SHRINKING ROBOTS!

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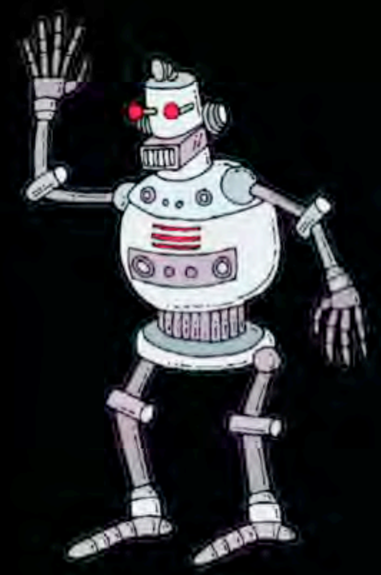
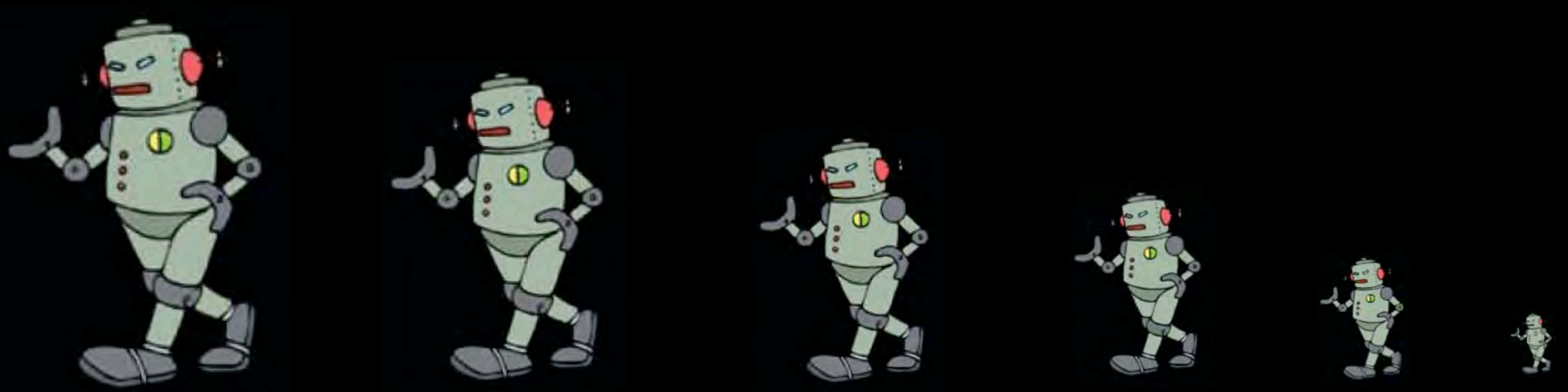
What is a robot?

Robots are machines
that can sense, plan, and act



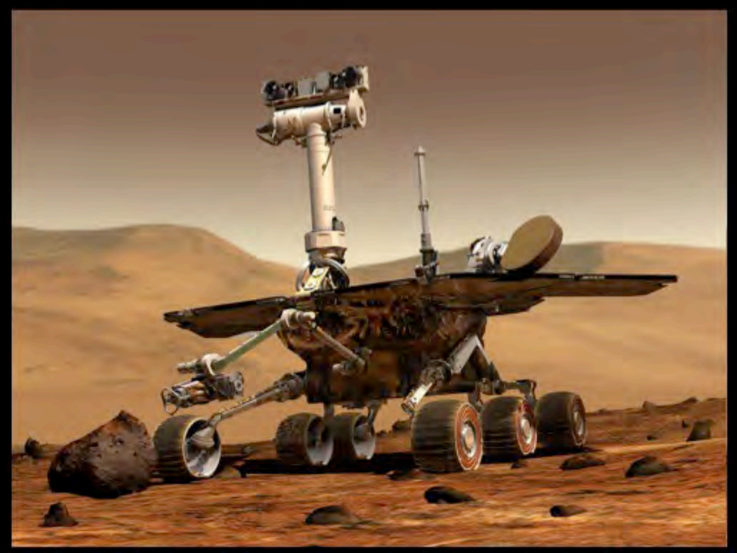


How small can robots be?

Are there robots
the size of a child?

