

EXPLORE THE WORLD OF ROBOTS

Complete these activities using the ROBOTS GUIDE → robotsguide.com Enjoy!



NAME: _____

MY FAVORITE ROBOT

Go to the ROBOTS GUIDE ⇨ robotsguide.com and click on some of the robots you find interesting! Which is your favorite?

My favorite robot is: _____

 Draw your favorite robot:

Why do you like this robot?

SPOT THE DIFFERENCES

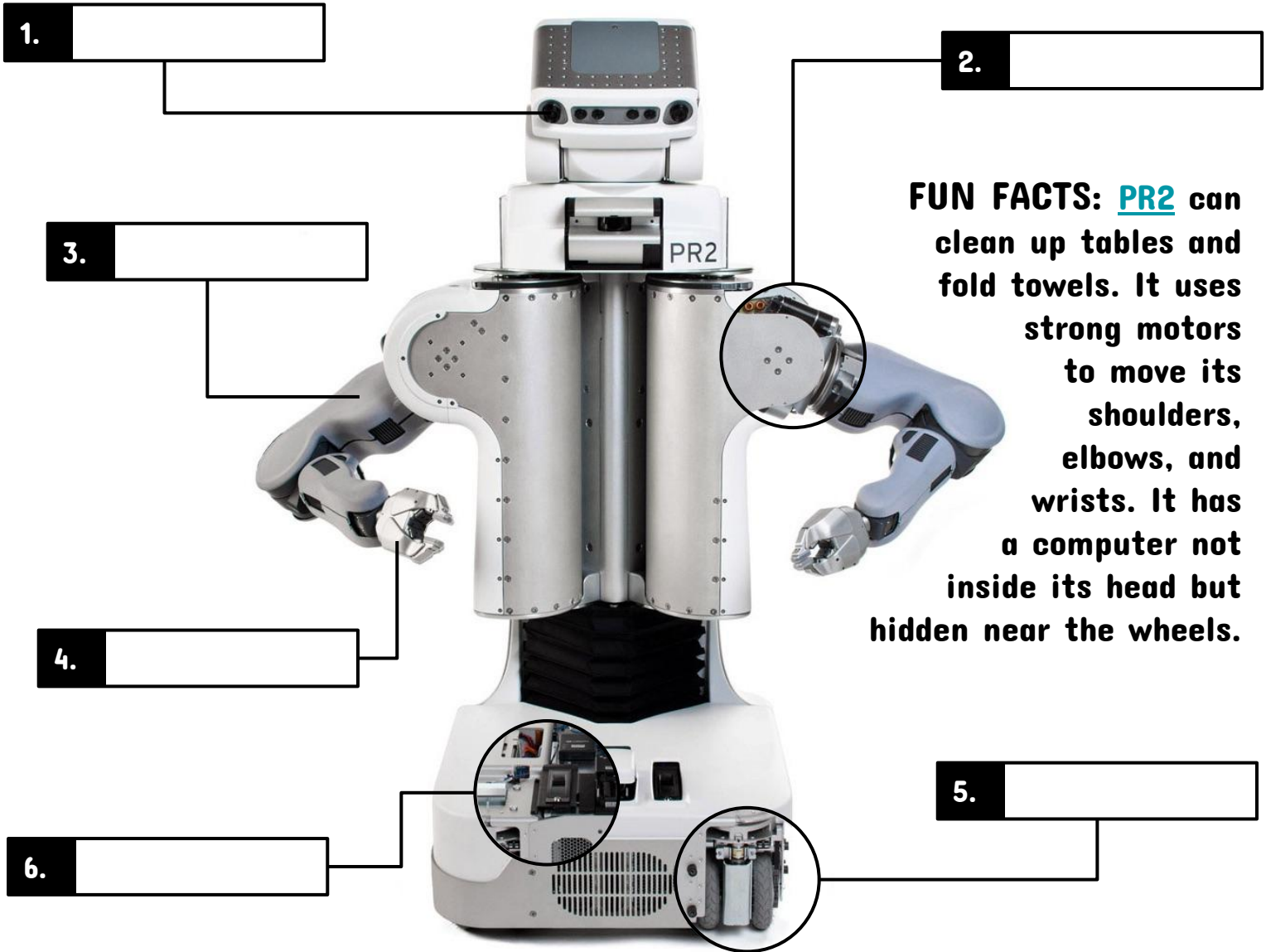
Circle the 6 things that are different between these two pictures.



FUN FACTS: [Wakamaru](#) is a friendly helper robot that can talk to people, recognize faces, and shake hands.

