To understand universal values there is an urgent need to make young people aware of our diverse and outstanding heritage. This will enable us to truly identify with our cultural heritage and inspire us to preserve and conserve it. The provision of relevant educational material is the key to create awareness in youth.

Junaid Bin Masood
Student, Grammar School Rawalpindi
TEACHERS RESOURCE KIT
HERITAGE IN YOUNG HANDS

PROJECT MOENJODARO
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3. Websites, skills required, required materials
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IDENTITY
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   Student Activity Sheet # 2
13. Moenjodaro Script ‘deciphered’
    Moenjodaro Script
14. Examining objects and structures of Moenjodaro
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TOURISM
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CULTURE OF PEACE
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21. Art Activity I
22. Art Activity II
23. Handout # 3: Rubrics for Evaluation
24. Project outcomes
When students complete the project they will be able to

- Identify project components and needs
- Interview community members or people outside the school if necessary
- Locate places where the project is needed (mapping skills).
- Measure and Calculate all math and numbers needed for project.
- Assemble required materials.
- Design and Create the project itself.
- Apply scientific method where required (graphic organizers).
- Write instructions, summaries, statements, findings, or creative writing
- Read and Research relevant background materials.
- Use technologies to research websites, make videos, tape recordings, or use computer programs.
LESSON OBJECTIVES

The students will investigate and develop in-depth knowledge on Moenjodaro through Project Based Learning.

Lesson objectives are developed on cognitive, affective and psychomotor domains, to develop students holistically through an inter-disciplinary and integrated approach for meaningful learning.

KNOWLEDGE:

Identity
   To help students develop knowledge and understanding of the interaction and interdependence between nature and culture and between cultures.

Tourism
   To recognize the need for site management for effective visitor management.

Environment
   To develop appreciation of the natural and cultural environment and the interaction between people and the environment.

Culture of Peace
   To enable students to become aware that World Heritage sites are a testimony to peace, human rights and democracy.

SKILLS:

Identity
   To help students develop their ability to discuss issues in an open and democratic manner.

Tourism
   To enable students to develop creative thinking to enhance the preservation of Pakistan’s Heritage Sites for the benefit of tourists, while ensuring their conservation.

Environment
   To help students participate in the process of ecologically sustainable development for the future health of the planet and its people.

Culture of Peace
   To enable students to participate democratically in political and civic life.

ATTITUDES:

Identity
   To enable students to value their culture, their country’s history and its natural environment.

Tourism
   To enable students to reflect on and respect the measures taken to protect world heritage sites from mass tourism.

Environment
   To enable students to approach their life on the planet in a sustainable way to protect biodiversity.

Culture of Peace
   To co-operate in the spirit of solidarity in support of World Heritage.
WEBSITES

- http://www.education.unesco.org
- http://www.education.unesco.org/educprog/asp/
- http://www.unesco.org/whc/
- http://www.unesco.org/whc/heritage.htm
- http://www.icom.org
- http://www.icomos.org
- http://www.cr.nps.gov/ncpitt/irg/
- http://whc.unesco/culture.html
- http://unescobkk.org/culture/

SKILLS REQUIRED TO PROCESS AND COMPLETE THE PROJECT

- Require reading abilities of classes five, six, seven and eight.
- Writing abilities for the above grades for attempting the activities related to the project.
- Possess basic computer skills to conduct word processing and search the web.
- Mapping Skills.
- Ability to use Graphic Organizers.

REQUIRED MATERIALS (IN THE RESOURCE KIT)

Handouts: Given Handouts and Student Activity Sheets to be photocopied by the teacher before starting the class.

Display Materials: These include maps, posters, post cards, CDs and pictures of Moenjodaro.

Required Equipment/Technology: Preferably computers for students with internet connection to be made available in school for web searching and research.

Portfolio: Each student would prepare a portfolio to record all documentation (Handouts, Student Activity Sheets, any other material).
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>INSTRUCTOR NOTES</th>
<th>Estimated Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discuss: why study about World Heritage?</td>
<td>The teacher will generate a discussion on: why take an interest in world Heritage? Simultaneously make a cluster of children’s output. (Handout 1). This is the time to introduce the vocabulary related to Heritage given in Handout 2.</td>
<td>Takes an hour</td>
</tr>
<tr>
<td>2. Discuss the topic Project Moenjodaro.</td>
<td>Introduce the project to your group Display the posters and pictures of Moenjodaro to build the environment in the class. This is the time to introduce and discuss the main concepts behind your project. Establish prior knowledge of the subject with your group. The goal here is to make this project personally meaningful to the students. Ask the students if they have visited Moenjodaro or seen any pictures or read about this place. A great way to capture interest is to include a joke, fable, or story about Moenjodaro. Many students begin to relate to the lesson ONLY when they are engaged in group discussion.</td>
<td>Takes an hour</td>
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<tr>
<td><strong>3. Discuss lesson rubric.</strong></td>
<td>Discuss the Collaboration Rubric (Handout 3) and let the students know what is expected and important in the lesson. Use the rubric to explain specific assessments. (Rubrics are performance-based assessment devices that judge progress on performance, not isolated knowledge about the topic.)</td>
<td></td>
</tr>
<tr>
<td><strong>4. Prepare for your project.</strong></td>
<td>You may divide your class into groups at this point if necessary. Assist the students in thinking through their preparations. Remember, students learn by doing. When you find they are stuck, ask them “How can we accomplish this step? How can we get this done?” Allow the students to experience self direction and construct their place in community involvement.</td>
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<td></td>
<td>10 – 15 minutes</td>
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<td></td>
<td>20 minutes</td>
<td></td>
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</tbody>
</table>
# Practice and Process

