

To invent something is to come up with a new idea, no matter how unusual it may be, and then try to make it a reality. Read on to find out all about some of the strangest inventions...

Tomatan

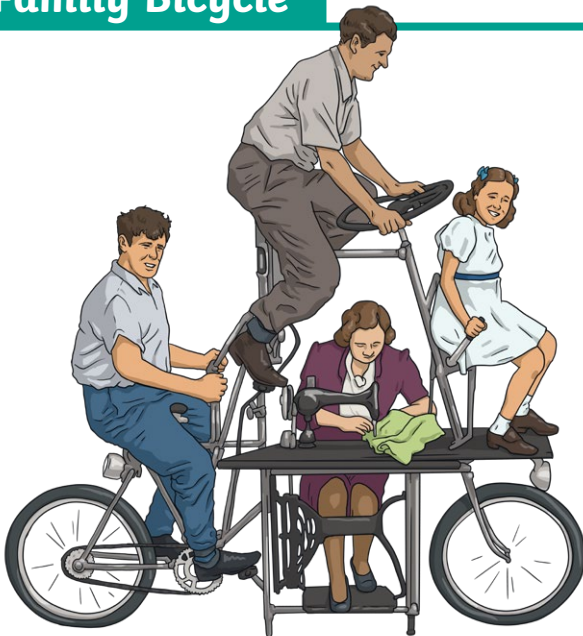
In 2015, a Japanese juice company called Kagome decided to solve the problem of how to ensure people who exercised ate enough nutritious food during their workouts. Paired with another company, they created a robot backpack that fed you tomatoes on the move. It had the following features:

- a tomato-shaped robot head
- two long metal arms
- a clear tube on the back that held six tomatoes
- a switch to control the robot

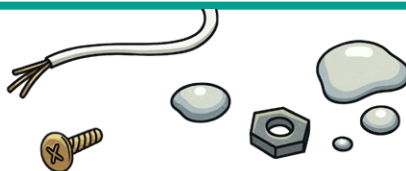
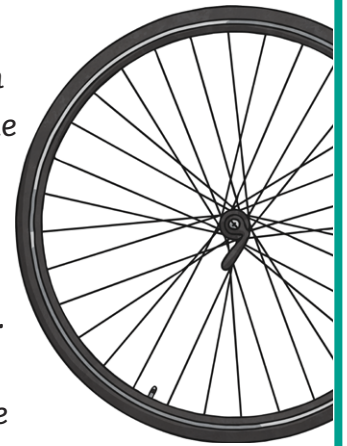
Would you like to be fed tomatoes by a robot?



Family Bicycle



Charles Steinlauf was an inventor of bicycles and, in 1939, he created a four-person bicycle with a sewing machine attached! The legs of the sewing machine made sure that the tall bicycle didn't fall over when not being used. What other inventions could combine two or more uses like this one?



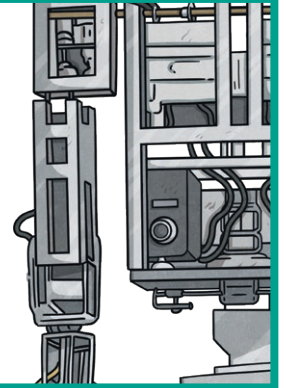
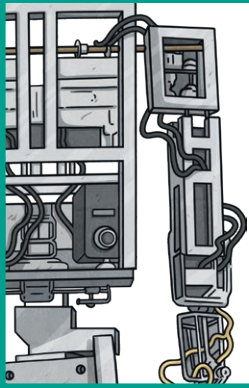
Greenhouse Helmet

In 1985, a patent (an official document showing that you are the only person who has the right to create your invention) was applied for to create the 'greenhouse helmet': a see-through, dome-shaped helmet that had shelves inside for plants. The idea also included some speakers and a microphone so that the wearer could continue to interact with other people around them. Can you foresee any problems with wearing the greenhouse helmet?



A Robot That Learns

In 2023, a company called Figure built a robot that acts and looks like a human. It is able to speak, follow instructions and even *learns* what to do next. The company hope that these robots will join workforces in the United States and increase productivity. Can you imagine working with a robot?



These unusual inventions have all been created by people who thought differently. They saw a problem and decided to design a solution. No matter whether they were successful or not, they were each brave, bold and took a risk to see what would happen. What risks might you take to invent something new?



Questions

1. Draw **four** lines to match the following inventions to the dates they were created.

| | |
|---------------------|------|
| Tomatan | 1939 |
| Family Bicycle | 1985 |
| Greenhouse Helmet | 2015 |
| A Robot That Learns | 2023 |

2. What unusual feature did Charles Steinlauf's four-person bicycle have?
-

3. What is the robot, created by Figure, able to do? Tick **two**.

- speak like a human
 eat food
 follow instructions
 have feelings

4. Underline the word in the following sentence that means how quickly and efficiently something gets done.

The company hope that these robots will join workforces in the United States and increase productivity.