ROBOT PARTS

Use the list of **ROBOT PARTS** to help you label this robot.



ROBOT PARTS:

**COMPUTER
CAMERA**

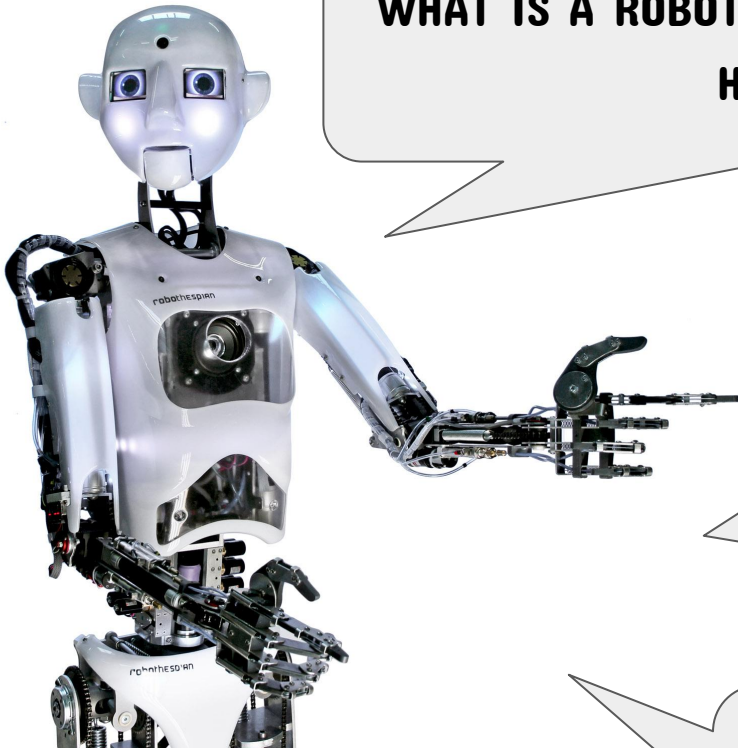
**MOTOR
WHEELS**

**ARM
GRIPPER**

ANSWER: 1. CAMERA; 2. MOTOR; 3. ARM; 4. GRIPPER; 5. WHEELS; 6. COMPUTER

ROBOT JOKES

Enjoy this collection of robot jokes. Share them with your friends!



**WHAT IS A ROBOT'S FAVORITE KIND OF MUSIC?
HEAVY METAL!**

**WHAT DO YOU CALL
A PIRATE DROID?**

ARRR-2-D2

**BEEP
BOOP**



FUN FACTS: [RoboThespian](#) is a robotic actor that tells jokes during its performances.

**WHAT IS A ROBOT'S
FAVORITE SNACK?**

MICRO-CHIPS!

**WHAT IS A ROBOT'S
FAVORITE DANCE MOVE?**

THE ROBOT!

**WHY DID THE ROBOT
GO ON A BOAT?**

**BECAUSE IT'S A
ROW-BOAT!**

ROBOT JOBS

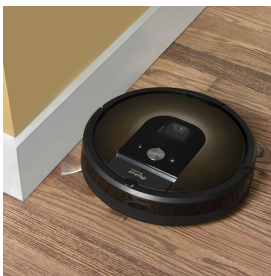
Draw a line to connect each of these robots to the task you think it can do.



UR



- Take a picture from the sky



Roomba



- Move boxes in a factory



Aquanaut



- Help firefighters put out a fire



Phantom



- Swim underwater



Colossus



- Clean dust from the floor

OPTIONAL (ADVANCED): Explain why you think robots are important.

ROBOT FACE-OFF

Look at the two robots below and circle the one that you want to have.



Aibo



Nao

Explain your choice:

OPTIONAL (ADVANCED): Go to the **ROBOTS GUIDE** ⇨ robotsguide.com and play the **Robot Face-off** game. Which *Star Wars* robot do most people say is cooler: R2-D2 or C-3PO?

WHO'S WHO?