<table>
<thead>
<tr>
<th>Activity</th>
<th>Instructor Notes</th>
<th>Estimated Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Picture observation of life in Moenjodaro</td>
<td>✓ Divide the class into six groups.</td>
<td>As needed</td>
</tr>
<tr>
<td>• Student Activity Sheet # 2</td>
<td>✓ To each group, provide a print of the painting of Moenjodaro.</td>
<td></td>
</tr>
<tr>
<td>• Print of a painting of an imaginary scene of life in Moenjodaro</td>
<td>✓ Make photocopies of Student Activity Sheet # 2 for each student.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Facilitate students to closely observe the picture (the building, the activity, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Ask groups to complete Student Activity Sheet # 2.</td>
<td></td>
</tr>
<tr>
<td>2. Moenjodaro script 'deciphered'</td>
<td>✓ Divide the class into groups of three.</td>
<td></td>
</tr>
<tr>
<td>• Moenjodaro script</td>
<td>✓ Make photocopies of the pages with Moenjodaro script for each student.</td>
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<tr>
<td></td>
<td>✓ Ask the groups to closely observe the characters on the page given.</td>
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<tr>
<td></td>
<td>✓ Using their imagination, the groups of students should try to decipher the meanings of each character.</td>
<td></td>
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<tr>
<td></td>
<td>✓ Each group should be asked to make up three sentences by using any characters of their choice.</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Instructor Notes</td>
<td>Estimated Time</td>
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<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Groups should use any number of characters that they choose.</td>
<td></td>
<td>As needed</td>
</tr>
<tr>
<td>The following steps should be used to complete this activity:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) the characters being used in each sentence must be drawn in frames</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) the meanings of the characters should be written below them</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) finally, the sentence should be written.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Examining objects and structures of Moenjodaro</td>
<td></td>
<td></td>
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<tr>
<td>- Student Activity Sheets # 3, 4, 5, 6, 7, 8, 9 and 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make photocopies of Student Activity Sheets # 3, 4, 5, 6, 7, 8, 9 and 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitate students to observe the pictures, keeping in view the</td>
<td></td>
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<tr>
<td>notations on each Student Activity Sheet.</td>
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<tr>
<td>Students should be asked to answer the questions adequately on each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity Sheet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Instructor Notes</td>
<td>Estimated Time</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>4. Making a site plan</td>
<td>1. Students should be divided into groups of three.</td>
<td></td>
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<tr>
<td></td>
<td>2. Each group should reproduce the lay out of Moenjodaro, using the site plan already provided, on boxboard sheets using markers.</td>
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<tr>
<td></td>
<td>3. In the site plan, the following features should be inserted in appropriate places, using the key given:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the highway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• parking area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• shuttle service area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• restrooms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• souvenir and other shops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• restaurants / cafes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• kiosks (khokhas) selling food and drink</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ticket booths.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Students should devise their own symbols for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• souvenir and other shops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ticket booth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• kiosks (‘khokas’) selling food and drink</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and add them also to the site plan.</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Instructor Notes</td>
<td>Estimated Time</td>
</tr>
<tr>
<td>----------</td>
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</tr>
</tbody>
</table>
| 5. Respectful tourism vs. irresponsible tourism | ✓ Students should be guided to prepare a set of Moenjodaro on the school compound based on the site plan of Moenjodaro. For making the set, tables and chairs, brown paper cutouts, cloth sheets, cardboard cartons, replicas of artifacts produced in the art activity and any other material can be used.  
✓ Students should be assigned tasks for developing the set.  
✓ Placards bearing instructions for the tourists e.g. “Do Not Throw Litter” or “Tickets” should be prepared by students and posted in appropriate places.  
✓ The banner stating Moenjodaro: A UNESCO World Heritage Site may be used as a backdrop for the set.  
- Stalls for food and drink, restaurants and cafes should be indicated by placards.  
- The ticket booth should be indicated by a window.  
- The features of the Heritage Site (e.g. the citadel mound) should be indicated on the set by placards or box-board sheets.  
- Litter bins should be placed at appropriate places on the set. | |

Follow – up: Invite other students and teachers from the school to visit the set and watch the activity.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Instructor Notes</th>
<th>Estimated Time</th>
</tr>
</thead>
</table>
| 6. The Indus and some of its challenges | ✓ Make photocopies of notes on ‘The Mohana: Living link to the past’ for each student.  
✓ Read out to students ‘The Mohana: Living link to the past’.  
✓ Consult Handout 2 for explaining vocabulary to students.  
✓ Make photocopies of Students Activity Sheet # 11 for each student to complete. | |
| 7. How to make a water filter | ✓ Guide students to make a basic water filter according to the given guidelines.  
✓ Make photocopies of Student Activity Sheet #12 for each student to complete.  
✓ Students’ diagrams of the water filter should be displayed in the classroom.  
✓ Allow students to take their water filters home. | |
<table>
<thead>
<tr>
<th>Activity</th>
<th>Instructor Notes</th>
<th>Estimated Time</th>
</tr>
</thead>
</table>
| 8. Polluters of River Indus | ✓ Brainstorm with the class the following aspects of pollution in the River Indus:  
  a) Explain the **problem**.  
  b) Examine the **alternatives** to solve the problem.  
  c) Propose a **public policy** to deal with the problem.  
  d) Develop a **plan of action**.  
  ✓ During the brainstorm, write student responses on the chalkboard.  
  ✓ Divide the class into groups of four panels, each of which will deal with one of the above issues.  
  ✓ Make photocopies of Student Activity Sheets # 13, 14, 15 and 16 for each of the respective groups.  
  ✓ Guide each panel to discuss the issue they have been assigned and provide answers to the questions on each of their Student Activity Sheets.  
  ✓ Each panel should select a representative to present their case before the whole class. |                 |
| 9. Building a highway close to a heritage site. | ✓ Explain to students that the Highway Department is planning to build a highway close to the cultural heritage site of Moenjodaro. Some government departments such as the Archaeology Department, Environment Department, Tourism Department and Transport Department are asked for their viewpoints.  
✓ Divide the class into four groups.  
✓ Each group should have a minimum of five members.  
✓ Each group would be assigned a department as follows.  
  
Group 1: Archaeology Department  
Group 2: Tourism Department  
Group 3: Environment Department  
Group 4: Transport Department  
✓ Each group would be provided with a set of questions for group discussion. By answering the questions, they will be defending the department responsible.  
✓ After a given time period during which the group will |
prepare their statements by answering questions, each group should select one member to take part in a 'Public debate' in the class room.

- In the debate, based on the statements they have prepared, each group would defend the views of their department.

- Teacher will now facilitate a discussion on making proposals for conserving the culture heritage site of Moenjodaro. Students would be guided by the teacher to keep in view the collective concerns of all four departments by utilizing a participatory approach in the classroom. The following points may be discussed:

  a) How far should the highway be from the heritage site? (perhaps some miles away)

  How should there be a control on the smoke emitting and noisy transport vehicles?
c) How far from the heritage site should the parking areas be?

d) Should there be a shuttle service for visitors from the parking area to the site? If yes what kind of environment – friendly vehicles could be used? (perhaps animal transport, battery operated transport, etc.)

e) What are the facilities that should be provided to visitors at entry and exit points to the site? (perhaps restrooms; souvenir shops selling local crafts; replicas of objects found at the site; brochures, maps and books on Moenjodaro; eateries such as restaurants and cafes and kiosks selling food and drink as well as ticket booths.

f) What measures should be used while planning these facilities so that they are eco-friendly, aesthetically pleasing and in balance with the environment of the site?
(garbage disposal, architecture, maintenance of the facilities etc. to be focused on.)

g) What arrangements should be made so that visitors may efficiently view the site areas? (e.g. designated path ways; visitors to queue up where required; significant facts about the prominent features of the site to be posted)

h) Given questions about the following departments to be answered by the students and a statement made to defend their view points.

