تاريخ السودان القديم:
هويدا ومعاوية يستكشفان
حديد مروي

Sudan's Ancient History:
Hwida and Maawia Investigate
MEROE'S IRON

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This book belongs to

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The team reminds us to respect our heritage!
At Meroe the archaeologists are trying to work out how the ancient people made the iron that was turned into objects.

Today we’re helping archaeologists who are digging to find clues about how the people of Meroe made iron thousands of years ago. Iron was a very important material at Meroe.

Archaeologists look for things that people from the past have left behind. They find the remains of buildings, pottery, jewellery and other everyday items.

Hi there! My name is Maawia.
I’m nine years old and this is my twin sister, Hwida.
We’re doing a school project about the ancient royal city of Meroe.

The archaeologists try to work out how the ancient people made the iron that was turned into objects.
To make iron, the first job was to find and dig up iron ore, which is a stone that contains iron. The ore had to be roasted in a fire and then crushed into small pieces.

Slag is the waste left behind from the iron production. It can tell archaeologists a lot about the ingredients that make up iron and how the ancient people produced iron objects.

A lot of iron was produced at Meroe. Archaeologists know this because of the many slag heaps around the city.

وإذاً تحديد الحديد كان لا بد من الحفر والتنقيب لاستخراج حام الحديد الذي يوجد في الحجر والصخور، وبعد ذلك يتم تسخين هذا الخام وطحنه ليصبح قطعاً صغيرة.

خلث الحديد هو باقياً إنتاج الحديد الذي لا يصبح للاستخدام، والتي من خلالها يمكن للآثاريين بعد تحليلها معالجة المكونات التي استخدمت في صناعة الحديد وكيف حوّلها قديمو Enum to مصنوعات مختلفة.

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They would have to pump air in through bellows made of clay and animal skin to keep the temperature high enough.

To get the iron from the ore it has to be heated to really high temperatures. So they built strong furnaces from special clay.
This is all that is left today of the furnace workshops. The hot iron was taken by a blacksmith and hammered into a useful shape. A lot of iron objects were made, like weapons and tools.
يقوم الآثاريون بدراسة الحديد وتحليله في المعامل لكي يكتشفوا المكان الذي استخرج منه الخام، وما عمر هذا الحديد، وكيف تم صنعه. والآن يعلم الآثاريون تمامًا أن المورويين قاموا بصناعة الحديد لأكثر من ألف عام.
Goodbye from the UCL Qatar iron smelting team

وداعاً من فريق صهر الحديد في كلية لندن الجامعية بقطر

Colour in your own furnace

قم بتلوين فرنك الشخصي
We would like to thank Sudan’s National Corporation for Antiquities and Museums (NCAM) for permitting the archaeometallurgical research to be carried out. We would also like to thank UCL Qatar, the Qatar-Sudan Archaeology Project (QSAP), and the British Institute in Eastern Africa (BIEA) for providing funding, and the University of Khartoum for their support.

Too many people have been involved in the research to thank each one individually, so we extend our sincere thanks to all of the team members in Sudan and elsewhere for their dedication and hard work, and to the communities around Meroe and Hamadab for their hospitality and friendship.