

Topic Page: [firing](#)

Summary Article: **firing**

From *The Hutchinson Unabridged Encyclopedia with Atlas and Weather Guide*

In ceramics, the process that ‘bakes’ the pottery clay hard, and fixes colours and glazes to pottery surfaces. The pottery is fired in a kiln, an ovenlike enclosure where the pieces undergo intense heating.

As different clays and glazes react in different ways to varying degrees of heat, it is important that the temperature of a kiln is accurately controlled. In order to prevent cracking or other damage during firing, the temperature in a kiln can be assessed by placing **pyrometric cones** (clay wedges) inside the kiln. At certain temperatures, which range from 625°C/1,157°F to about 1,327°C/2,420°F, the cones will bend, telling the observer exactly what temperature has been reached inside the kiln.

The use of a kiln is not necessary to fire clay. **Pit-firing** is still practised by ancient cultures today. A pit is dug and filled with twigs, dry leaves, and sometimes coal. The material is lit and encouraged to burn slowly with the unfired pottery form placed on top. The pot is then covered entirely with more leaves, twigs, and even dung, which is also lit, and left to smoulder for several hours. Towards the end of the process, the entire pit is covered with sand or dirt, in order to cut off the oxygen source and stop the embers from burning. Finally, the pottery is removed from the pit and cleaned ready for use.

Raku is a Japanese style of ceramic ware, which originated in the 16th century and is admired for its deep, subtly changing colours. Although the process does require a kiln, it is a **low-fire** technique where clay is quickly heated to red-hot temperatures and then taken out of the kiln to cool down and reduce quickly.

APA

Chicago

Harvard

MLA

firing. (2018). In Helicon (Ed.), *The Hutchinson unabridged encyclopedia with atlas and weather guide*. Abington, UK: Helicon. Retrieved from <https://search.credoreference.com/content/topic/firing>



© RM, 2018. All rights reserved.



© RM, 2018. All rights reserved.

APA

firing. (2018). In Helicon (Ed.), *The Hutchinson unabridged encyclopedia with atlas and weather guide*. Abington, UK: Helicon. Retrieved from <https://search.credoreference.com/content/topic/firing>

Chicago

"firing." In *The Hutchinson Unabridged Encyclopedia with Atlas and Weather Guide*, edited by Helicon. Helicon, 2018. <https://search.credoreference.com/content/topic/firing>

Harvard

firing. (2018). In Helicon (Ed.), *The Hutchinson unabridged encyclopedia with atlas and weather guide*. [Online]. Abington: Helicon. Available from: <https://search.credoreference.com/content/topic/firing> [Accessed 22 October 2019].

MLA

"firing." *The Hutchinson Unabridged Encyclopedia with Atlas and Weather Guide*, edited by Helicon, 2018. *Credo Reference*, <https://search.credoreference.com/content/topic/firing>. Accessed 22 Oct. 2019.