Archaeology Department
Environment Department.
Tourism Department
Transport Department
<table>
<thead>
<tr>
<th>10. Art Activity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pictures of clay / terracotta toys and seals</td>
<td>✓ Make photocopies of pictures of clay / terracotta toys and seals for each student.</td>
</tr>
<tr>
<td></td>
<td>✓ Provide each student enough clay to make one copy / replica each of:</td>
</tr>
<tr>
<td></td>
<td>i). a toy</td>
</tr>
<tr>
<td></td>
<td>ii). a seal.</td>
</tr>
<tr>
<td></td>
<td>✓ Students may be guided to make the toys and seals (using the implements mentioned in Resources) and leave them to dry on the trays or plastic plates.</td>
</tr>
<tr>
<td></td>
<td>✓ These toys and seals when dry may be displayed in school areas with proper captions.</td>
</tr>
</tbody>
</table>
Evaluation and Reflection

The Fishbowl Method

- Arrange students in a large circle.
- Place a smaller circle of five to seven chairs in the center of the larger circle.
- Have selected students sit in the inside circle. Keep one chair vacant.
- Students in the inner circle discuss the outcomes of the project. The audience in the outer circle listens. The vacant chair is for any member of the audience who wants to join the discussion to add a comment and ask a question. Once the comment has been made or the question asked, the participant returns to the audience so that another member of the audience may join the inner circle.
Moenjodaro is widely recognized as one of the most important early cities of the world. Moenjodaro was built around 2600 B.C.E. (about five thousand years ago) and it was abandoned around 1900 B.C.E. due to reasons that are still based on speculation. An Aryan invasion and the change in the course of the River Indus are some of the theories put forward that are thought to have been the cause of the demise of Moenjodaro and the subsequent immigration of its inhabitants.

Moenjodaro was rediscovered in 1922 and now, more than four hundred similar ancient urban cultures of the Indus Valley Civilization have been excavated all over the South Asian sub-continent, with around one thousand settlements and towns being found around Moenjodaro itself.

The site of Moenjodaro reveals that the city was built with the Indus River on its west and the Ghaggar—Hakra river in the east. Today, the Indus flows to the east of the site and the Ghaggar—Hakra riverbed is dry. The course of the Indus has moved over the centuries and now is nearly four kilometers from the ancient site of Moenjodaro. But the river once played a vital role in the evolution and development of Moenjodaro, providing drinking water, water for domestic use, for pottery and brick making and to carry away the refuse and sewage of the densely populated habitation. One of the most striking features of the urban planning of Moenjodaro is the presence of indoor bathrooms. In the bathrooms were clay pipes to carry away waste water through brick-lined covered sewerage channels into the river. This sophisticated drainage system and the attention paid to sanitation and civic facilities is indeed a marvel.

As can be seen from the small portion of the city that has been excavated, the city had a symmetric plan. In other words, it was built on a rectangular grid with broad roads, several metres wide, running the length of the city. From these main roads side streets provided access to every house in the city blocks and each was connected to an underground drainage system. Many of the houses are two or more stories high, constructed from fire-baked bricks and timber.
The city can be divided into two parts, the Citadel Mound and the Lower Town.

On the mound (or high land) are structures which form the ritual and civic centre of the city, e.g. the Great Bath and a so-called Granary, the Assembly Hall and the College.

The lower city of Moenjodaro is a large area, made of several lower mounds. These contain evidence of workshops and shops as well as houses.

When the ancient city of Moenjodaro was excavated, several objects including toys, pottery, seals with writing and figures, jewellery, weights and measures, etc. were found. No money seems to have been found at the site, so it is believed that the system of exchange was through barter. The mounds were surrounded by a fertile flood plain on which several crops were probably grown and the land was also used for grazing. Since seals and other artifacts of Moenjodaro have been found in far away places, it is believed that the people of the Indus conducted trade with Persia, Afghanistan and Mesopotamia using boats to cross the sea when required.
The most famous Mohenjodaro artifacts recovered are the bust of a Priest – King and a small bronze statue of a dancing girl.

Cleanliness was sacred to the people of Mohenjodaro as may be seen by the Great Bath and the excellent plumbing. Provision of drinking water in Mohenjodaro was ensured for all citizens. Covered drains were perfectly sloped to maintain a continuous flow and the wastewater received treatment in ponds before it was allowed to flow into the River Indus. This city was one of the most remarkable cities of ancient times and was the most advanced city in the world when it was at its peak. It is an architectural wonder and reminds us of how developed humanity was in our corner of the world thousands of years ago. Despite its high level of social development, there were no rich palaces, temples or monuments. Modesty, order and cleanliness were obviously preferred.

Although it is not clear as to how the people of Mohenjodaro ruled themselves, a system of government must have been in place to ensure that a town with a population of over thirty thousand survived and had an organized infrastructure.

It may perhaps have been a wonderful culture which had no formal religion but which considered natural features such as the sun, earth and river as sacred and life giving. The people of Mohenjodaro were truly liberal and progressive and seemed not to have spent time and resources on arms and weapons or on the destruction of others. They made tools, jewellery, beautiful sculptures and well-planned cities so as to make the Indus civilization one of the most sophisticated and harmonious cultures the world has ever seen.
Why should we take interest in Heritage?

Brainstorm with students about what they think heritage means. Draw the image given below on the chalkboard and write out responses given by students at the end of the lines.

Questions you may ask students to reinforce their perception of heritage:

1. Do you own something that you value and which you have had for a long time?
2. How do you look after it?
3. If it were broken or spoilt, how would you feel about it?
4. Are there things in your home that might have been passed down from your grandparents to your parents?
5. Does the family look after these things?
6. Does your family have value for these things?

