

## Robotics Badges: Programming Robots 1

### Real Robot Cards

Before the meeting, print and cut out these cards for Activity 3: Learn about Robots.



**DESIGN A ROBOT  
THAT MAKES FARMERS'  
LIVES EASIER.**

**Real Life Robot Example:**

A dairy barn robot lets cows decide when they want to be milked each day. This is better for the cows and free up more time for the farmers. Each cow wears a collar, think of a wearable for cows, and is trained to go to the robot when she feels like she needs to release milk. Then, the robot reads the cow's health data from the collar, which determines what the robot will do (give the cow more food if they need more nutrition, milk the cow, etc.)

**DESIGN A MUSICAL  
ROBOT.**

**Real Life Robot Example:**

The heavy metal robot band Compressorhead is a trio of robots that play real instruments; they've even played at festivals! There's a drummer, Stickboy, a guitarist, Fingers, and a bassist, Bones. Wondering why he's called Fingers? He has 78 hydraulic fingers!

**DESIGN A DELIVERY  
ROBOT.**

**Real Life Robot Example:**

Gita is a self-driving drum-shaped rolling robot with room for luggage or groceries. Created by Vespa, Gita will help with ordinary everyday tasks.

**DESIGN A WEARABLE  
ROBOT THAT ENHANCES  
STRENGTH OR OTHER  
ABILITIES.**

**Real Life Robot Example:**

SuitX's Phoenix exoskeleton helps paralyzed people walk. It weighs 27 pounds and is custom-fit to the user's body. Users press a button and the suit returns movement using small motors that help their knees and hips to move.

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DESIGN A FOOD PREPARATION ROBOT THAT CAN MAKE DISHES TO ORDER.

**Real Life Robot Example:**  
Sally the Salad Robot is a vending machine that dispenses ingredients into your bowl. She can create any salad you want in only one minute!

DESIGN A NURSING HOME ROBOT THAT CAN HELP RESIDENTS STAY ALERT AND FOCUSED.

**Real Life Robot Example:**  
Robotic kittens, puppies, and baby seals respond to petting when residents cuddle and talk to them. They have fur and sensors that make them purr or wag their tails when they are pet.

DESIGN A ROBOT THAT CAN WORK ON THE OUTSIDE OF A SPACE VEHICLE.

**Real Life Robot Example:**  
Canadarm2 is a giant Canadian-built robotic arm that can be operated by astronauts inside the International Space Station or by ground control. First launched in 2001, the arm helps to carry heavy loads, dock spacecrafts, and assist astronauts while they go on spacewalks.

DESIGN A ROBOT TO HELP PRESCHOOLERS LEARN.

**Real Life Robot Example:**  
MIT's Tega has a smartphone face and a fuzzy animated body that can teach a child a foreign language. Tega can respond to the emotions of humans by recognizing of facial movements, making it more friendly and likable for kids.