





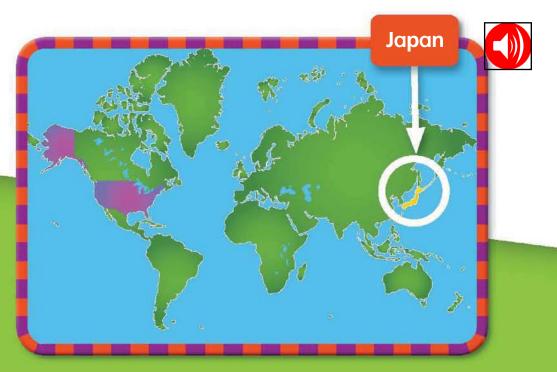
# Big Ideas

Meet Tomotaka Takahashi. He invents <mark>unusual</mark> robots. How did he get started?

Mr. Takahashi was born in Japan in 1975. As a child, he played with blocks. He used his imagination to make all sorts of forms and shapes.











Later, he read comic books about a robot named Astro Boy. The robot looked like a real child. Takahashi wanted to make robots just like it.





# Finding Out About Robots

In 1999, Takahashi **began** to study robots. He took classes to **learn** how they move. The robots bent their legs when they walked. It did not look **right** to Takahashi. People did not walk that way.

Then Takahashi had an idea. He made a better robot. It did not bend its legs when it walked. It moved more like a person.







## Making Better Robots

In 2003, Takahashi started his own company. He made many robots. A short robot climbed up a cliff with a rope. A bigger robot lifted a car with its arms. Another robot rode a bike for 24 hours.





Takahashi began to put his robots in contests. He made three robots for a sports race in Hawaii in 2011. The first robot had to swim. The second robot had to ride a bike. The third robot had to run. The robots had to do these tasks for a week!





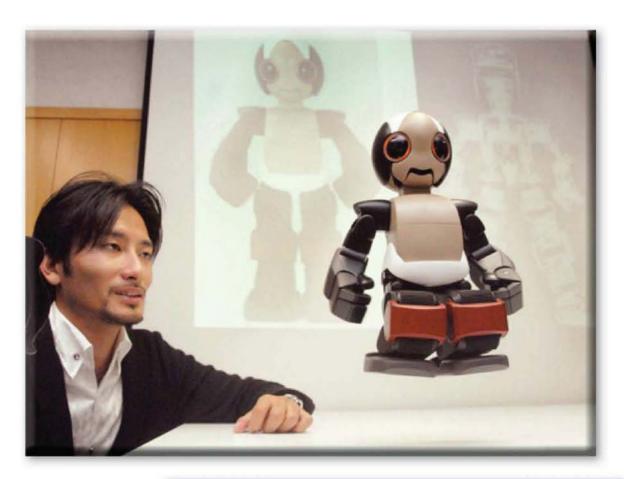


For the race, there were many problems to solve. Takahashi made the swimming robot waterproof. He gave it arms like fins to help it swim faster. Another robot was able to ride its bike for 100 miles without breaking. The third robot ran for 26 miles!



What will Takahashi invent next? Will his robots fly and soar like Astro Boy? Will they be his finest? We can only **guess**. We must wait and see.

Tomotaka Takahashi is **sure** of one thing. His robots will do more and more!





## Make Connections



What kind of robot would you like to invent? Essential Question





### **Problem and Solution**

A **problem** is something that a person wants to do, change, or find out. The way the person solves the problem is the **solution**.

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#### **Find Text Evidence**

Find one of the problems that Mr. Takahashi faced when building robots for the race.

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#### **Problem**

Takahashi wanted to put a robot in a race where it had to swim.



#### **Steps to Solution**

He built a waterproof robot with arms like fins.



#### **Solution**

Takahashi built his robot in a way that it could swim.



#### Your Turn



Talk about the problems the inventor faced in "The Story of a Robot Inventor" and how he solved them.

Go Digital! Use the interactive graphic organizer

#### **Writing and Grammar**





**Word Choice** Norm used time-order words to tell about a dance he invented.

#### Norm's Personal Narrative



I invented a new dance. First,

I saw the greatest dancer on

TV. Next, I practiced his steps.

Then, I added new moves. I am

a faster dancer than he is!





#### Your Turn



Tell what time-order words Norm used in his narrative. Which words will you use?



# Writers



Comparative Adjectives Add -er to most adjectives to compare two things. Add -est to compare more than two.





#### Your Turn



- Tell what Norm is comparing in his narrative.
- Write new sentences. Use other adjectives that compare.