NOTE:
Do you know that all things that belong to you and that you value are a part of your heritage that can be passed down to others?
<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ancient</td>
<td>Belonging to times that are long past; very very old.</td>
</tr>
<tr>
<td>2.</td>
<td>Archaeology</td>
<td>The study of old cultures, peoples and periods of history by scientific analysis of physical remains, especially those found in the ground.</td>
</tr>
<tr>
<td>3.</td>
<td>Artifact</td>
<td>A thing made by people, especially tool or weapon of historical interest.</td>
</tr>
<tr>
<td>4.</td>
<td>Barter</td>
<td>A system of exchanging goods or property for other goods, etc.</td>
</tr>
<tr>
<td>5.</td>
<td>Characters</td>
<td>A letter, sign or mark used in a system of writing.</td>
</tr>
<tr>
<td>6.</td>
<td>Chemicals</td>
<td>Substances used by or obtained through a chemical process.</td>
</tr>
<tr>
<td>7.</td>
<td>Decline</td>
<td>A gradual and continuous loss of power, strength or numbers, etc.</td>
</tr>
<tr>
<td>8.</td>
<td>Decipher</td>
<td>Decode, explain, figure out or interpret.</td>
</tr>
<tr>
<td>9.</td>
<td>Deface</td>
<td>Damage, deform, disfigure or destroy.</td>
</tr>
<tr>
<td>10.</td>
<td>Descendants</td>
<td>Children, family or animals who have an ancestor (e.g. the Mohanas may be the direct descendants of the people of Moenjodaro).</td>
</tr>
<tr>
<td>11.</td>
<td>Designate</td>
<td>To mark or indicate something clearly, allot, assign or specify.</td>
</tr>
<tr>
<td>12.</td>
<td>Dialect</td>
<td>An accent used in a certain part of a country or by a certain class that is different from other accents of the same language.</td>
</tr>
<tr>
<td>Serial No.</td>
<td>Word</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>13.</td>
<td>Excavation</td>
<td>A process of revealing or taking out something that has been buried in the ground by digging.</td>
</tr>
<tr>
<td>14.</td>
<td>Graffiti</td>
<td>Drawings or writing (usually rude or funny) on a wall in a public place.</td>
</tr>
<tr>
<td>15.</td>
<td>Habitation</td>
<td>The process of living in a place; a house or home.</td>
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<tr>
<td>16.</td>
<td>Metropolis</td>
<td>The chief city of a region or country; a capital.</td>
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<tr>
<td>17.</td>
<td>Pictograph</td>
<td>A form of writing in which pictures and characters are used in place of alphabets.</td>
</tr>
<tr>
<td>18.</td>
<td>Replica</td>
<td>Copy, duplicate, imitation or reproduction.</td>
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<tr>
<td>19.</td>
<td>Rural</td>
<td>Agricultural, agrarian, to do with the countryside.</td>
</tr>
<tr>
<td>20.</td>
<td>Seals</td>
<td>A piece of wax or other soft material stamped with a design and fixed on a document, letter or packet to prevent it from being opened before it reaches its destination.</td>
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<tr>
<td>21.</td>
<td>Sewerage</td>
<td>An underground system of pipes or a passage that carries waste matter away.</td>
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<td>22.</td>
<td>Scales / weights</td>
<td>A system of measuring or grading something.</td>
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<tr>
<td>23.</td>
<td>Souvenir</td>
<td>A thing taken, bought or received and kept to remind one of a person place or event.</td>
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INTRODUCTORY ACTIVITY

KWHL

OBJECTIVES:

- To enable students to become prepared to begin Project Moenjodaro.
- To arouse the interest of students and find out what they already know about Moenjodaro.
- To encourage students to contribute their ideas on the topic.
- To enable students to reflect on what they want to know further.
- To enable students to explore ideas as to how they will gather information on Moenjodaro.
- To allow students to become aware at the end of the project as to what they have learnt.

- The KWHL (i.e. what I know, what I want to know, how I will find information and what I learned) teaching methodology would be utilized.
- Draw students’ attention to the poster materials displayed on the walls and encourage them to look at the brochures and view cards you have distributed.
- Photocopy Student Activity Sheet #1 for each student of the class.
- After preparation, ask students to fill in the first three columns, and at the end of the project, they may complete the activity sheet by filling out the fourth column.

INSTRUCTIONS FOR TEACHERS:

- Read attached Resource Material to equip yourself with adequate information to facilitate the activity effectively.
- Using the Pakistan Tourism Development Corporation posters, brochures and view cards of Moenjodaro in the Resource Kit, prepare students for the Heritage Education Project they will be involved in.
**Introductory Activity: KWHL Chart**

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**STUDENT ACTIVITY SHEET # 1**
IDENTITY

Our Heritage lives within us and our generation will pass it on to the future generation for their enrichment.

Citadel Mound

On the mound (or high land) are structures which form the ritual and civic centre of the city, e.g. the Great Bath and a so-called Granary, the Assembly Hall and the College.
OBJECTIVES:
- To enable students to develop their skills of observation.
- To enable students to become aware of the lives of the people of Moenjodaro.
- To enable students to become aware of the high level of development of an ancient people who are part of our heritage.

RESOURCES:
- Six copies of a painting of a scene from Moenjodaro for six groups of students.

INSTRUCTIONS FOR TEACHERS:
1. Divide the class into six groups.
2. To each group, a photocopy of the painting of Moenjodaro should be provided.
3. Make photocopies of Student Activity Sheet #2 for each student.
4. Facilitate students to closely observe the picture (the buildings, the activity, the people, etc.)
5. Ask groups to complete Student Activity Sheet #2 on the basis of their observations.
An imaginary scene from life in Moenjodaro
Observe the painting of Moenjodaro carefully and answer the following questions:

1. What are the buildings made of?
Ans. 

2. What is the style of the buildings?
Ans. 

3. What kinds of skills would be required to construct the buildings and gateway in the picture?
Ans. 

4. Looking at the bales of cotton the men are putting on the boat that is not visible, what kinds of occupations would the people be involved in?
Ans. 

5. What would be the purpose of the logs of wood resting against the left side of the entrance gate?
Ans. 

6. What do you think the bullock cart is carrying to put into the boat which is in the foreground but not visible?
Ans. 
7. From where will the woman with the pitcher on her head fetch water?
Ans. 

8. In the picture, what do you think is
   i) the time of day?
      Ans. 
   ii) the weather?
      Ans. 

9. In what ways do you think Moenjodaro was like a modern city?
   Ans. 
   
   
   
   

10. What do you think might have been the reasons for the decline of Moenjodaro?
    Ans. 

MOENJODARO SCRIPT ‘DECIPHERED’

OBJECTIVES:
- To enable students to appreciate how writing evolved
- To enable students to become aware that ancient scripts need to be decoded for our understanding.
- To encourage students to give free rein to their imagination.

RESOURCES:
- Pictographs/Script of Moenjodaro.

INSTRUCTIONS FOR TEACHERS:
1. Divide the class into groups of three.
2. Make photocopies of the pages with Moenjodaro script.
3. Ask the groups to closely observe the characters on the pages given.
4. Using their imagination, the groups of students should try to decipher the meanings of each character.
5. Each group should be asked to make up three sentences by using any characters of their choice.
6. Groups should use any number of characters that they choose.
7. The following steps should be used to complete this activity:

   a) The characters being used in each sentence must be drawn in frames.
   b) The meanings of the characters should be written below them.
   c) Finally, the sentence should be written.

   Example:

   a) Characters:

      [Blank spaces for characters]

   b) Meanings:

      [Blank spaces for meanings]

   c) Sentence:

      [Blank space for sentence]

FOLLOW UP:
- Since Moenjodaro script is part of our heritage, students should develop their own pictographs to communicate with their friends.
SCRIPT OF MOENJODARO
SCRIPT OF MOENJODARO CONTINUED

to rule  to lead  South  to find  old age  cool
OBJECTIVES:

- To enable students to develop skills of observation and analytical thinking
- To enable students to become aware of the various activities the people of Moenjodaro were involved in
- To enable students to understand the high level of sophistication of the Indus culture
- To encourage students to take pride in their ancient and great cultural heritage.

FOLLOW UP:

Class discussions should be held based on the students’ responses to the questions.

INSTRUCTIONS FOR TEACHERS:

1. Make photocopies of Student Activity Sheets #3, 4, 5, 6, 7, 8, 9 and 10 for each student.
2. Facilitate students to observe the pictures on each Activity Sheet, keeping in view the notations.
3. Students should be asked to answer the questions adequately on each Activity Sheet.
1. The top three rows are stone weights of different sizes.