5. Explain what the word 'patent' means.
-

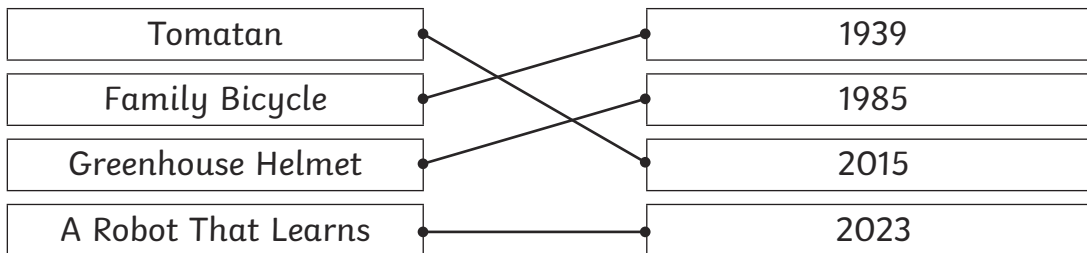
6. Which of the following is not a feature of Tomatan? Tick one.

- a fabric cloth used to make the tomatoes shiny
 two long metal arms
 a clear tube that holds six tomatoes
 a tomato-shaped robot head

7. Which of these inventions do you think is the most useful and why?
-
-
-
-

Answers

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a sewing machine
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7. Which of these inventions do you think is the most useful and why?
Children's own responses that include a clear reason for their choice.

To invent something is to come up with a new idea, no matter how unusual it may be, and then try to make it a reality. Humans have been inventing things for a long time and

this has helped to develop the society we have today. However, not all of the ideas have been perfect! Read on to find out more...

Tomatan

In 2015, a Japanese juice company called Kagome decided to solve the problem of how to ensure people who exercised ate enough nutritious food during their workouts. Paired with another company, they created a robot backpack that fed you tomatoes on the move. It had the following features:

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Would you like to be fed tomatoes by a robot?



Family Bicycle

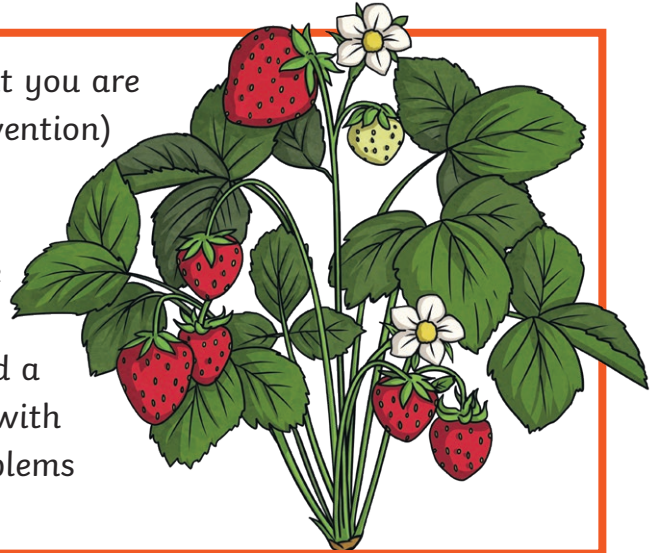


Charles Steinlauf was an inventor of bicycles from Chicago and, in 1939, he created possibly the strangest one. The machine had one front seat, one back seat with pedals, one top seat with pedals and a steering wheel and one lower seat where the rider sat at a functioning sewing machine! The legs of the sewing machine made sure that the tall bicycle didn't fall over when not being used. What other inventions could combine two or more uses like this one?



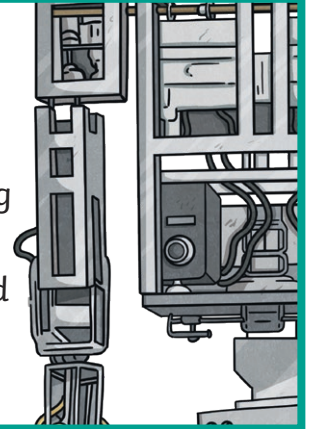
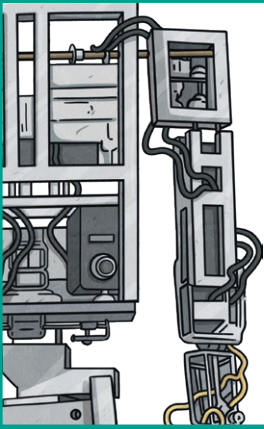
Greenhouse Helmet

In 1985, a patent (an official document showing that you are the only person who has the right to create your invention) was applied for to create the 'greenhouse helmet': a see-through, dome-shaped helmet that would have shelves inside for plants. It was designed so that the wearer could breathe the cleaner air provided by the plants. The idea also included some speakers and a microphone so that they could continue to interact with other people around them. Can you foresee any problems with wearing the greenhouse helmet?



