

Get Ready Workbook, page 28

D Read about at least three inventions below and find out what they have in common.

Behind the Scenes at ¹

How are bicycle helmets, invisible dental braces and water filters similar? Look up in the sky and you'll find the answer – outer space². They all use products that NASA scientists developed for space travel.

A Good Night's Sleep

5 It is important to sleep in a comfortable bed because we spend one third of our lives sleeping. Today many companies use a special material developed by NASA to make mattresses and pillows more comfortable. This material is called temper foam. When a spaceship takes off, there is a lot of pressure which pushes the astronauts into their seats. Temper foam
10 makes the seats safer and more comfortable for the astronauts. There is also temper foam in bicycle helmets and regular airplane seats for comfort and safety.



Hot and Cold

15 Every athlete knows that playing sports makes you hot. They are always looking for a way to cool down. Astronauts also need to stay cool in their spacesuits. That's why scientists at NASA developed the gel pack. Gel packs absorb³ a lot of heat and keep the body cool. The spacesuit has special pockets inside it for the gel packs. Today, sports clothes with gel packs are popular with athletes like tennis
20 players and runners.



Keep Smiling

25 Many teenagers wear metal braces to straighten their teeth. They don't like to smile because the braces are ugly. But today, there are also invisible braces – braces you can't see. These braces are made from a clear material called TPA. NASA developed TPA to protect a special part of the spaceship. Later, a company began to use this clear material to make invisible braces. These braces are very popular. Even the famous actor Tom Cruise has worn them!



Drink Up

30 Many people use water filters in their homes every day to make sure that the water is safe to drink. The companies that make the water filters use a technology developed by NASA. NASA scientists needed to keep water clean for a long time on the spaceships. They found a way to kill the bacteria⁴ in the water and to stop any bacteria from growing again.
35 Thanks to NASA, you can drink a glass of clean water in your home.



Most people today will never walk on the moon, but many will use a NASA product in their daily lives. You don't have to be an astronaut to enjoy these great inventions from NASA!

¹נאס"א - סוכנות החלל האמריקאית

²outer space החלל החיצון / الفضاء الخارجي

⁴bacteria חיידקים / جراثيم

נאס"א - وكالة الفضاء الأمريكية

³absorb סופגים, קולטים / تمتص, تستوعب

GET THE FACTS

E Answer at least four questions in your notebook.

- What information do we learn about temper foam?
 - why we use it
 - how to make it
 - when NASA invented it
 - how expensive it is
- True or False? NASA invented gel packs for athletes.
- Why is TPA useful in braces?
- How do water filters make water safe to drink?
- Another title for this text could be
 - Stay Cool with NASA
 - Walking on the Moon
 - Space and Our Lives
 - NASA and Sports
- Complete the chart in your Workbook, page 28.

The invention	Why NASA needed the product
1. Water filters	
2.	To keep the astronauts cool in their spacesuits.
3.	To make the spaceship seats safe and comfortable.
4. TPA	

KEEP THINKING

F Answer the questions.

- Which products add to our comfort? Explain.
- Which products are good for our health? Explain.

YOU AND THE TEXT

G Which NASA invention do you think is the most useful? Explain your answer.

Vocabulary

Give at least one example of ...

- a product you can develop
- a popular product
- two similar athletes
- a material that keeps us cool

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TASK Give a "Behind the Scenes" award.

→ For guidelines and checklist see Workbook, pages 44-45.