2. At the bottom of the picture is a balance scale.

3. What were the various uses of these objects for the people of Moenjodaro?
1. The seals were ¾ to 1 ¾ inches in measurement and were found in several parts of Moenjodaro.

2. On the seals were pictures of humans and animals.

3. Most seals contained writing.

4. What do you think the people of Moenjodaro used these seals for?
1. The hole in the centre was filled with water.
2. The channel made of bricks and clay ran throughout the city.
3. Water moved through the channel.
4. What do you think the people of Moenjodaro use these structures for?
1. Windows were usually on the second floor of these structures.

2. The structures were made of mud bricks.

3. Some structures had only one room while others had many rooms.

4. What do you think the people of Moenjodaro used these structures for?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
1. The objects on the top left hand corner have different numbers of dots carved on each side.

2. At the bottom right hand corner is an object with a track along which a ball may be moved.

3. The small carved objects in the front left hand corner seem to be pawns.

4. What do you think the people of Moenjodaro used each of the objects for? Describe their uses.

________________________________________

________________________________________

________________________________________

________________________________________
1. This is a clay model of a cart.

2. A person is riding the cart.

3. There are two oxen pulling the cart.

4. What does this object tell you about the daily life of the people of Moenjodaro?

5. What were the uses of this object in real life?
This city was one of the most remarkable cities of ancient times and was the most advanced city in the world when it was at its peak. It is an architectural wonder and reminds us of how developed humanity was in our corner of the world thousands of years ago.

TOURISM

Our mission is to nurture all aspects of our heritage and introduce it to all so that they can appreciate it.
Making a Site Plan

OBJECTIVES:
- To enable students to develop graphics skills
- To help students to recognize the merit of making a site plan
- To enable students to understand the use of the key in a map/plan
- To develop students organizational skills
- To enable students to recognize others’ strengths through group work.

RESOURCES:
- Site plan of Moenjodaro
- Boxboard sheets
- Cardboard cartons
- Markers
- Rulers

INSTRUCTIONS FOR TEACHERS:
1. Students would be divided into groups of three.
2. Each group would reproduce the layout of Moenjodaro, using the site plan already provided, on boxboard sheets using markers.
3. In the site plan, the following features should be inserted in appropriate places, using the key given:
   - the highway
   - parking area
   - shuttle service area
   - restrooms
   - restaurants/cafes
4. Students should devise their own symbols for:
   - souvenir shops
   - shops
   - kiosks (‘khokas’) selling food and drink and add them to the key and then the site plan.
RESPECTFUL TOURISM VS. IRRESPONSIBLE TOURISM

OBJECTIVES:
- To enable students to promote respectful and responsible tourism at heritage sites.
- To encourage students to take pride in the indigenous culture of their country.
- To enable students to show sensitivity to the fragile nature of cultural heritage sites.

RESOURCES:
- Completed Activity on ‘Making a Site Plan’
- A banner stating:

MOENJODARO: A UNESCO World Heritage Site.
- tables, chairs
- brown paper
- cloth sheets of earth colours
- artifacts prepared in art activity
- markers
- boxboard sheets
- placards with instructions for tourists.

INSTRUCTIONS FOR TEACHERS:

1. The Set
- Students should be guided to prepare a set of Moenjodaro on the school compound based on the site plan of Moenjodaro that they have made.
- For making the set, tables and chairs, brown paper cutouts, cloth sheets, and any other material can be used.
- Students should be delegated tasks for developing the set.
- Placards bearing instructions for the tourists e.g. “Do Not Throw Litter” or “Tickets” should be prepared by students and posted in appropriate places.
- The banner stating:

MOENJODARO: A UNESCO WORLD HERITAGE SITE
- may be used as a backdrop for the set.
- Stalls for food and drink, restaurants and cafes should be indicated by placards.
- The ticket booth should be indicated by a window.
- The features of the Heritage Site (e.g. the citadel mound) should be indicated on the set by placards or box-board sheets and cardboard cartons.
- Litter bins should be placed at appropriate places on the set.

2. The Activity
- Select students for the stall serving refreshments; for the ticket booth; for the souvenir shops and as local craftsmen making artifacts.
- Select three students to play the role of ill-mannered tourists and three to play the role of respectful tourists.

Give the following guidelines for role play to the ill mannered or irresponsible tourists:

i) They will not queue up at the ticket window or the stalls.
ii) They will throw litter wherever they please.
iii) They will be loud and aggressive.
iv) They will write graffiti on the walls or structure of the site.
v) They will get off designated pathways and tread on the site itself.
vi) They will be disruptive and exhibit uncultured behaviour in the craft making area and in the souvenir shop.

Give the following guidelines for role play to the respectful tourists:

i) They will queue up at the ticket window or stalls.
ii) They will take care not to touch heritage structures.
iii) They will stay on designated paths.
iv) They will be respectful to local craftsmen by purchasing artifacts.
v) They will be respectful and show interest in the local craftsmen.

During role play, students will improvise a dialogue based on the role they are playing and the situation.

Parents, too, may be invited, as members of the community, to witness the activity.

Resource Material on Moenjodaro should be read out at the event.

At the end, teachers should supervise the clearing up of the set by assigning responsibilities to specific students.

Students participating in the activity should share their information and experience with other students in the class.

3. Follow-up:

Invite other students and teachers from the school to visit the set and watch the activity.
The course of the Indus has moved over the centuries and now is nearly four kilometers from the ancient site of Moenjodaro. The river once played a vital role in the evolution and development of Moenjodaro, providing drinking water, water for domestic use, for pottery and brick making.

ENVIRONMENT

Enabling youth to make sustainable choices and address environmental challenges in their communities
THE INDUS AND SOME OF ITS CHALLENGES

OBJECTIVES:
△ To enable students to value and respect their cultural links with ancient civilizations
△ To enable students to become aware of how environmental pollution can threaten people’s way of life
△ To enable students to understand some of the causes of water pollution
△ To develop in students the ability to find a solution to a basic challenge
△ To create in students the understanding that clean drinking water is essential for good health.

INSTRUCTIONS FOR TEACHERS:

1. Photocopy resource information on ‘The Mohana: Living link to the past’ for each student.
2. Read out to students ‘The Mohana: Living link to the past’.
3. Consult Handout 2 for explaining vocabulary to students.
4. Make photocopies of Students Activity Sheet #11 for each student to complete by referring to notes on the Mohana people.
A tribe of fishermen is to be found living in boats and often spending their entire lives on them floating on the River Indus and the Manchar Lake. They earn a livelihood by fishing, catching waterfowl in flood season and as ferrymen serving the small villages of the settled rural communities. They are the Mohana people.

The Mohana hold a yearly festival on the river bank opposite the site of Moenjodaro. It is held at the beginning of the flood season and is marked by boat racing, swimming long distances, singing and dancing. The flat bottomed sailboats of the Mohana resemble the pictures of boats seen on some seals of Moenjodaro.

