



## Human Tools Design Project Lessons

### Websites

#### [The Not So Ancient Art of Chindogu](http://www.gadgets-gizmos-inventions.com/Chindogu.html)

This website features a short article about the background of Chindogu, the term coined by Japanese writer and inventor Kenji Kawakami. Included in the article are some examples of Chindogu.

( <http://www.gadgets-gizmos-inventions.com/Chindogu.html> )

#### [10 Chindogu: The Art of Intentionally Making a Useless Invention](http://inventorspot.com/articles/chindogu_art_intentionally_making_useless_invention_39210)

This website highlights 10 Chindogu inventions such as a Carrot-Grating Ukulele, a Chewing Gum Holder and Magnetic Slippers.

[http://inventorspot.com/articles/chindogu\\_art\\_intentionally\\_making\\_useless\\_invention\\_39210](http://inventorspot.com/articles/chindogu_art_intentionally_making_useless_invention_39210)

#### [Levers in the Human Body](http://www.dynamicscience.com.au/tester/solutions/hydraulicus/humanbody.htm)

This website, which includes animation and video, highlights the many levers that exist within the skeletal structure of the human body.

( <http://www.dynamicscience.com.au/tester/solutions/hydraulicus/humanbody.htm> )

#### [Tools and Machines](http://www.explainthatstuff.com/toolsmachines.html)

This website provides good background information about how tools and simple machines work.

( <http://www.explainthatstuff.com/toolsmachines.html> )

#### [ToolMaking](http://www.janegoodall.org/chimp-central-toolmakers)

For those students who might be interested in learning more about other organisms who make tools, this website features Jane Goodall's observations of how chimpanzees use the materials around them to make tools. Included on this site is wonderful, short video showing 9 different tools a chimpanzee utilizes.

( <http://www.janegoodall.org/chimp-central-toolmakers> )



## Human Tools Design Project Lessons

### Books

#### **101 Unuseless Japanese Inventions: The Art of Chindogu**

By Kenji Kawakami; Translated by Dan Papia (1995, W.W Norton & Company, Inc.)

#### **99 More Unuseless Japanese Inventions: The Art of Chindogu**

By Kenji Kawakami; Translated by Dan Papia (1997, W.W Norton & Company, Inc.)

These books, written by the original genius behind and creator of Chindogu, are geared towards adult readers. However, the books include ample photographs of Chindogu designs that might inspire the children.

#### **Inventions**

By Valerie Wyatt; Illustrated by Mathew Fernandes (2003, Kids Can Press)

This book, filled with descriptive illustrations contains short, entertaining, informative synopses of a number of different human inventions. Some of the categories of inventions include: Everyday Inventions, Wearable Inventions, Edible Inventions, and Medical Marvels.

#### **Science in Seconds for Kids**

By Jean Potter (1995, John Wiley & Sons, Inc.)

This book includes over 100 investigations using common materials. They are designed so that young children can follow and complete the investigations in a short amount of time. The experiments, divided into categories such as The Human Body, Light, Machines, and Weather, provide many opportunities for students to create simple examples of tools and technology that are often much more complex in the real world.



### **Science in Seconds with Toys**

By Jean Potter (1998, John Wiley & Sons, Inc.)

This book, written by the same author as the previous book, includes over 100 different investigations using common materials. They are designed so that young children can follow and complete the investigations in a short amount of time. The experiments, divided into categories such as Throwing, Flying, and Falling or Balancing, Swinging, and Spinning provide ample opportunities for students to investigate a variety of science and engineering principles.

### **Wow! World of Wonder: Machines and Inventions**

By Ian Graham (2008, Children's Press; An Imprint of Scholastic Inc.)

This book provides a glimpse of the history of human inventions. The book, filled with descriptive illustrations, begins with the invention of simple tools like knives and axes made from stones and bones. Next come the inventions of the wheel, ways to measure time, and defensive weapons. Other inventions include writing, improved sanitation, the steam engine, the light bulb, and modern travel.