NEW TOY USES AR TO TEACH ABOUT THE ELEMENTS

A new capsule toy uses augmented reality to help teach about the properties of the elements.

Capsule toys, often sold in vending machines, are very popular with young children around the world. In Asia these toys are often called gashapon, an onomatopoeic word formed from the Japanese sound ‘gasha’ (or ‘gatcha’), for the hand-cranking action of a toy-vending machine. ‘Pon’ refers to the sound of the toy capsule leaving the machine. Examples range from a miniature version of Edvard Munch’s “The Scream” to popular anime figures. With approximately 150 toys being released every month, Red Dot has given an education design award to a new capsule toy, Element Capsule, designed by South Korean creators Ko Hyunseon and Shin Daji.

Element Capsule is an interactive toy that helps teach the basics of chemistry. The Gashapon toys visually represent 118 elements. Each toy has different colours, shapes, and facial expressions that represent the elements and make them easier to remember. Since hydrogen is highly reactive the capsule is designed with horns and flaming red hair. Each capsule contains one element character with information on its chemical name, atomic number, weight, and property.

The capsule toys are also designed with an Augmented Reality app. Users can download the app and point their smartphone or tablet at the toy to learn more about each element. The capsules themselves are magnetic. If two or more capsules are combined, the AR app will play a video showing how the elements combine to form new matter. The videos of different combinations of elements can be saved in the app’s archive, allowing users to experiment with different combinations. The Element Capsule joins a number of recent AR innovations, such as a system that
brings training manuals to life and an app that allows users to watch live musical gigs anywhere and anytime. What other types of toys might help teach people about science concepts?