These Mohana are the most ancient people living in Sind. They speak a local dialect of Sindhi of the rural areas, which makes it different from the language of the rest of the population. It is thought that they may be the living descendants of the original inhabitants of ancient Moenjodaro (UNESCO Publications: World Heritage Sites in Pakistan).

Some Mohana also live around the Manchar Lake. The timber of the boats they build is brought by them from forests in the north of the country. These boats are expensive to build, Mohanas, traditionally, live on houseboats, with eight or ten people living on one. Apart from fishing and ferrying people from one bank to the other, the Mohana people use the water reeds to make rush mats and the women do fine needle work, both of which they sell.

The ancient people of Moenjodaro mastered the technology of boat building. Due to this new kind of transport, they carried on trade even with far away civilizations of that time. Some people say that Moenjodaro should be known as ‘Mohanadaro’ or ‘city of the boat people’.

The Manchar Lake around which most of the Mohana people live is the biggest shallow water lake in Pakistan but the biodiversity in it is dying. Due to poisonous chemicals and lead content that has collected in it due to human and industrial activity, the quality of the lake is being degraded. There is a continuous loss of biodiversity that existed here, including migratory birds and water life.

Due to the polluted water of the Manchar Lake and the Indus River, around which many Mohana families live, one of the major livelihoods of the Mohanas, i.e. fishing, is being lost. Much of the pollution which kills the fish is caused by untreated sewerage water from the nearby cities and untreated waste water from factories. The famed blind dolphin of the Indus has been under threat in the past. Moreover, even other species in the river and lakes are killed when heated water from factories is thrown into the river.

Because the Mohana people do not get clean drinking water, they use polluted water which causes diseases like cholera, dysentery, typhoid and hepatitis. Their intestines often become infested with worms and they can develop many types of cancers.

Mohanas are now largely becoming poorer and due to neglect in providing them basic facilities
Read the information on the Mohana people carefully.
Complete the following sentence stubs with the correct information:

1. The Mohana people’s livelihood is

2. The types of boats the Mohanas use are

3. During the yearly festival, the Mohanas

4. The language the Mohanas speak is

5. Due to their boats, the professions of the Mohana people are

6. Apart from fishing and ferrying, other means of livelihood of the Mohanas are

7. The pollution in the river and lake is caused by

8. The dirty drinking water Mohanas use causes

9. The Mohanas are now becoming poorer because

10. The Mohanas are suffering deeply because
How to make a water filter

OBJECTIVES:
- To enable students to understand the health hazards of drinking impure water
- To enable students to follow instructions to conduct experiments
- To develop in students skills to do simple experiments.

MATERIALS TO BE USED:
- one glass of tap water with bits of soil, dead leaves, etc. in it
- large plastic bottle with the base cut off
- piece of string
- fine sand
- coarse sand
- small pebbles (or stones)
- piece of soft cotton cloth (preferably material from a brand new vest or other hosiery)
- small pieces of coal
- a container to collect clean filtered water.

METHOD:
- Hang the plastic bottle upside down (by putting a string through two holes made in it) near the cut off base.
- Add the materials into the bottle in the following order, and according to the following specifications:
  - coal: 1”
  - pebbles: 1”
  - cotton cloth in two layers
  - coarse sand: 1”
  - fine sand: 6”
- Put the empty container under the plastic bottle to catch the filtered water.
- Pour the tap water with impurities into your water filter.
- If the colour of the water that comes out of the filter is not clear, pour it back to go through the filter a second time.

INSTRUCTION FOR TEACHERS:
1. Guide students to make a basic water filter according to the given guidelines.
2. Make photocopies of Student Activity Sheet # 12 for each student to complete.
3. Students’ diagrams of the water filter should be displayed in the classroom.
4. Students should be allowed to take their water filters home.
Based on the experiment of making a water filter, write out some of your observations below:

**Observations:**

1. When you put in the materials, did they make neat layers in the plastic bottle?
   - Yes [ ] No [ ]

2. Did the impurities that you put in the tap water clear up the first time you put the water through the filter?
   - Yes [ ] No [ ]

3. Was the water clean when you had filtered it the second time?
   - Yes [ ] No [ ]

4. Do you think that this kind of water filter can clean up even the impurities that cannot be seen?
   - Yes [ ] No [ ]

5. What kinds of impurities cannot be filtered through the water filter?
   
   ____________________________________________________________
   ____________________________________________________________

6. What causes some of these unseen impurities in the water?
   
   ____________________________________________________________
   ____________________________________________________________

**FOLLOW UP:**
Make a diagram of your water filter. Label equipment clearly and neatly and give your diagram a frame and title.
OBJECTIVE:
To enable students to develop solutions to pollution in the River Indus.

INSTRUCTIONS FOR TEACHERS:

1. Read out the notes on polluters of River Indus or allow students to do so before the class.
2. Brainstorm with the class on the various aspects of pollution in the River Indus.
   a) Explain the problem.
   b) Examine the alternatives to solve the problem.
   c) Propose a public policy to deal with the problem.
   d) Develop a plan of action.

3. During the brainstorm, write student responses on the chalkboard.
4. Divide the class into groups of four panels, each of which will deal with one of the above issues.
5. Photocopy Student Activity Sheets # 13, 14, 15 and 16.
6. Guide each panel to discuss the issue they have been assigned and provide answers to the questions on each of their Student Activity Sheets.
7. Each panel should select a representative to present their case before the whole class.

(Acknowledgement: Project Citizen, CIVITAS)
The River Indus, one of the longest rivers in the world, with its source lying in Tibet in China, runs through Pakistan, 2,900 kilometers to the Arabian Sea. Since it runs the length of Pakistan, it is called the life blood of the country.

However, due to human activity, this river is subject to pollution by different means. City wastewater, which includes sewerage water, is discharged into it. Cleaning this water in treatment plants that have not been maintained results in people getting water-borne diseases such as cholera, dysentery and typhoid. Wastewater from factories which contains harmful toxins, heavy metals and chemicals is also drained into this river. This pollution has resulted in putting the blind dolphin of the Indus, a rare species, at serious risk of becoming extinct. More importantly, due to this poisoning of water sources, humans are threatened with multiple cancers, organ damage and malaria (due to polluted water leading to breeding of all kinds of harmful insects), etc.

The solution for cleaning up the river would be that the government should have a strict control on the wastewater that is discharged into it by industries. For this, technical experts such as environmental engineers can be hired and laboratories set up. Not dealing with the situation has already resulted in disastrous consequences and this will continue until we consider it an urgent matter that needs to be dealt with without delay.
EXPLAINING THE PROBLEM

Panel 1:

Responsibilities:

This panel is responsible for explaining the problem. The group should also explain why the problem is important and why an individual, organization or group should deal with it.

1. What is the problem?

2. How serious is the problem and why?

3. How widespread is the problem? (You can look at a map with the River Indus and the cities and industrial areas it passes near to).

