

World Prehistory

Stone Tool Identification and Function

Description: The identification and function of stone tools, or typology, is a critical area of inquiry and analysis in the development of cultural histories derived from archaeological assemblages. Stone tools, or lithics, analysis has the potential to provide information on ancient technologies, trade patterns, resource procurement, stylistic and cultural associations, and use-wear or behaviors traceable to the tools themselves. In this exercise, you will learn some of the basic procedures utilized to both (a) identify and describe, and (b) interpret the function of said tool types.

Part 1: Using the diagrams from Toby Morrow (1984), Figures 1.1 through 1.10, you are to first describe, and then identify the types of ancient tools or projectile points provided for your analysis. Each of the tools has been identified by way of a Specimen Number provided on the plastic bag that contains each tool. In order to complete this first portion of the exercise, you are to complete the following tasks:

1. Using Figure 1.1, determine which stage of the Production Process is indicated (e.g., Preform).
2. By comparison with Figure 1.5, determine the Form Category represented (e.g., Corner-notched point).
3. Use Figure 1.6 to determine the longest and shortest attributes of the specimen(s) examined (e.g., Stem Width = Maximum Width).
4. With Figure 1.7, determine the Blade Form (e.g., Convex-sided).
5. Using Figure 1.8, describe the Point Cross-section (e.g., Rhombohedral).
6. Use Figure 1.9 to determine the Flaking Pattern employed (e.g., Collateral).
7. Employing Figure 1.10, identify the Basal Treatment (e.g., Steep retouch).
8. Having identified each of the specific characteristics or types that best describe your stone tool, prepare a brief one or two sentence technical description of the tool in your possession.

Part 2: This portion of the lab exercise entails one final assessment of the tool type or tools that you have selected for analysis. Cortex, or the natural “skin” or surface of lithic material used for flintknapping, is not always completely removed from all specimens crafted into tools. This portion of the exercise requires that you determine the extent to which the cortex has been removed from the tool under analysis. The diagram used for this portion of the exercise was adopted from Sutton and Arkush (1998: 60). Please complete the exercise as follows:

1. First, select a total of five flakes and completed tools for your analysis.
2. Use the diagram labeled “Debitage Analysis Form” to examine and consider the sample of specimens provided.
3. Using the Form specified, enter the Specimen Number of the artifacts that you believe best represent at least five of the categories noted in the table.
4. Be prepared to explain why it is that you believe that your identifications are correct.
5. Please return the artifacts provided to your professor at the end of today’s lab session.

Morrow, Toby. 1984. Iowa Projectile Points. Iowa City: Office of the State Archaeologist, The University of Iowa (Reprinted 1992).

Sutton, Mark Q., and Brooke S. Arkush. 1998. Archaeological Laboratory Methods: An Introduction. Second Edition. Dubuque, Iowa: Kendall/Hunt Publishing Company.