A Robot That Learns

In 2023, a company called Figure harnessed AI's potential and built a robot that acts and looks like a human. It is able to speak, follow instructions and even *learns* what to do next. It is 1.7m in height, weighs 60kg and can run for approximately 5 hours. The company hope that these robots will join workforces in the United States and increase productivity. Can you imagine working with a robot?



These unusual inventions have all been created by people who thought differently. They saw a problem and decided to design a solution. No matter whether they were successful or not, they were each brave, bold and took a risk to see what would happen. What risks might you take to invent something new?



Questions

- Which of these statements is incorrect according to the text? Tick one.
 - The robot created by Figure can learn and looks like a human.
 - The greenhouse helmet ensured that the plants were always watered and fed.
 - A juice company created a robot rucksack.
 - While riding on the four-person bicycle, someone could be sewing a button onto a jacket.
- Give one example of a question to the reader used in the text.

- Underline one word in the text below that means the same as 'communicate'.
The idea also included some speakers and a microphone so that they could continue to interact with other people around them.
- How many seats on Charles Steinlauf's bicycle had pedals for riding?

- Why was Tomatan created?

- Number the inventions from 1 to 4 to show the order in which they were created or designed.

Tomatan

Family Bicycle

Greenhouse Helmet

A Robot That Learns

- Which of these inventions do you think is the most useful and why?

8. Draw **four** lines to match the following inventions to the statements about them.

Tomatan ●

Family Bicycle ●

Greenhouse Helmet ●

Figure Humanoid ●

● served two purposes

● has yet to be built

● created in 2015

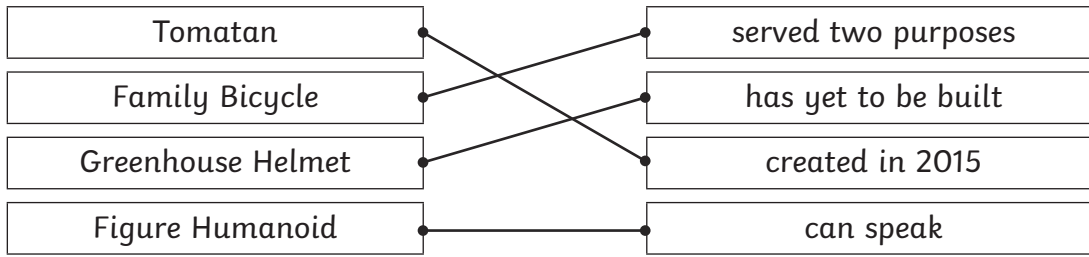
● can speak

Answers

- Which of these statements is incorrect according to the text? Tick one.
 - The robot created by Figure can learn and looks like a human.
 - The greenhouse helmet ensured that the plants were always watered and fed.**
 - A juice company created a robot rucksack.
 - While riding on the four-person bicycle, someone could be sewing a button onto a jacket.
- Give one example of a question to the reader used in the text.
Any one of the following: Would you like to be fed tomatoes by a robot?; What other inventions could combine two or more uses like this one?; Can you foresee any problems with wearing the greenhouse helmet?; Can you imagine working with a robot?; What risks might you take to invent something new?
- Underline one word in the text below that means the same as 'communicate'.
*The idea also included some speakers and a microphone so that they could continue to **interact** with other people around them.*
- How many seats on Charles Steinlauf's bicycle had pedals for riding?
two
- Why was Tomatan created?
Tomatan was created to help people who exercise for a long time to eat nutritious food during their workouts.
- Number the inventions from 1 to 4 to show the order in which they were created or designed.

| | |
|----------|---------------------|
| 3 | Tomatan |
| 1 | Family Bicycle |
| 2 | Greenhouse Helmet |
| 4 | A Robot That Learns |
- Which of these inventions do you think is the most useful and why?
Children's own responses that include a clear reason for their choice.

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the society we have today. However, not all of the ideas have been perfect! Read on to find out all about some of the most weird and wacky inventions...

Tomatan

In 2015, a Japanese juice company called Kagome decided to solve the problem of how to ensure people who exercised for long periods of time ate enough nutritious food during their workouts. The juice company paired with another company, Maywa Denki, to create a robot backpack that fed you tomatoes on the move. Featuring a tomato-shaped robot head, two long metal arms, a clear tube at the back to hold six tomatoes and a switch for the wearer to control when they were fed, it was certainly an odd-looking invention! Upon pressing the switch, the robot would grasp a tomato using the metal arms and then lift it up and over the runner's head and position the tomato in front of their mouth, allowing them to take a bite. Would you like to be fed tomatoes by a robot?



