\% Robot is my friend

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## Robot's Part List

Before building robots, Let's check out the parts and the functions of Tami-Creative.


## Controller X1

Controls inputs, outputs and motions of a robot.


Remote control X1
Controls a robot without
a cable.


3Pin headerpin X3


Remote control receiving module
Recieves an RC signal and sends it to the controller.


Infrared sensor module
Receives an infrared signal.

## X2

Switch module
Receives a physical touch signal.

## X1

## LED module(Green)

## X1

## LED module (Red)

Emits light after a signal from the controller.
$\square$
le t's ch eck it


DC Motor X2
Generates power.


Tire X2
Covers a wheel.


T-panel X2
Connects frames and panels.


Rod rivet X10


Wheel guide X2
Connects a motor to a wheel.


L-bracket X21
Connects frames and panels


V-panel X4
Connects frames and panels.


Wheel X4
Spins to move a robot.


V-bracket X8
Connects frames and panels

## 50 mm rod X3

Connects a frame or a panel to a wheel or a gear.


## Bushing X15

holds a rod and a frame.

Builds up a robot's structure.


5X13 frame


## 3X11 panel



3X9 panel


X9
3X5 panel


2X7 panel


2X3 panel


9 panel
○○○○○ X6
6 panel
○○○ X5
4 panel
○○ X4
3 panel


Rubber band


Download cable


Rivet Container


Tronz Card V2 CD

## X1

Disassembly Tool


Rivet
Connects frames or panels to other panels or brackets.

## Racing Robot

## Learning subject

## 1. Let's learn about the robot.

2. Let's compare the different movements between humans and robots.
3. Let's learn about the three laws of robotics.

## What is a robot?

Robots are machines built to identify surroundings, process a range of operations
on their own and do the work to replace humans.
Robots are much like humans. The image below compares between robots and humans.


## There are three laws of robotics.



Second law
3 Third law

No.1, a robot may not injure a human being or, through inaction, allow a human being to come to harm.

No.2, a robot must obey orders given it by human beings except where such orders would conflict with the First Law.

No.3, a robot must protect its own existence as long as such protection does not conflict with the First or Second Law.






Completion


## Connection



## Let's Program

1. Make Racing Robot go forward for 3 seconds.

2. Make the robot go forward, backward, turn left and turn right.

3. Make Racing Robot move in a" $\neg$ " shape.

4. Make Racing Robot move in a" $\square$ " shape.

