

## **What is a crystal: The question comes full circle**

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With reference to personal experiences with crystals, a reflection is presented on the nature of crystals, their structures and their transformations. Two "standard" definitions and one official definition of a crystal are offered as a point of departure for a discussion of the ways in which crystals are used in chemistry and of some possible practical variants on the definition of crystals. The key properties of periodicity and symmetry, and the nature of motions within crystals, are used in further development of an overview of their defining characteristics. It is concluded that a context-dependent, functional or phenomenological definition is as useful in practical applications as is a rigorous first-principles definition.