results; they show each tool is used for a different purpose.

1. Figure one, scraping with a flake had 50% of the total weight.
2. Figure two shows wood took the lead with 41% of the total depth .
3. Figure three we could only use Bone and Flake because wood would not do the job. Bone did the best in this challenge with 51%.
4. We learned that each of the tools are used for their own purpose.

Scraping data

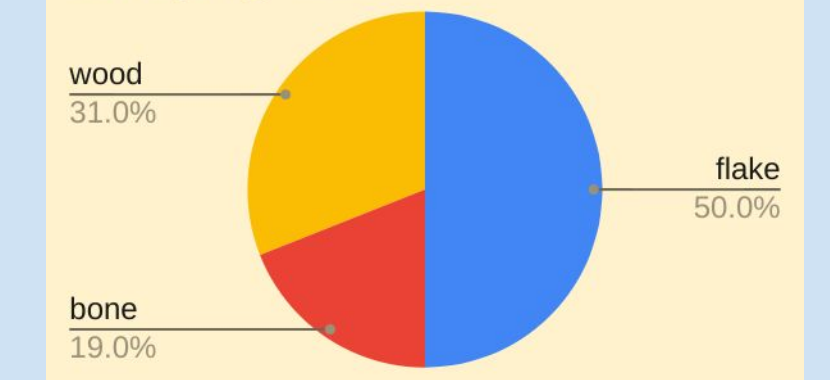


Figure 1. Pie chart showing scraping data by tool type.

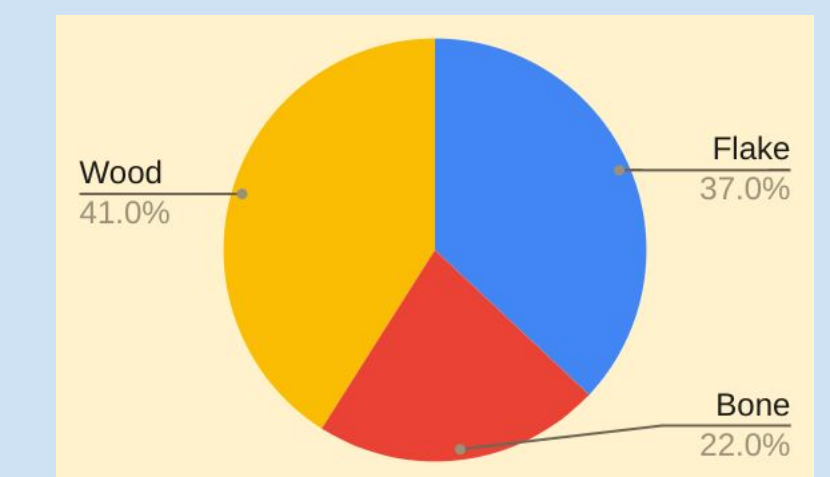


Figure 2. Pie chart showing cutting data by tool type.

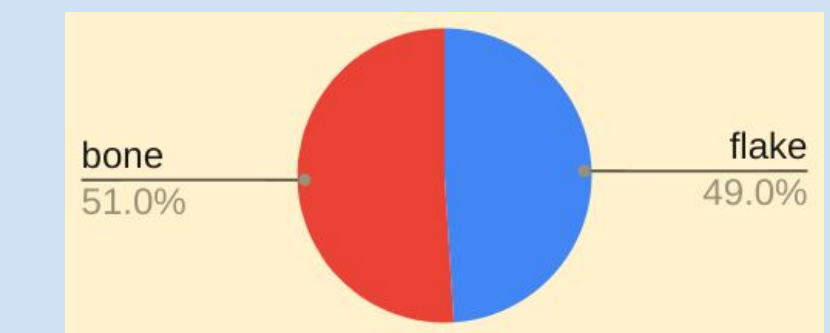


Figure 3. Pie chart showing drilling data by tool type.

Conclusions

- In conclusion, our hypothesis was incorrect because we thought that flake would be the best for all the tasks but it turns out that all of the raw materials have their different purposes.