Family Bicycle



Charles Steinlauf was an inventor of bicycles from Chicago and, in 1939, he created possibly the strangest one. The contraption had one front seat, one back seat with pedals, one top seat with pedals and a steering wheel and one lower seat where the rider sat at a functioning sewing machine! The legs of the sewing machine ensured that the tall bicycle didn't fall over when not being used. What other inventions could combine two or more uses like this one?



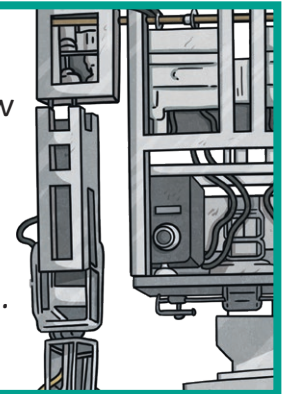
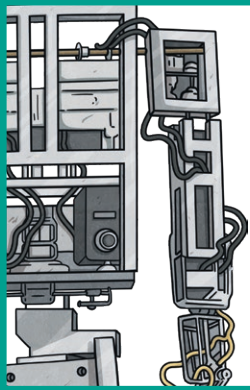
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Glossary

humanoid: Robot that looks and acts like a human.

invention: Something new that has been designed and created.

patent: An official document showing that you are the only person who has the right to create your invention.



Questions

1. Which of the following is **not** a feature of 'Tomatan'? Tick one.

- a fabric cloth used to make the tomatoes shiny
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2. Draw **four** lines to match the following inventions to the statements about them.

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|-------------------|---|---|---------------------|
| Tomatan | • | • | served two purposes |
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| Figure Humanoid | • | • | can speak |

3. Find and copy one word that means the same as 'working'.

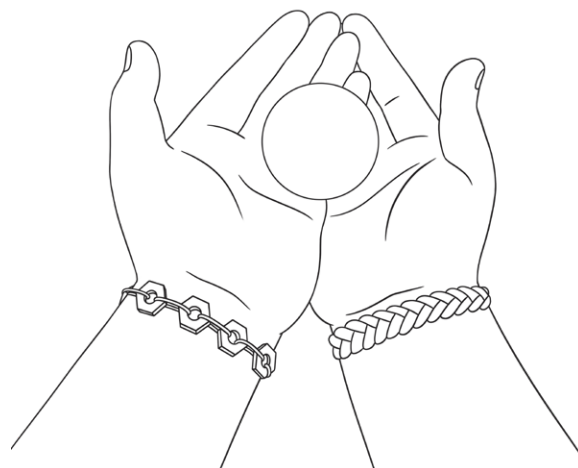
4. What unusual extra feature did Charles Steinlauf's four-person bicycle have?

5. How long can the humanoid run for?

6. What three features of a non-chronological report can you identify? How do these features make the text easier to read?

7. How do you think the author feels about these inventions? Provide evidence to support your answer.

8. Which of these inventions do you think is the most useful and why?

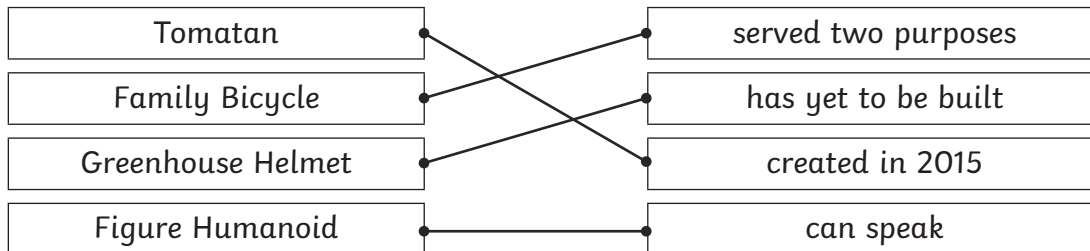


Answers

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2. Draw **four** lines to match the following inventions to the statements about them.



3. Find and copy one word that means the same as 'working'.

functioning

4. What unusual extra feature did Charles Steinlauf's four-person bicycle have?

a sewing machine

5. How long can the humanoid run for?

approximately 5 hours

6. What three features of a non-chronological report can you identify? How do these features make the text easier to read?

Children's responses should include three of the following: main heading, sub-headings, introduction paragraph, glossary. These features help to organise the information and make it clear to the reader.

7. How do you think the author feels about these inventions? Provide evidence to support your answer.

The author feels interested and surprised by these inventions as they are described as 'weird', 'wacky' and 'unusual'. The author also feels impressed by the inventors who made the creations as they are described as 'bold', 'brave' and problem-solvers or risk-takers.

8. Which of these inventions do you think is the most useful and why?

Children's own responses that include a clear reason for their choice.