

ACTIVITY 4	From material to tools
The aim of the activity	The aim of the experience is to bring the students to understand the usefulness of the tools and of the materials of which the tools are made, understanding the processing path that allows to produce simple work objects.
Places where the event can be held	Iron Museum
Age group for the activity	6-11

B. IN THE OUT-OF-SCHOOL LEARNING ENVIRONMENT	
Educational tools	Work tools, 4 puzzles, materials (iron, plastic, glass, fabric...), paintings/multimedia supports, kits for build the tools.
Method, technique and strategies	Participatory lessons, practical activity
PRACTICE	Visit to the museum and build a reproduction of a tool
Introduction of the activity	The first phase of the workshop consists of a visit to the Iron Museum, in particular the <i>Tool Room</i> , where the operator will show the students some of the most characteristic tools of peasant work (hammer, hoe, shovel, but also protective goggles, gloves, etc.).
Development of the activity	<p>After the visit the class is divided into 4 groups (5-6 pupils each). The grouping method is as follows: 4 puzzles are previously prepared, each puzzle is the image of objects, spaces, characteristic of the museum. Each child takes a piece randomly and looks for the corresponding puzzle. The groups are therefore formed by the randomness of the chosen pieces. The class group is shown some objects/tools they have seen during the visit:</p> <ul style="list-style-type: none"> - Nail; - pincer; - hoe; - shovel; - <p>The operator clarifies their function, materials they are made of, supporting the explanation and contextualization, where possible, with paintings or multimedia supports.</p> <p>Then, the class group is shown some materials (fabric, metal, plastic, glass, wood, etc.) and together they reason about why specific materials</p>

	<p>have been used and not others, why certain materials could be used for some objects and others absolutely not.</p> <p>Now the pupils have to build a reproduction of one of the tools seen previously. Each group is given a kit, in which there are:</p> <ul style="list-style-type: none"> – Cards representing different materials: the group will have to choose the most suitable ones; – A paper model of a tool to be made; <p>Once the “material cards” have been chosen, each group can ask the operator for the materials necessary for the construction of the tool. The operator will give them what they ask for, even if wrong materials. In case the choices are right, the students will be able to reconstruct the tool in a simple way; if not, pupils can change their materials every time they want. The operator has materials of shapes adaptable to numerous tools, such as iron or wooden bars.</p>
<p>Evaluation of the activity</p>	<p>The important thing is that the object they build reproduces the function of the real object (e.g.: a pliers reconstructed with our materials will not need to really tighten strongly but, in any case, there is a lever that allows it to do however, a minimum of strength. Cardboard is still the most suitable material for such young children: they can draw it, cut it out, glue it, etc.)</p>