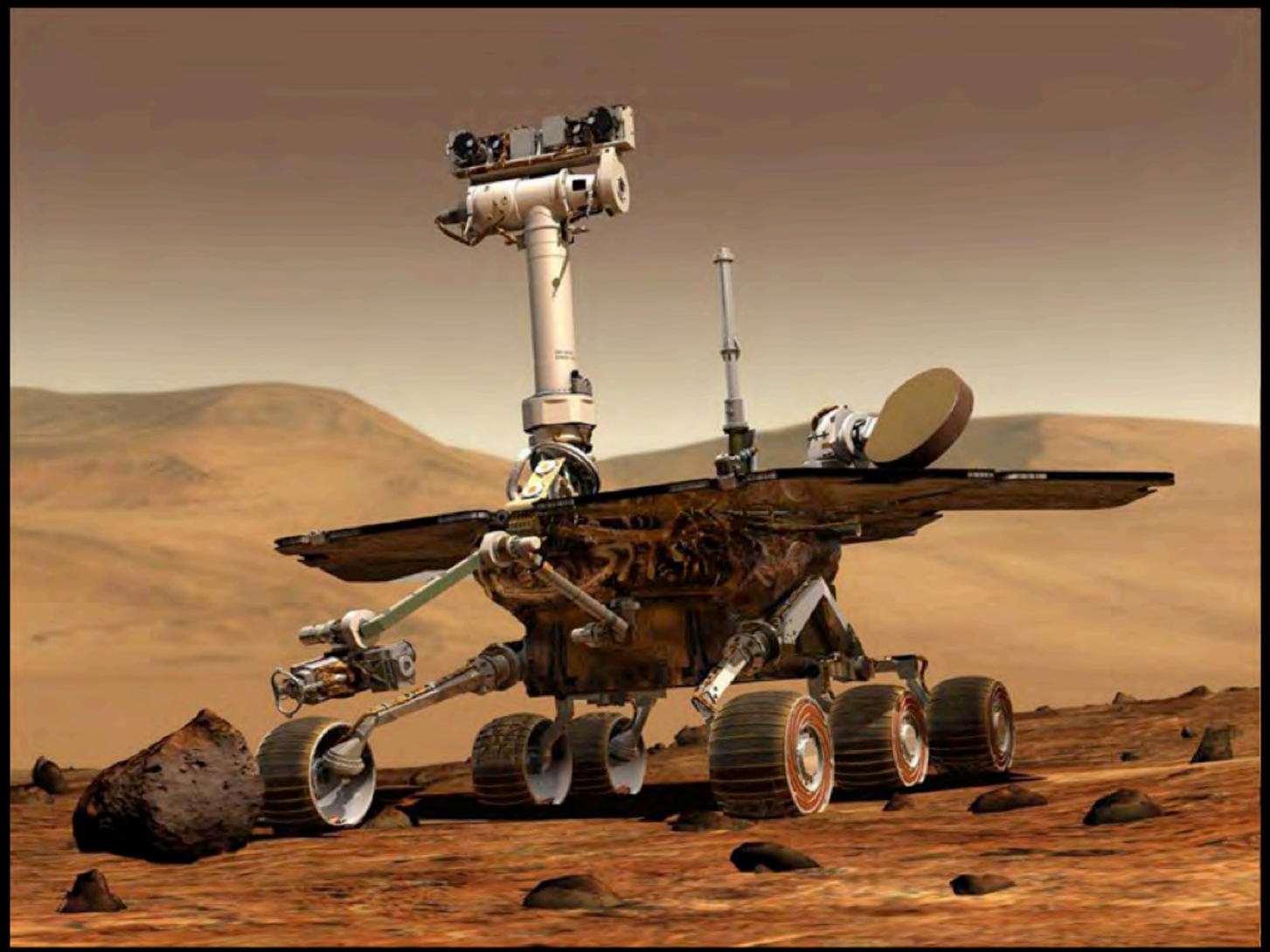
1m

Yes! There are robots the size of a child!

