IS THAT ROBOT REAL?

How small can a robot be?

Sciencenter
Ithaca, New York

Emily Maletz
graphic design

NSF

NISE network
NANOSCALE INFORMAL SCIENCE EDUCATION

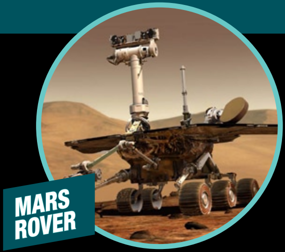
Created in 2008 by Sciencenter, Ithaca, NY, www.sciencenter.org
Accompanying book available for purchase at www.lulu.com

This material is based upon work supported by the National Science Foundation under Agreement No. ESI-0532536.
Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

REAL Macrosize

These robots do exist

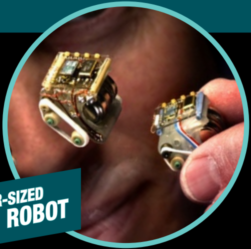
Are there robots the size of a child?
Yes, there are robots as tall as a person!
The Mars rovers are about 1 meter tall.



Are there robots the size of a hand?
Yes, there are robots as tall as a hand!
The Roomba® Vacuum Robot is 1 decimeter thick.

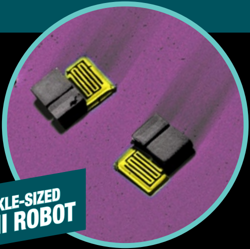
VACUUM
ROBOT
iRobot

Are there robots the size of a finger?
Yes, there are robots as wide as a finger!
This mini robot is about 1 centimeter wide.



FINGER-SIZED MINI ROBOT

Are there robots the size of a freckle?
Yes, there are robots as small as a freckle!
This mini robot is less than 1 millimeter wide.



FRECKLE-SIZED MINI ROBOT

Are there robots the size of
Yes, there are robots as wide as
This mini robot is about one tent
millimeter wide.

IN GOD WE TRUST
LIBERTY

HAIR-SIZED MINI ROBOT

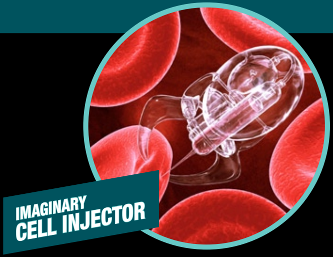
a hair?
a hair!
h of a

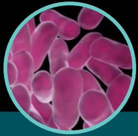
NOT REAL

Microsize

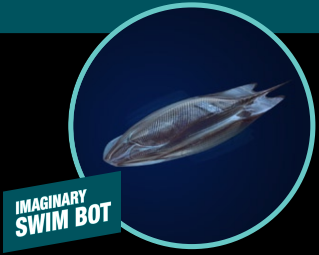
Micro-sized robots don't exist

Are there robots the size of blood cells?
No, cell-sized robots don't exist.
This tiny robot was created by an artist and is just imaginary.





Are there robots the size of bacteria?
No, bacteria-sized robots don't exist.
This "swim bot" was created by an artist and is just imaginary.

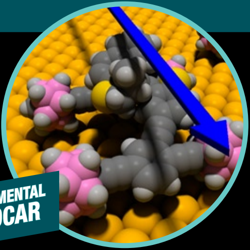


NOT REAL

Nanosize

Nanobots don’t exist

Are there robots the size of molecules?
No, molecule-sized robots don’t exist.
This experimental nanocar is built from atoms, but is not a robot.



EXPERIMENTAL NANOCAR