4. Which are the people or agencies that can handle this problem?

5. Could any one else solve it?

6. If the Mohana people are asked about the problem,
   - what would be their opinion?
   - what would be the advantage to them if the problem is solved?
7. If the factory owners are asked about the problem,
   • what would be their opinion?
   • what would be the advantage to them if the problem is solved?
   • what would be the disadvantage to them if the problem is solved?

8. If the government department concerned is asked about the problem.
   • what would be their opinion?
   • what would be the advantage to them if the problem is solved?
   • what would be the disadvantage to them if the problem is solved?
EXAMINING ALTERNATIVES

PANEL 2:

Responsibilities:
This panel is responsible for clearly explaining the present situation and / or alternative situations designed to deal with the problem.

1. One possible solution is:

Advantages: ___________________________

Disadvantages: _________________________

2. Another possible solution is:

Advantages: ___________________________

Disadvantages: _________________________
PROPOSING A POLICY

Panel 3:

Responsibilities:

This group is responsible for proposing a public policy to deal with the problem. It may be one of the alternative policies or your own idea.

1. The policy which we believe will best deal with the problem is

2. The advantages of this policy are

3. The disadvantages of this policy are

4. Are anybody’s rights being violated due to this policy?
Developing a Plan of Action

Responsibilities:

This group is responsible for developing a plan of action. The plan should include steps that can be taken to have the policy accepted, implemented and followed up.

1. The main points of our plan are:
   a) ________________________________.
   b) ________________________________.
   c) ________________________________.
   d) ________________________________.
   e) ________________________________.

2. How will we develop support among the Mohana, the factory owners and the government?

_________________________________________________________________

3. Which individuals and groups would support our policy?

_________________________________________________________________

_________________________________________________________________

4. Which individuals or groups would oppose our policy?

_________________________________________________________________

_________________________________________________________________

5. We might be able to convince them by:

_________________________________________________________________
This city was one of the most remarkable cities of ancient times and was the most advanced city in the world when it was at its peak. It is an architectural wonder and reminds us of how developed humanity was in our corner of the world thousands of years ago. Despite its high level of social development, there were no rich palaces, temples or monuments. Modesty, order and cleanliness were obviously preferred.

CULTURE OF PEACE

Culture of Peace provides creative ways to look at our social realities. It also gives us opportunities of learning to live together.
BUILDING A HIGHWAY CLOSE TO A HERITAGE SITE

OBJECTIVES:

1. To enable students to understand the diversity of interests and views in relation to development, tourism, and world heritage.
2. To enable students to understand the varying advantages and risks of making a highway close to a World Heritage site.
3. To enable students to become aware of the need for conservation of World Heritage Sites.
4. To enable students to become part of a crucial decision-making process which could positively effect the heritage site.

Part I
INSTRUCTIONS FOR TEACHERS:

1. Explain to students that the Highway Department is planning to build a highway close to the cultural heritage site of Moenjodaro.
2. Some government departments such as the Archaeology Department, Environment Department, Tourism Department, and Transport Department are being asked for their viewpoints.

3. Make photocopies of Student Activity Sheet #17 for each student.
4. In Student Activity Sheet #17, the four government departments (given above) have given their responses which are numbered (1 to 4).
5. Students may be asked to follow instructions and complete the activity.
Read the following statements carefully and match each statement with the department that has made it.

Write the name of each department in front of the correct number, in the table given below.

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<th>Number of Statement</th>
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1. If a highway is built so close to Moenjodaro, there will be a serious risk to the World Heritage Site. Transport vehicles running on the road would create vibrations so as to cause the brick structures to become loose. They would, moreover, cause pollution that would cause the remains of Moenjodaro to corrode in time. Graffiti by tourists would deface the site.

2. If a highway is built so close to Moenjodaro, there would be an increase in the number of tourists coming to see this World Heritage Site. Moreover, the facilities to be provided to the tourists would require that more people would be employed. This in turn would uplift the economic condition of the local people. Funds could be generated for the site through levying entry fares and by other means.

3. If a highway is built so close to Moenjodaro, tourists will invade the area. Because of this, there will be an increase in noise pollution, encroachments and garbage. This will negatively effect the simple and sustainable lifestyle of the local people and also degrade the environment of the area. The nearby Indus River would get more polluted because of the increased activity.

4. If a highway is built so close to Moenjodaro, there will an increase in domestic tourism, and people will use several means of transport. Due to this increase in transport facilities, the local population would be helped in many ways, one of them being employment and the other, a means of getting around easily.
Part II

INSTRUCTIONS FOR TEACHERS:

1. Divide the class into four groups.
2. Each group should have a minimum of five members.
3. Each group would be assigned a department as follows.
   - Group 1: Archaeology Department
   - Group 2: Tourism Department
   - Group 3: Environment Department
   - Group 4: Transport Department
4. Each group would be provided with a set of questions for group discussion. By answering the questions, they will be defending the department responsible.
5. After a given time period during which the group will prepare their statements by answering questions, each group should select one member to take part in a ‘Public debate’ in the classroom.
6. In the debate, based on the statements they have prepared, each group would defend the views of their department.
7. Teacher will now facilitate a discussion on making proposals for conserving the cultural heritage site of Moenjodaro. Students would be guided by the teacher to keep in view the collective concerns of all four departments by utilizing a participatory approach in the classroom. The following points may be discussed:
   a) How far should the highway be from the heritage site? (perhaps some miles away).
   b) How should there be a control on the smoke emitting and noisy transport vehicles? (perhaps a system of fines).
   c) How far from the heritage site should the parking areas be?
   d) Should there be a shuttle service for visitors from the parking area to the site? If yes, what kind of environment-friendly vehicles could be used? (perhaps animal transport, battery operated transport, etc.)
   e) What are the facilities that should be provided to visitors at entry and exit points to the site? (perhaps restrooms; souvenir shops selling local crafts; replicas of objects found at the site; brochures, maps and books on Moenjodaro; eateries such as restaurants and cafes and kiosks selling food and drink as well as ticket booths).
   f) What measures should be used while planning these facilities so that they are eco-friendly, aesthetically pleasing and in balance with the environment of the site? (garbage disposal, architecture, maintenance of the facilities to be focused on).
   g) What arrangement should be made so that visitors may efficiently view the site areas? (e.g. designated path ways; visitors to queue up where required; significant facts about the prominent features of the site to be posted).
Preparing the Statement

By answering these questions, each group should be able to come up with a statement to defend their viewpoints:

Archaeology Department

1. How do transport vehicles (buses, cars, rickshaws, trucks) cause air pollution?
2. Do all kinds of transport cause air pollution? Explain.
3. In what ways do transport vehicles cause noise pollution?
4. Do drivers of transport vehicles cause noise pollution due to irresponsible behaviour? How?
5. What effect does the noise and air pollution have on the heritage site and its structure?

Environment Department.