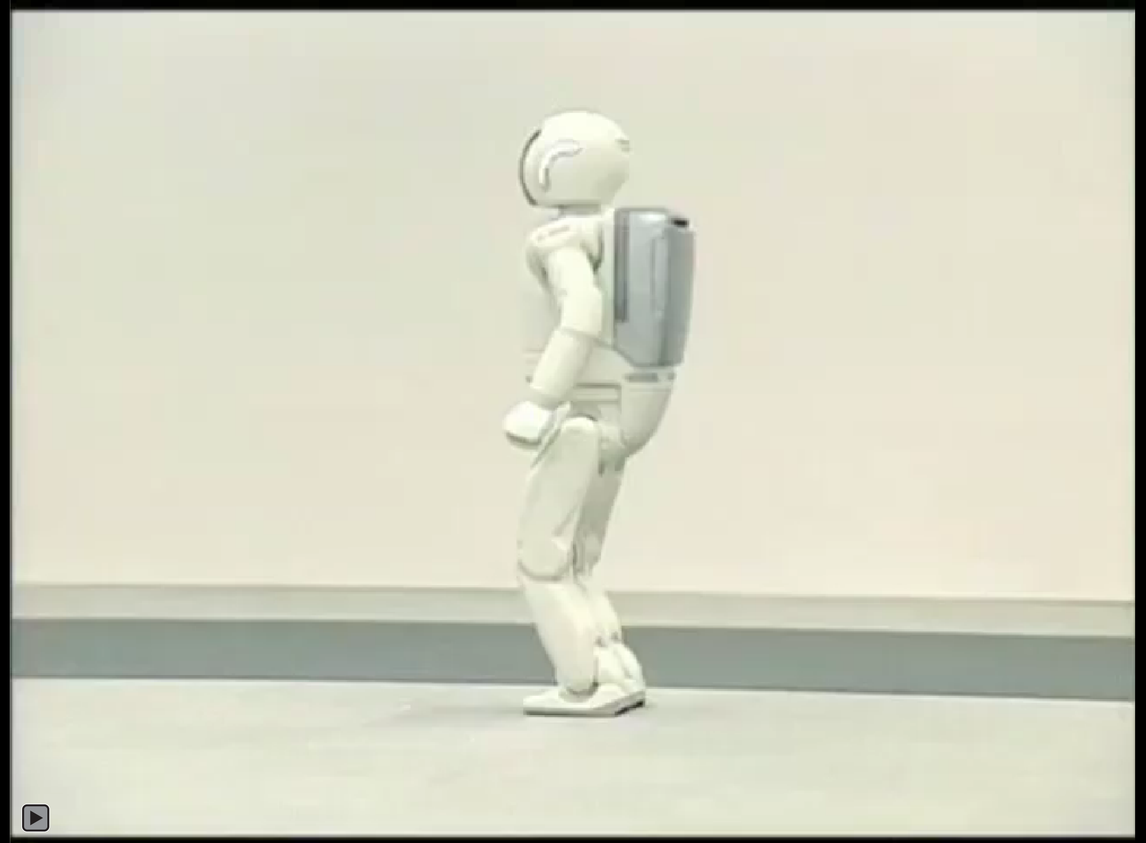


1m

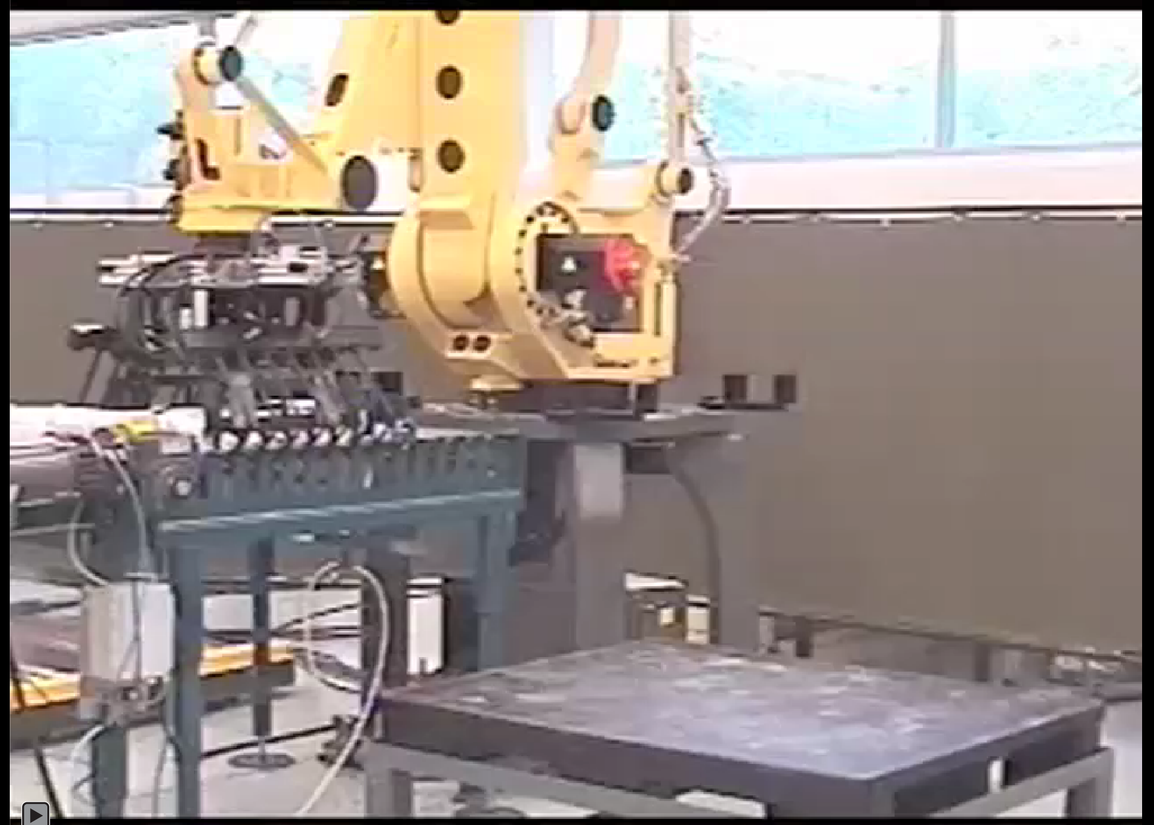
Mars rover



Humanoid robot



Factory robot



Are there robots the size of a hand?

10cm

Yes! There are robots the size of a hand!

10cm

Vacuuming robot

Climbing robot

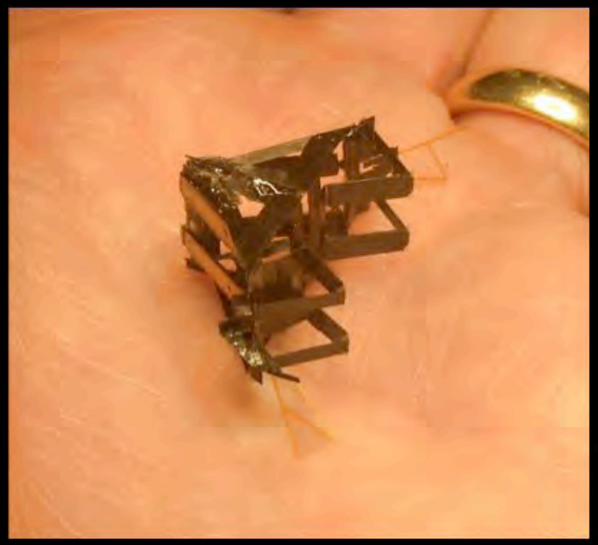
Swarming robot


Matching Orientation

Are there robots the size of a finger?

1cm

Yes! There are robots the size of a finger!

