**ANTHRO 100: REVIEW SHEET J. M. KENOYER**

Fall 2017

**IMPORTANT ARCHAEOLOGICAL CONCEPTS AND TERMS**

**ARCHAEOLOGY** - the study of human cultural development in the primarily in past but also in the present. Major focus is on the material remains or **artifacts** of human activity.

**ARTIFACTS** - any object or environment with evidence of human intervention

 - "artifacts" generally refer to the range of movable objects

 - "ecofacts" generally refer to seeds, pollen, bone, etc.

 - "structures" generally refer to architectural features

 - "features" generally refer to any discernable change in the soil or natural environment that results from human activity, e.g. a hearth, depression for sleeping.

**Specific goals of archaeological research are to**

 1) describe and reconstruct  **culture history - chronology**

 2) describe and reconstruct **past lifeways**

3) identify and explain **culture process –** how and why people did what they did?

4) describe and understand the **archaeological record**

The archaeological record is a **finite (limited) and incomplete record** of human activity.

**Culture-** learned behavior that is the primary means of adaptation to the environment for humans- includes the use of tools and technology; social organization; use of symbols; versatility of the manipulation of symbols and the non-genetic transfer of meaning of symbols. Culture is shared, it is accumulative and it is constantly changing. **Archaeological culture** is generally correlated to a human society.

**Natural Environment -** all aspects of nature including other humans, human belief systems and ideology

**Uniformitarianism**- Hutton and Lyell - all strata are the result of geological processes of erosion, accumulation, weathering and tectonic movements that are continuing to occur today as they did in the ancient past.

**Diffusion -** the spread of organisms or ideas over space

**Migration -** the physical movement of organisms in to new regions

**Scientific Process of Hypothesis formulation and testing:**

1) one or more hypotheses are formulated based on inductive research

 2) then you deduce the logical consequences from the hypothesis

 3) then you proceed to test the deduced observational predictions with the empirical data from the archaeological record to see if in fact they are true

 4) if they are true, then the hypothesis is confirmed to some extent

- more hypotheses can be generated and tested with independent data to increase the probability that the interpretation is correct.

Most archaeological interpretations are based on **inductive reasoning -** based on a set of specific empirical observations you make generalizations or inferences about past and present situations.

Very few interpretations are based on **deductive reasoning-** proceeds from a general principle to infer about a specific situation, - if the premises are true then the conclusions must also be true.

**Analog**y - a form of inference in which it is reasoned that if two or more things agree with one another in one or more respects, they will probably agree in yet other respects. Ethnographic Analogy uses such similarities to interpret the function or meaning of past artifacts on the basis of modern function or meaning. There is no such thing as a "perfect analogy" since if all properties were the same then the objects would be identical.

**Palaeontology-** study of **fossil** bone

**Taphonomic studies-** study of how bones are patterned in the systemic and archaeological context

**Palynology-** the study of pollens

**Ethnoarchaeology - Living archaeology -** the study of living cultures to understand how to better interpret the past

**Experimental Archaeology** - the replication of tools or adaptive processes to better understand the archaeological record

**Archaeometry** – materials analysis using various scientific approaches, physics, chemistry, geology

**Public Archaeology** – cultural resource management, heritage management, public outreach and education

**Archaeological Sites-** occupation sites- cave, open air

 special activity sites- kill sites, burial, ceremonial, quarry, trading, transitory

**Archaeological Occurrences-** surface scatters, secondary gravels, (colluvial or alluvial), trap caves

**Primary Context-** artifacts located where they were originally used or discarded.

**Secondary Context-** artifacts that have been redeposited or shifted from their original position.

**in situ** - in place

**Systemic Context-**the context in which artifacts are made and used by humans.

**Archaeological Context-** the context that artifacts enter after they leave the systemic context or are discarded or buried.

**Types of Material Evidence Preserved Archaeologically**

 faunal and botanical remains, raw materials, finished objects, tools and weapons, utensils, ornaments, mortuary remains, architecture, settlement patterns, graphic symbols, ritual objects and symbols

**Inform us about**

 subsistence systems, technology, population growth, centralization and control of social, ritual, economic and political aspects of a society, e.g. urbanism, social stratification, status, access to resources, etc.

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**ARCHAEOLOGICAL PERIODS**

Neolithic (Food Production) 9000 to 8000 B.P. and later

Mesolithic (Transitional period) 10,000 to 9000 B.P.

Upper Palaeolithic (Hunting-Gathering) 30,000 to about 10,000 BP

Middle Palaeolithic (Hunting-Gathering) 100 or 70,000 to about 30,000 BP

Lower Palaeolithic (Hunting-Gathering) + 2 MYA to 100 or 70,000 BP

**IMPORTANT GEOLOGICAL TERMS and DATES**

**PERIOD EPOCH Approximate Dates**

 **Holocene** Present to 10,000/12,000 BP

 **Pleistocene** 10,000 to about 2 MYA

**Quaternary** - Upper/Late 10,000 to 100,000 (127,000) BP

 - Middle Pleistocene 100,000 to about 1 (.7 ) MYA

\_ \_ \_ \_ \_ \_ \_ \_ \_ - Lower/Early 1 MYA to about 2 (1.9, 1.7)

**DATING TECHNIQUES**

 **Relative:** Relative stratigraphic position, relative stylistic position,

 Seriation, Cross dating, with artifacts, fossils, and pollen

 **Chronometric/Absolute: Approx. ranges of reliable dates**

Potassium/ Argon: (K/Ar) 400,000 to several billion years ago

 Fission Track Dating: 100,000 to several billion years ago

 **Carbon 14 (conventional): 1500 A.D. to 30,000 years ago**

 **Accelerator Mass Spectroscopy (AMS): possibly to 75,000 YA**

 **(100, 000 YA not reliable)**

 **Thermoluminescence: (TL) present to 10,000, possibly**

 **to +200,000 YA**

 **Palaeomagnetic/Thermoremnant** or Geomagnetic: present to +6 MYA

 **Optically-Stimulated** **Luminescence (OCL)** – dates based on estimates of when quartz or feldspar grains were last exposed to light. **Burnt rock or sediment 100 to 300,000 YA**