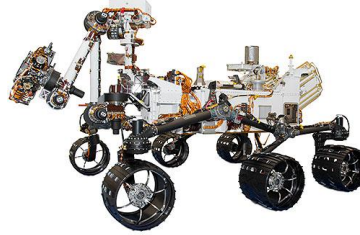
Look at the photos and the list of ROBOT NAMES and try to match them.
TIP: If you don't know some of these robots, you can [search](#) their names on the ROBOT GUIDE ⇨ robotsguide.com



1. _____



2. _____



3. _____



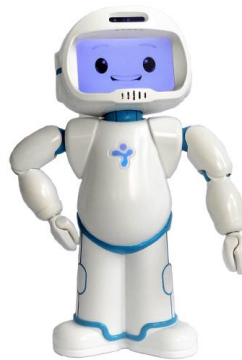
4. _____



5. _____



6. _____



7. _____



8. _____

ROBOT NAMES:

[Curiosity](#)

[Root](#)

[Dash & Dot](#)

[Paro](#)

[Titan](#)

[QRobot](#)

[Emiew](#)

[Robobee](#)

ANSWER: 1. Emiew; 2. Paro; 3. Curiosity; 4. Titan; 5. Dash & Dot; 6. Robobee; 7. QRobot; 8. Root

HOW ROBOTS MOVE

Some robots have wheels, some have legs. Some can fly, some can swim.
For each of the places below, write the name of one robot you think could go there.



Hexa



ACM-R5H



Aqua



Mavic



Digit



Starship

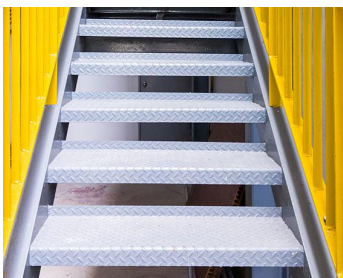


Zipline



Husky

STAIRS



1. _____

SAND



2. _____

WATER



3. _____

ROCKS



4. _____

OPTIONAL (ADVANCED): Go to the **ROBOTS GUIDE** ⇨ robotsguide.com and find the smallest robot. How does it move?

ROBOT WORD SEARCH

Can you find the words and the robot names below?

M O T O R Z K D I E S K K T
M P U T E R J F Y G H R A N
X H S B G O V L D M X J M F
J E I W P A L C J G K W I C
H E K W **S E N S O R** M C G F
U E H S D U V J K G K E A X
C C J F H E K W G S K M M T
O R C I U F E U R Y W Y I A
M G C K C L S M I S T Y E U
P J S H X N Z K P A K Q L D
U R C C K X M S P S D U S L
T O W C U B E L E T S D A S
E I D F A M O D R I V I W P
R E E P O I L M S L C L S O
T P J S S K L D F J A K L S
F X O L M I R P Q C M G E J

- SENSOR**
- MOTOR**
- COMPUTER**
- GRIPPER**



- CUBELETS**



- MISTY**



- KAMIGAMI**

OPTIONAL (ADVANCED): Go to the **ROBOTS GUIDE** ⇨ robotsguide.com and pick 4 robots that you like. Then use a blank sheet of paper to create your own robot word search!

ROBOT SHOWDOWN

For each pair of robots, pick the one you think is cooler. Keep going until there's one robot left.



Valkyrie

OR



HRP-4



Keepon

OR



Furby



ANYmal

OR



Spot



Dreamer

OR



Flobi

WHO IS THE
WINNER?

OPTIONAL (ADVANCED): Go to the **ROBOTS GUIDE** ⇨ robotsguide.com and pick 8 robots that you like and repeat this activity.

ROBOTS THAT LOOK LIKE US

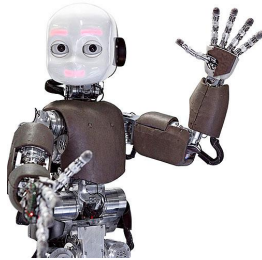
The robots below are examples of **humanoid robots**. They have parts (like arms and legs) that are similar to ours. Use the Venn diagram to show how they compare to us humans.



Atlas



Armar



iCub



Robonaut



Nao



Erica

HUMANS

What are things that **only humans** have or can do?

HUMANOIDS

What are things that **only humanoid robots** have or can do?

BOTH

What are things that **both humans and humanoid robots** have or can do?

OPTIONAL (ADVANCED): Explain why you think engineers build robots that look like us.

CREATE YOUR OWN ROBOT

Now that you've seen what real robots can do and what they look like,
use your imagination to create your own!



Draw your robot design:

My robot's name is: _____

Write 3 things that your robot can do:

1 _____

2 _____

3 _____

OPTIONAL (ADVANCED): Show in your drawing what **sensors** your robot has.



ASK A QUESTION!

Below are questions we've received from students from around the world. Write your question and your name, then ask an adult to send a photo of this page to hellorobots@ieee.org and a robotics engineer may answer it on the ROBOTS GUIDE ⇨ robotsguide.com

What was the most difficult robot to build?
—Chloe

Do robots think before they do an action?
—Anders

What type of robot has *not* been created yet?
—Nuraz

Why do people make robots look like humans?
—Sonia

Your question:

YOUR NAME