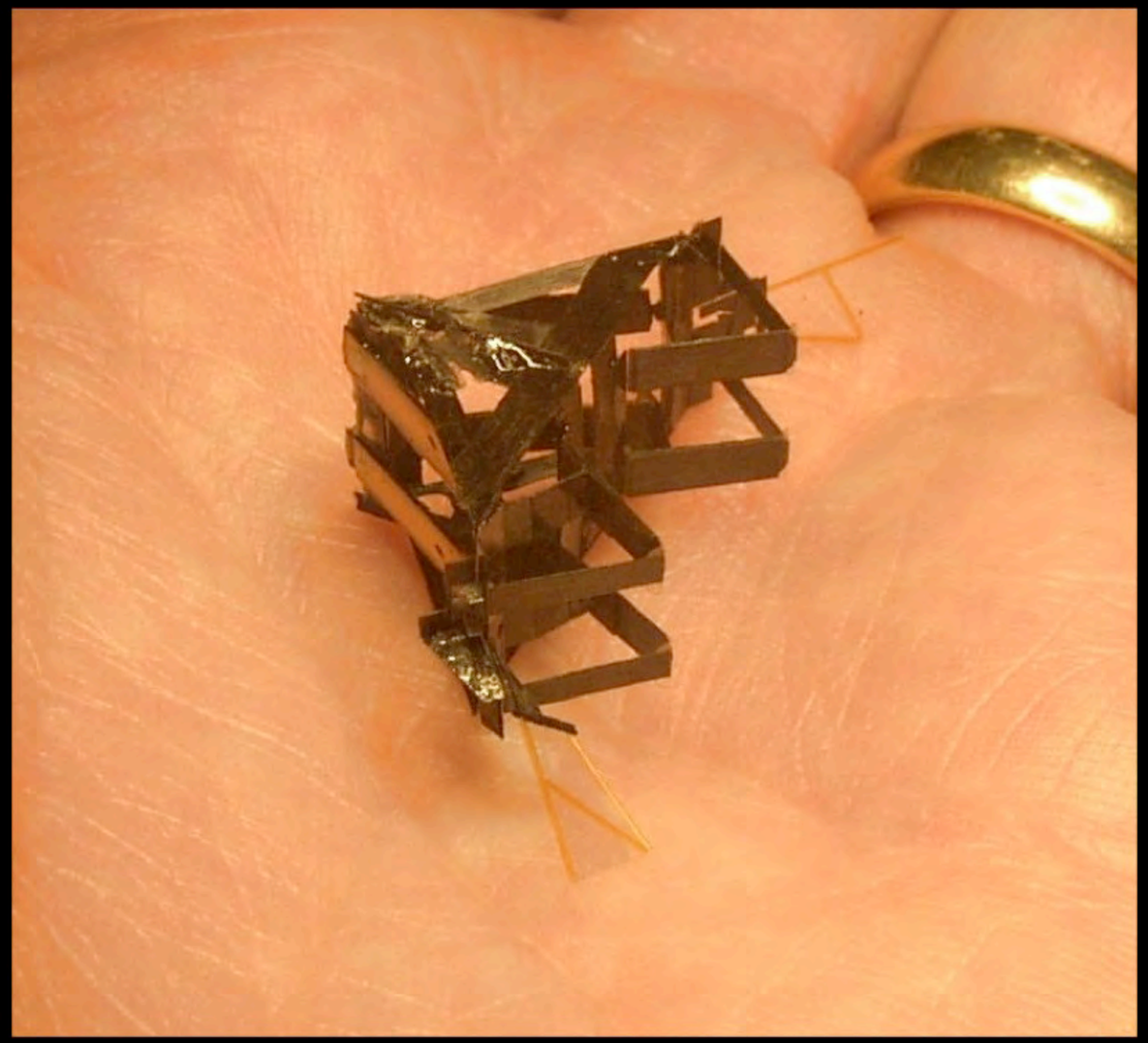


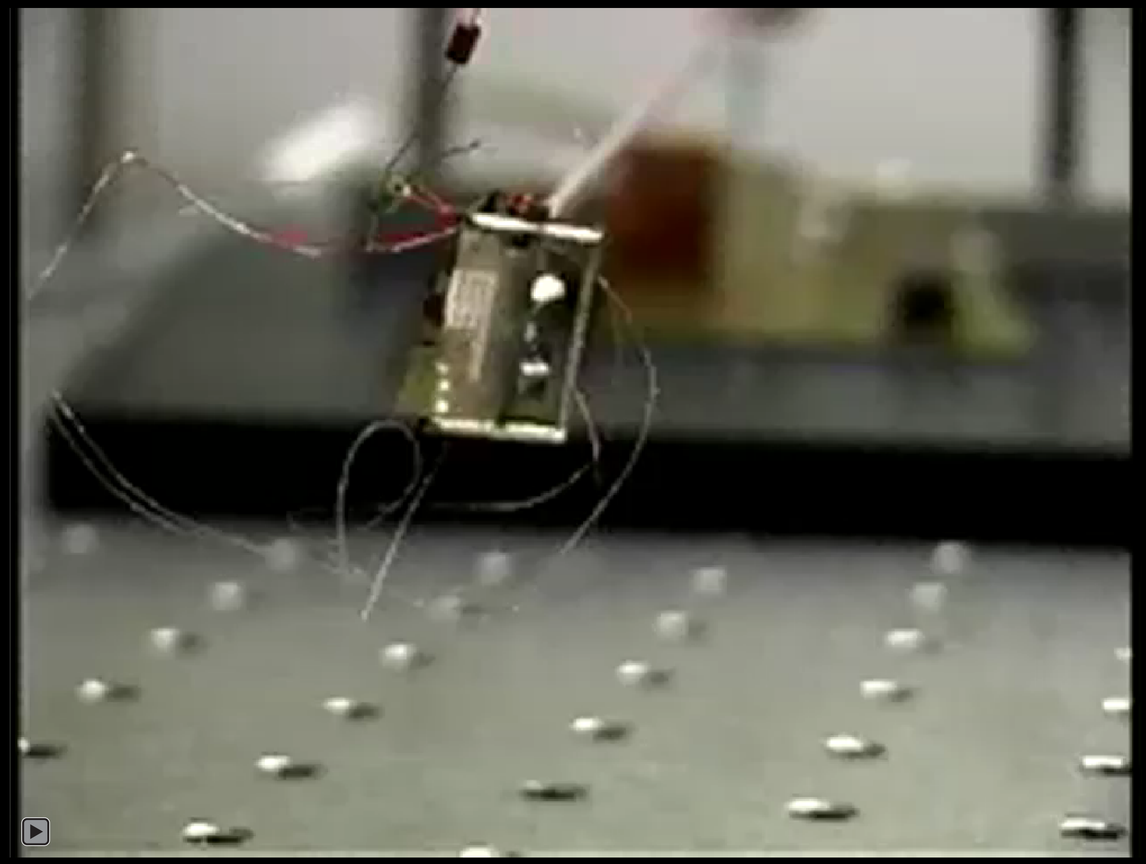
1cm

Crawling robot

Medical robot

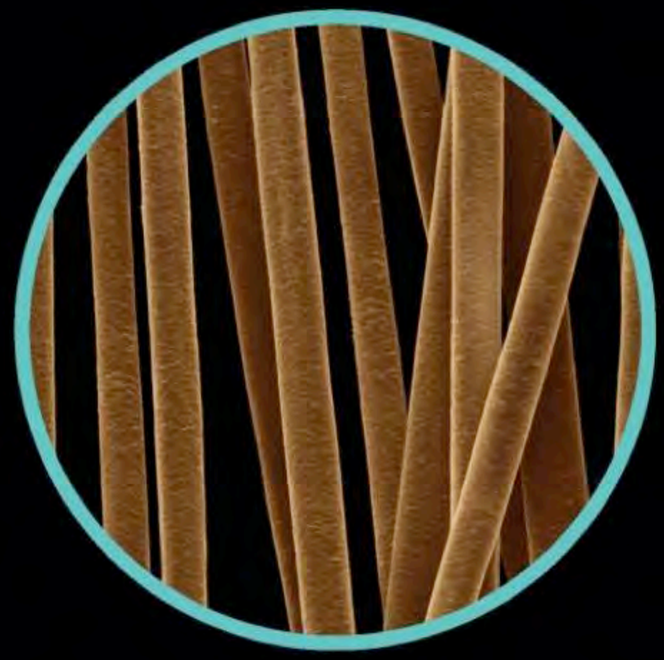
Flying robot





