To Rot or Not to Rot

**Topic:** Anthropology  
**Subtopic:** Archaeology  
**Type:** Activity  
**Level:** for grades 6 and up  
**Time:** More than a week  
**Origin:** Petra

**Keywords:** Antiquities--Collection and preservation • Archaeology--Field work • Climate • Excavations (Archaeology) • Science--Methodology

**MORE ABOUT THIS RESOURCE**

This activity is a supplement to the Petra Educator’s Guide. Here, students explore the effect of environment on the preservation of organic materials. It includes:

**Lead Question: What are the effects of the environment on organic materials?**

- a list of materials
- step-by-step instructions
- observation worksheet

**STANDARDS**

**National Science Education Standards**

**Grades K-4:**
*Science as Inquiry CONTENT STANDARD A:*
  - abilities necessary to do scientific inquiry
  - understanding about scientific inquiry

*Physical Science CONTENT STANDARD B:*
  - properties of objects and materials

*Life Science CONTENT STANDARD C:*
  - organisms and environments

*Earth and Space Science CONTENT STANDARD D:*
  - properties of earth materials

*Science in Personal and Social Perspectives CONTENT STANDARD F:*
  - types of resources
  - changes in environments

*History and Nature of Science CONTENT STANDARD G:*
  - science as a human endeavor

**Grades 5-8:**
*Science as Inquiry CONTENT STANDARD A:*
  - abilities necessary to do scientific inquiry
  - understanding about scientific inquiry

*Physical Science CONTENT STANDARD B:*
  - properties and changes of properties in matter

*Life Science CONTENT STANDARD C:*
  - diversity and adaptations of organisms

*Science in Personal and Social Perspectives CONTENT STANDARD F:*
  - populations, resources, and environments

*History and Nature of Science CONTENT STANDARD G:*
  - science as a human endeavor
  - nature of science

**Grades 9-12:**
*Science as Inquiry CONTENT STANDARD A:*
  - abilities necessary to do scientific inquiry
  - understanding about scientific inquiry

*Physical Science CONTENT STANDARD B:*
  - chemical reactions

*Science in Personal and Social Perspectives CONTENT STANDARD F:*
  - natural resources
  - environmental quality

*History and Nature of Science CONTENT STANDARD G:*
  - science as a human endeavor
  - nature of scientific knowledge

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Strand 5 - Inquiry

- **Standard 5.2 - (Conducting Investigations)** – Students will conduct investigations by formulating a clear statement of a question, gathering and organizing information from a variety of sources, analyzing and interpreting information, formulating and testing hypotheses, reporting results both orally and in writing, and making use of appropriate technology.
  - **Benchmark 5.2.3 - (Early Elementary)** – Construct answers to the questions posed and support the answer with evidence.
  - **Benchmark 5.2.4 - (Early Elementary)** – Report the results of their investigation.
  - **Benchmark 5.2.7 - (Later Elementary)** – Construct an answer to the question posed and support it with evidence.
  - **Benchmark 5.2.11 - (Middle School)** – Construct answers to the questions posed and support their answers with evidence.
  - **Benchmark 5.2.13 - (High School)** – Conduct an investigation prompted by a social science question and compare alternative interpretations of their findings.