

Artifact Analysis



[http://3d.ltc.mq.edu.au/3d/viewer/?id=264
&mode=normal&view=0](http://3d.ltc.mq.edu.au/3d/viewer/?id=264&mode=normal&view=0)

MU4095 (Die)



[http://3d.ltc.mq.edu.au/3d/viewer/?id=265&
mode=normal&view=0](http://3d.ltc.mq.edu.au/3d/viewer/?id=265&mode=normal&view=0)

MU4492 (Astragalus bone / knucklebone)



[http://3d.ltc.mq.edu.au/3d/viewer/?id=2
66&mode=normal&view=0](http://3d.ltc.mq.edu.au/3d/viewer/?id=266&mode=normal&view=0)

MU4493 (Counter)

Teacher Notes	Teacher Notes	Teacher Notes
<p>Bone(?) die. Provence and age unknown...thought to be Roman.</p> <p>Ivory or bone? 1.Ivory is dense, feels heavy. 2. Ivory feels smooth, unpocked...like butter. 3. Under a magnifying glass ivory has visible crosshatched lines...no “pock marks” or spots like bone. 4. When touched by a hot pin ivory will not be marked and have no residual smell. Bone will mark and smell of burnt “hair”.</p> <p>Not perfectly square. Size may be the result of fabric...not many bones are robust enough to allow larger pieces.</p> <p>The lack of precision of the “pips” may suggest the use of a punch rather than a drill.</p> <p>Its use in games is consistent with our modern experience. There are examples of “loaded” dice from the ancient world. The Latin term for die / dice is <i>cubus/cubi, cybus/cybi or alae/alaea</i>.</p>	<p>Ankle or knucklebone from a sheep. Provence and age unknown.</p> <p>Has had a lead weight attached or inserted...purpose unknown. Appears that each side may have been weighted.</p> <p>Used in two ways.</p> <p>1. A game we still call “Jacks” or “Knuckle bones” can be played using five bones. The bones are thrown in the air and caught in various ways, on the back of the hand etc. There are modern variations using plastic and metal “bones”.</p> <p>2. A game of chance can be played using four bones that operate like dice. Each bone is marked with numbers on its four ‘sides’. The numbers 1, 3, 4 and 6 are used. The best throw is a “Venus”...with all numbers different. The worst is the “dog”...with all ones. There appears to be some provision for weighting on each side.</p> <p>Bets or wagers are possible in both games.</p>	<p>Bone(?) game piece or counter. Provence and age unknown...thought to be Roman.</p> <p>Ivory or bone? 1.Ivory is dense, feels heavy. 2. Ivory feels smooth, unpocked...like butter. 3. Under a magnifying glass ivory has visible crosshatched lines...no “pock marks” or spots like bone. 4. When touched by a hot pin ivory will not be marked and have no residual smell. Bone will mark and smell of burnt “hair”.</p> <p>It is not perfectly circular nor of uniform thickness. The size of the bone surface from which it was cut would determine the accuracy of such an operation.</p> <p>Manufacture may have included use of a lathe for the larger decorative element and a drill for the central element.</p> <p>Its use in “board games” is consistent with our modern experience.</p> <p>The Latin word for counter is <i>calculus</i>.</p>

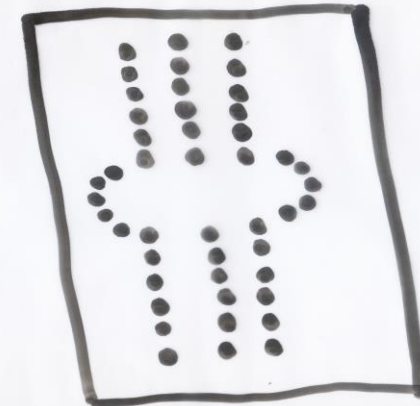
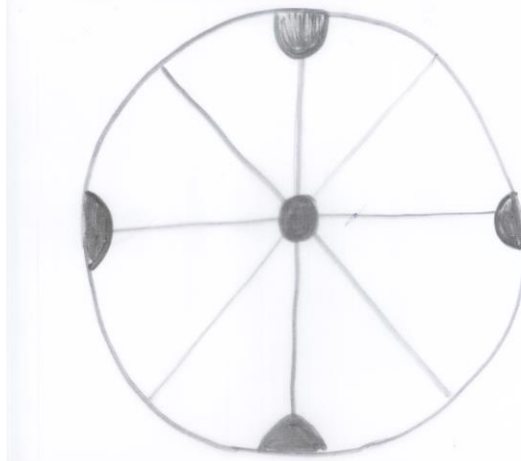
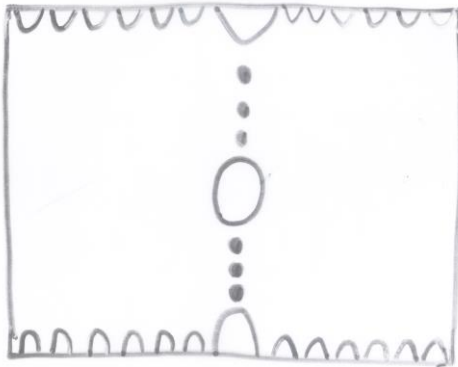
“Bored Games”