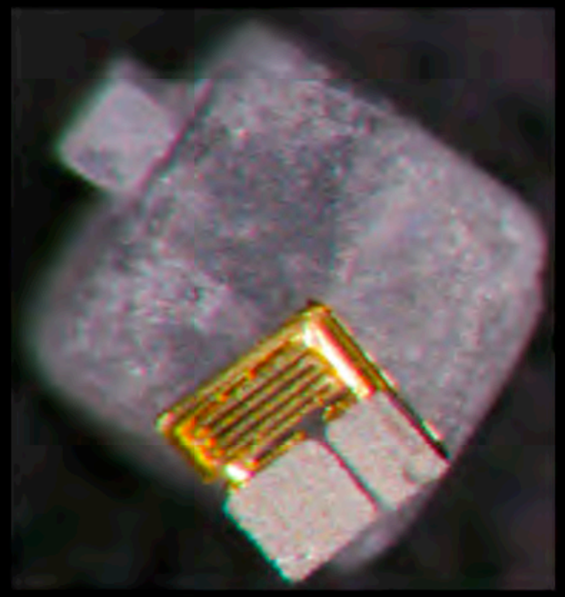
Are there robots the size of a freckle or hair?

1mm

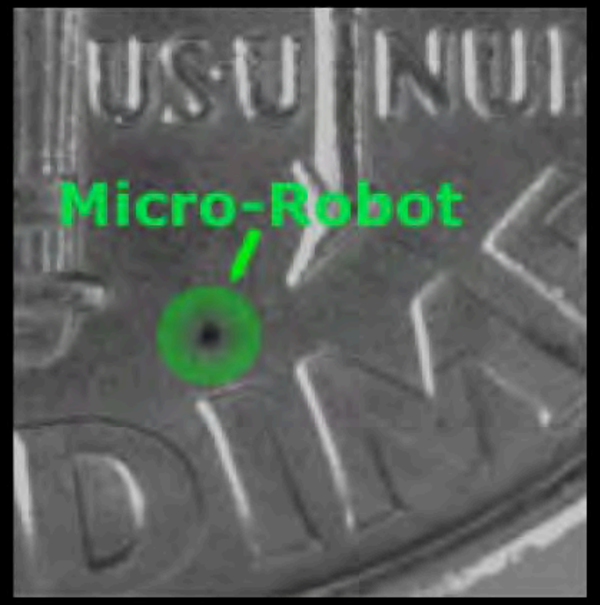


.1mm

Yes! There are robots the size of a freckle or hair!

