The MIT Museum

Kids’ gallery guide

A fun and interactive experience for the under-12 crowd and their families

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Welcome

Welcome to the MIT Museum!

This museum shows the work of many scientists, artists, and engineers at MIT as well as different ideas about science and technology. There are robots, machines, cameras, video games, and lots of pictures for you to see!

As you walk through the second-floor galleries, this guide will help you learn about the objects and exhibits inside.
Polaroid Cameras

Cameras work by using a light source and lenses in order to capture the image of an object. Unlike today’s digital cameras, older cameras recorded these images on film.

Both of these Polaroid cameras have something in common— they focus by using bellows. The bellows fold up and expand so that the picture becomes clearer.

Challenge! Can you find any cameras on the robots in the MIT Museum?
Robots & Beyond

The robots displayed in this gallery are organized into four categories. Be sure to watch the videos to learn more about the robots on display!

Sensing -- These robots get information about the world using sensors. Which of the five senses do they use?

Moving -- These robots were designed to move in different ways. What types of animals inspired their motion? Can you find them in the exhibit?

See your activity sheet for an animal-inspired matching game!
Robots & Beyond

Socializing – The robots and computer systems in this section were built to interact with humans. How do they communicate?

![Robot Image]

Reasoning & Learning – As humans, we are able to solve problems, and these robots were programmed to do the same. How do you think researchers try to teach a robot? What problems can occur?

✏️ See your activity sheet for a Kismet-inspired art challenge!
Gestural Engineering

Arthur Ganson is a local artist who makes moving sculptures using gears, motors, and all sorts of other materials.

What is a gear? A gear is a disk that has teeth cut into it. When the teeth in two gears match up, they make each other move. There are many different types of gears!

Choose your favorite sculpture. How many gears are in it?

See your activity sheet for a fun gear puzzle!
Holography

A hologram is a special type of image of an object that uses interactions between light waves to show the three-dimensional properties of the object.

Many holograms are made using lasers. The light from the laser bounces off the object and is recorded on holographic film. When you shine light on the film, your eyes and brain recreate a 3D picture of the object.

Which hologram is your favorite? Why?

See your activity sheet for a holography word search!
Daguerre’s American Legacy

In 1839 Louis Daguerre invented a way to permanently capture images. His process was called daguerreotypy but we call it photography now. Happily, we can take pictures quickly and don’t need dangerous chemicals to do it anymore. (Whew!)

How many daguerreotypes in the exhibit are images of one or more children?

Which daguerreotype, tin type, or ambrotype is your favorite? Why?
5000 Moving Parts

All of the pieces in this exhibit are examples of kinetic (moving) art.

Arthur Ganson’s *Machine with Breath* includes sound by composer Christina Campanella. Describe what you hear when wearing the headphones?

Which sculpture is your favorite? Why?
Inventions: 2014
Student Showcase

This exhibit presents a number of ideas that were developed by MIT students. Which do you like best? Do you need to use more than one of your five senses to appreciate it? (If so, which ones?)

If you were going to put an invention you created on display at the MIT Museum, what would it be? Think hard about this – everyone in the world might see it!