1. A matrix scratched into the marble seating of a circus in Jerash, Jordan.

2. A matrix scratched into a marble “stela” reused in the wall on the Acropolis, Athens.

3. A matrix scratched into a temple pavement at Kom Ombo in Upper Egypt.



Lesson(s)

OUTCOMES	<i>Stage 4</i>
INPUT	4.4 describes some of the main features of past societies 4.5 describes the key features of cultural groups
PROCESS	4.6 identifies the meaning, purpose and context of historical sources 4.8 locates, selects and organises relevant information from sources
OUTPUT	4.9 uses a range of historical terms and concepts when communicating an understanding of the past 4.10 selects and uses appropriate oral, written, visual and digital forms to communicate about the past

Lesson(s)

<i>Input</i>	<p style="text-align: center;">Artifact analysis</p> <p>Artifact analysis is a socratic process, building knowledge from student responses by appropriate questioning, probing, hint dropping and information provision. The age and experience of the students will necessarily determine the language used by the teacher and the depth of knowledge expected in response to probing and interrogation of the artifact.</p> <p style="text-align: center;"><i>Caution: Assume nothing!</i></p>
<p><i>Carefully observe and examine this artifact.</i> (If using actual artifacts you can add: <i>Handle it carefully. Wear your gloves.</i>) <i>Use the 3-D link to examine the artifact from all angles.</i> <i>You can make notes in the space provided after each question.</i> (Worksheet with questions and notemaking space provided.)</p> <p><i>Work in pairs to consider the following questions:</i></p>	

1. *What is this artefact made from?*

Is it a natural material or fabric?

Is it a metal?

Is it ceramic?

Is it a 'plastic' material?

2. *How was this artifact made?*

Is it naturally occurring?

Is it human made?

Was it hand made?

Was it machine made? (NB: students often confuse engine / motor and machine...explain that anything that does “work”, regardless of its motive power source, is a “machine”...illustrate by reference to the potter’s wheel / windmill / water wheel / treadmill crane etc)

Was it mass-produced?

Does it have any distinguishing ‘markings’ or decorations?

3. *What might this artifact have been used for?*

4. *What does it tell you / us about the people who made it and used it?*

If appropriate this process can be extended by asking the following questions:

Is this artifact still in use?

If so, has it evolved?

Does the change reflect changes in society?

If not, what has replaced it?

Does the change reflect changes in society?

Has the change made our lives different?

<p><i>Process</i></p>	<p>Group work.</p> <p>Introduce students to images of “Bored games”. Explain provenance of the diagrams. Implications?</p> <p><i>How might this game be played?</i> <i>How could you use the artifacts we have examined and analysed?</i></p> <p>In groups (4s?) work out how to play the games. <i>What rules would apply?</i> <i>Be prepared to demonstrate and explain your game to the class.</i></p>
<p><i>Output</i></p>	<p>Group reports / demonstration: <i>How our game is played.</i></p> <p><i>Write up rules and instructions for each game for future reference.</i> Playing the games could be a future reward or spontaneous activity for the class.</p>
<p><i>Resources</i></p>	<p>Artifacts or 3-D images. Images and diagrams of “Bored games”.</p>

Extension / Research

<p><i>Links for research</i></p>	<p>Stage 4</p>	<p>Ancient Board Games https://medium.com/swlh/the-full-history-of-board-games-5e622811ce89#.q8jrslivj http://www.mastersgames.com/cat/board/ur.htm http://www.mastersgames.com/cat/board/hounds-and-jackals.htm</p> <p>Senet http://discoveringegypt.com/ancient-egyptian-game-senet/ http://legacy.mos.org/quest/pdf/senet.pdf http://www.mastersgames.com/rules/senet-rules.htm https://www.youtube.com/watch?v=ikfRHqw46jE</p>
<p><i>Extension</i></p>	<p>Stage 4</p>	<p>Playing <i>Jacks</i>.</p> <p>Researching <i>Senet</i>.</p> <p>Playing <i>Senet</i>. Class competition...(used to be a competition on-line?).</p> <p>Other ancient games? Change and continuity? Cause? Consequence?</p>