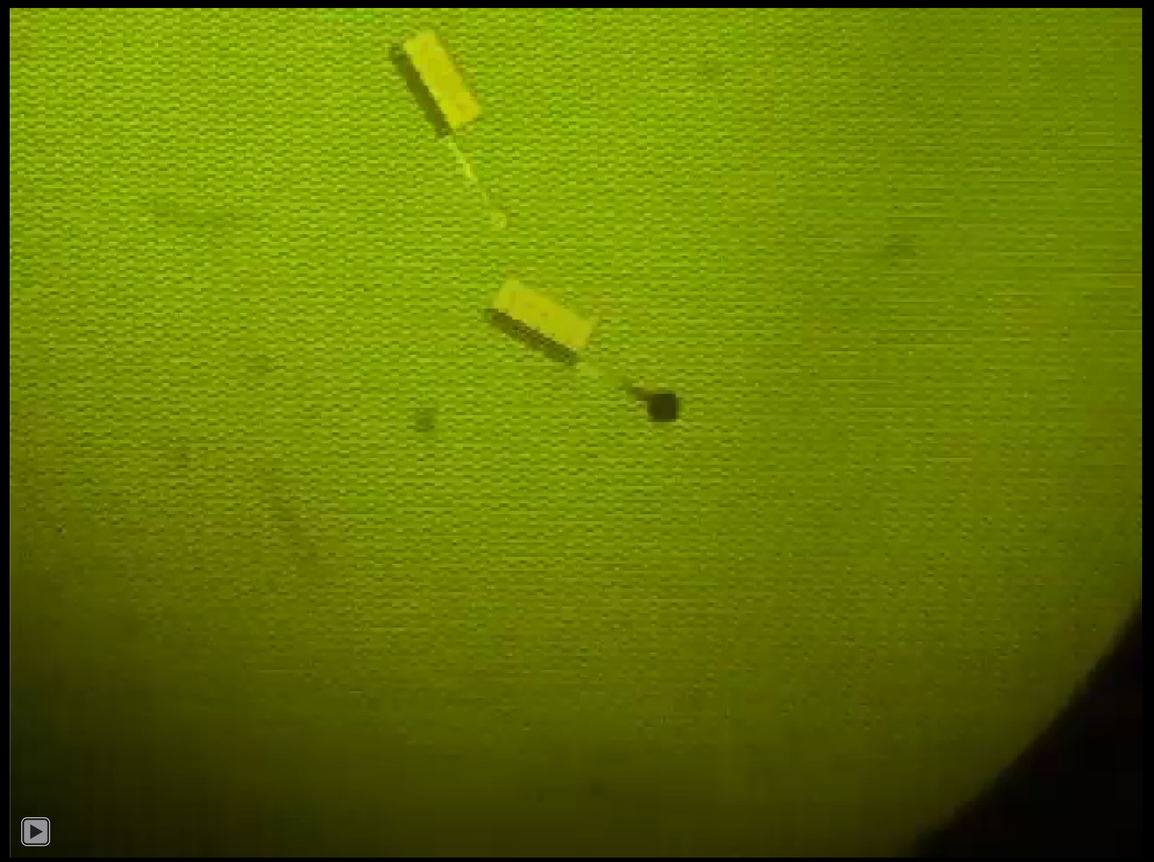


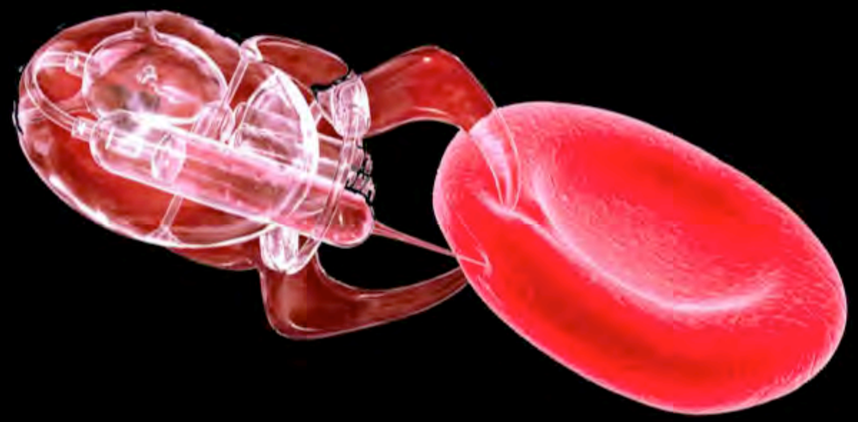
1mm



.1mm

Smallest robot!





What are nanobots?

Are they real?