1. Will the construction of a highway attract more visitors to a tourist site?
2. If too many people visit the site, what would be the effect on the immediate environment (noise pollution, roadside kiosks or khokhas and the state of the garbage)?
3. Since some of the local people have a simple and sustainable lifestyle, how will the building of the highway affect them?
4. Where would the sewerage, that would be created due to more people coming to see the heritage site, be drained into?

Tourism Department

1. If a highway is built close to Moenjodaro, would there be an increase in the number of visitors coming to see the heritage site?
2. What facilities would be required for the tourists?
3. What kind of businesses and jobs would be created?
4. Would the local people benefit from this activity? How?
5. In what ways can the authorities looking after the heritage site generate income that can be useful to help protect and conserve it?
Transport Department

1. If a highway is built close to the heritage site, what will be the means by which the number of visitors will increase?
2. How will people who visit the heritage site benefit?
3. How will the local population benefit from the increase in transport facilities in terms of their quality of life?
4. What kinds of employment opportunities will be created due to increase in transport facilities to the area?
5. Would the heritage site benefit from a highway being built close to it? How?
ART ACTIVITY 1

OBJECTIVES:
- To enable students to be creative by using their hands
- To enhance observation skills in students
- To enable students to make connections, through creative work, with their heritage.

✓ Students may be guided to make the toys and seals (using the implements mentioned in Resources) and leave them to dry on the trays or plastic plates.

✓ These toys and seals when dry may be displayed in school areas with the caption "Toys and Seals of Moenjodaro made by Class___."

RESOURCES:
- Modeling clay
- Pictures of toys and seals of Moenjodaro
- Toothpicks for carving
- Dull knives for carving
- Trays/plastic plates.

INSTRUCTIONS FOR TEACHERS:
✓ Photocopy pictures of clay/terracotta toys and seals for each student.
✓ Provide each student enough clay to make one copy/replica each of:
  i) a toy
  ii) a seal.

PICTURES OF MOENJODARO SEALS
PICTURES OF MOENJODARO TOYS
Ajrak is the name given to a unique form of shawls made in Sind. Ajrak is made by using printing blocks to display special designs and patterns in blue, red, black and white. The dyes were originally made from vegetables.

The people of the Indus civilization learnt to make cotton from the cotton tree as early as 3000 B.C. The bust of the king priest of Mohenjodaro can be seen wearing a piece of cloth that resembles an Ajrak draped over one shoulder.

The design used on the Ajrak was the trefoil pattern. This symbol shows three discs representing the gods of the sun, water and the earth, and has been found on various objects found in excavations at the other ancient site of Mesopotamia as well as on the royal couch of an Egyptian Pharaoh, Tutankhamen. Incidently Egyptian mummies were wrapped in cotton cloth imported from Mohenjodaro which they called Sindhini. The manner in which the designs on Ajrak are made are those used thousands of years ago. Once the blocks (or ‘pors’ in Sindhi) have been used by skilled poregar, they are thrown into the river never to be used again.

Ajrak making involves fifteen to twenty five stages of preparation. The use of vegetable dyes gives the design a glow. The designs are based on nature like flowers, leaves, birds and peacocks. In Sind, Ajrak is worn as a turban or shawl or used as bedsheets and is traditionally presented to respected guests as a symbol of honour. It is painstaking work where much skill and expertise is required.

The major portion of the Ajrak industry has been destroyed, leaving the people who produced Ajraks to join other jobs and businesses.
ART ACTIVITY II

OBJECTIVES:
- To enable students to appreciate a craft that can be traced back to ancient times.
- To help students appreciate and develop some of the skills required to produce designs on cloth.

RESOURCES:
- Plain foolscap sheets of paper
- Potatoes cut in half
- Knives
- Water or powder paint: deep blue, dark red
- Saucers

INSTRUCTIONS FOR TEACHERS:
- Read the resource notes: Ajrak, an ancient craft.
- Inform students that they are going to imitate a block printing activity such as is carried out for making an Ajrak.
- Instead of cloth students will use paper and instead of wooden blocks they will use potatoes.
- Divide the class into groups. Each group should be given the materials from ‘Resources’.
- Student groups should be guided to carefully carve a design (perhaps copied from the Ajrak designs given) on each part of the potato on the side where it is cut.
- The different coloured paints should be mixed with water in the saucer.
- The cut and carved part of the potato should be dipped into the paint and the potato pressed down hard on the plain paper, then carefully removed.
- A design or pattern should thus be created by the student groups.

FOLLOW-UP:
- Designs of Ajrak made by students should be displayed on school boards.
## Handout 3

### Rubric for Evaluation

Name of the Student

Teacher to fill out the following rubric for each student

<table>
<thead>
<tr>
<th>Collaboration Rubric</th>
<th>Beginning 1</th>
<th>Developing 2</th>
<th>Accomplished 3</th>
<th>Exemplary 4</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribute</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research &amp; Gather Information</td>
<td>Does not collect any information that relates to the topic.</td>
<td>Collects very little information—some relates to the topic.</td>
<td>Collects some basic information—most relates to the topic.</td>
<td>Collects a great deal of information—all relates to the topic.</td>
<td></td>
</tr>
<tr>
<td>Share Information</td>
<td>Does not relay any information to teammates.</td>
<td>Relays very little information—some relates to the topic.</td>
<td>Relays some basic information—most relates to the topic.</td>
<td>Relays a great deal of information—all relates to the topic.</td>
<td></td>
</tr>
<tr>
<td>Be Punctual</td>
<td>Does not hand in any assignments.</td>
<td>Hands in most assignments late.</td>
<td>Hands in most assignments on time.</td>
<td>Hands in all assignments on time.</td>
<td></td>
</tr>
<tr>
<td>Take Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fulfill Team Role’s Duties</td>
<td>Does not perform any duties of assigned team role.</td>
<td>Performs very little duties.</td>
<td>Performs nearly all duties.</td>
<td>Performs all duties of assigned team role.</td>
<td></td>
</tr>
<tr>
<td>Share Equally</td>
<td>Always relies on others to do the work.</td>
<td>Rarely does the assigned work—often needs reminding.</td>
<td>Usually does the assigned work—rarely needs reminding.</td>
<td>Always does the assigned work without having to be reminded.</td>
<td></td>
</tr>
<tr>
<td>Value Others’ Viewpoints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listens to Other Teammates</td>
<td>Is always talking never allows anyone else to speak.</td>
<td>Usually doing most of the talking—rarely allows others to speak.</td>
<td>Listens, but sometimes talks too much.</td>
<td>Listens and speaks a fair amount.</td>
<td></td>
</tr>
</tbody>
</table>

Total
After completing the project students will have the:

- Information on the UNESCO World Heritage Site of Moenjodaro
- Capacity to understand the positive management of tourism
- Skills to make site plans and become aware of how features can be inserted onto maps
- Capacity to differentiate between the positive and the negative kinds of tourism
- Understanding of the challenges faced by our heritage sites
- Awareness of the links between ancient and modern times
- Value for our heritage as a rich part of our past.

YOUR HERITAGE IS NOW IN YOUR HANDS!
CONTACT

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