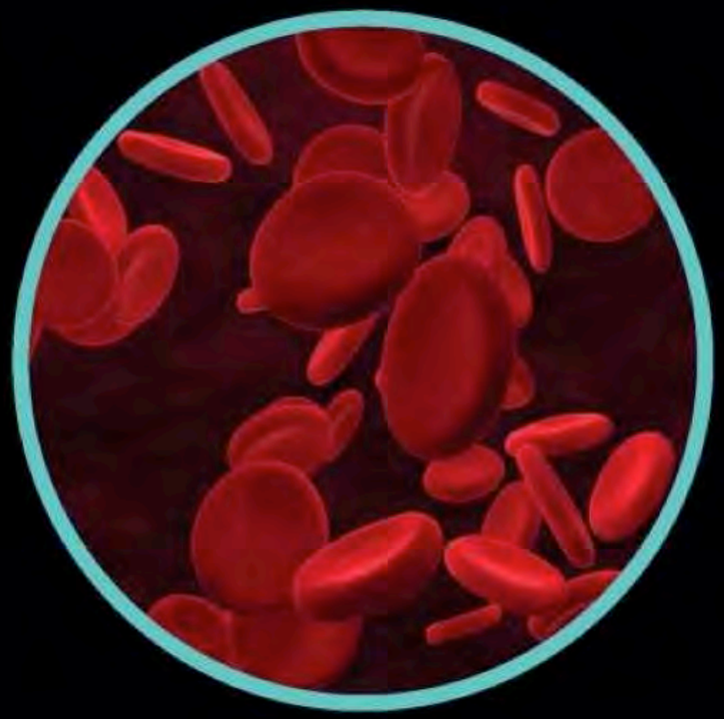
Nanobots would be very, very small robots!

- The size of cells or molecules
- Able to sense, plan, and act

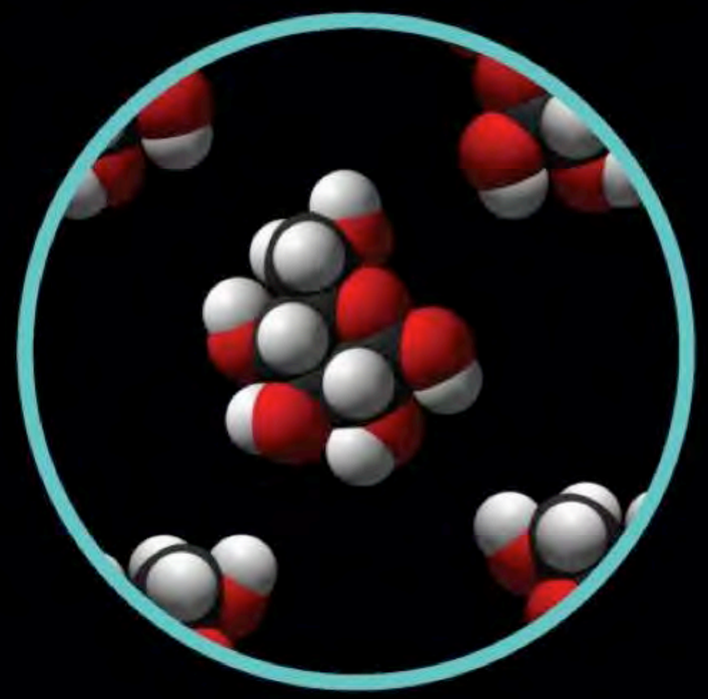
Nano is very, very small

- A nanometer is a billionth of a meter
- Molecules are nanometers across

Are there robots the size of a cell or molecule?



1μm



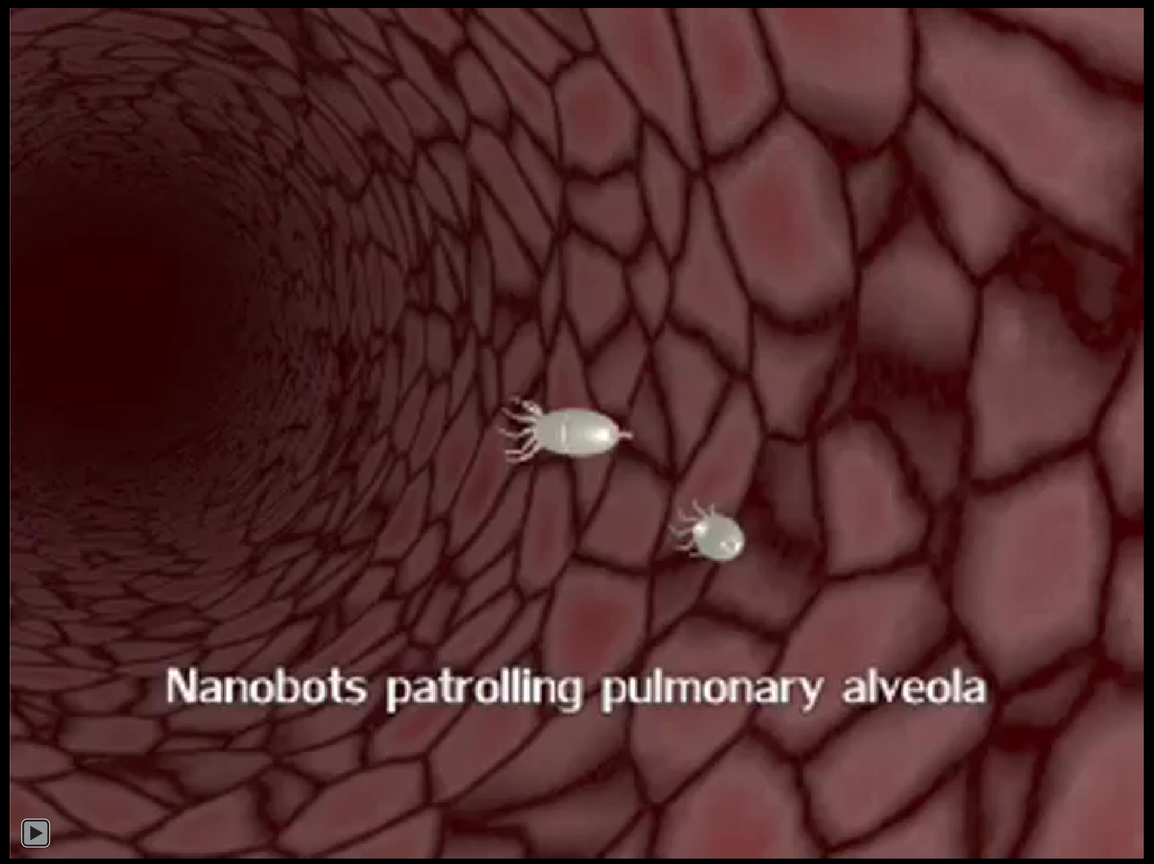
1nm

NO! There are no robots
the size of a cell or molecule!

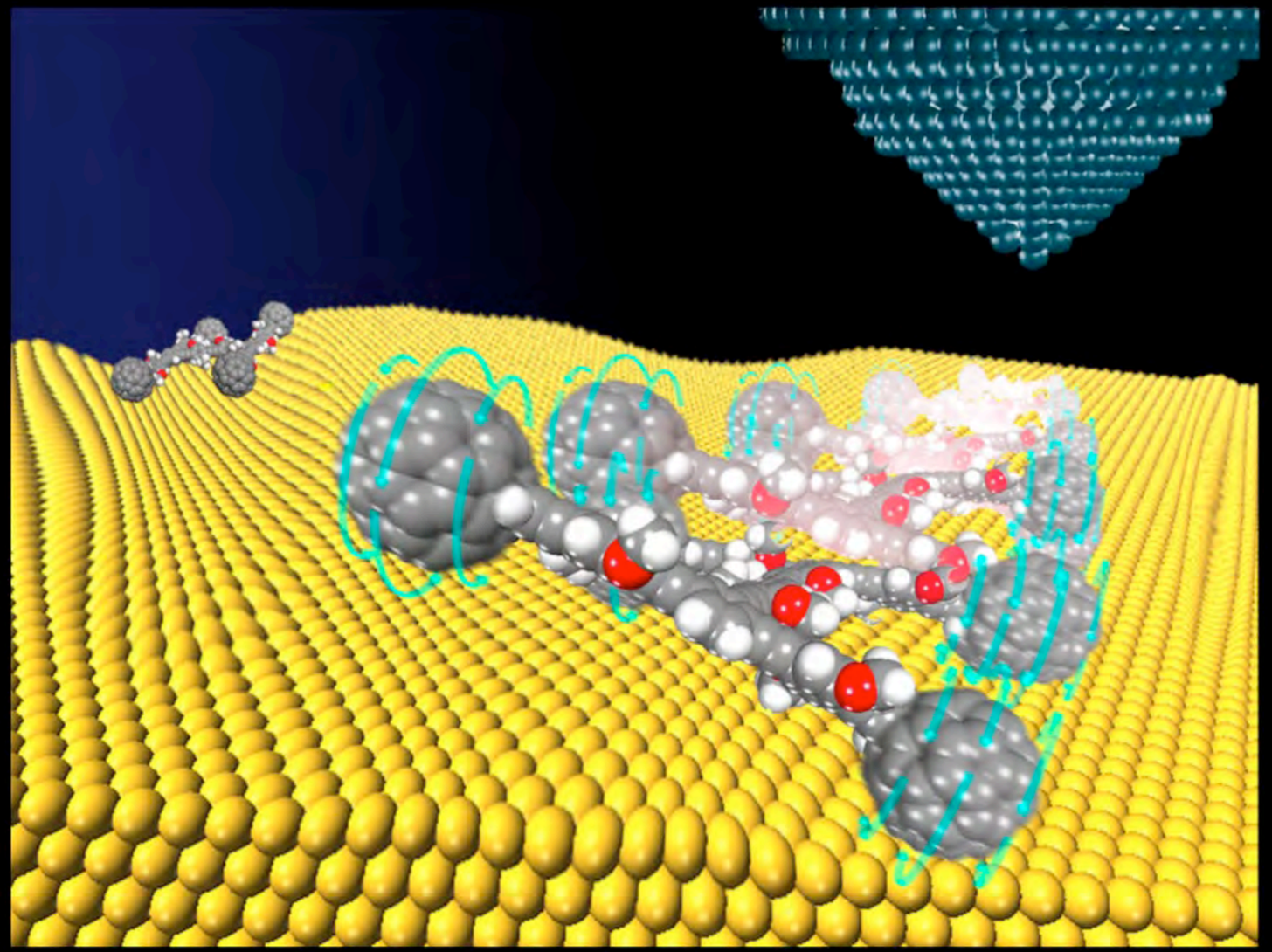
These are pictures of **imaginary** robots!

1µm

1nm


Nanobots patrolling pulmonary alveola

Nanocars (not robots)



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End