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英文注释

EVERYDAY SCIENCE

生活中的科学

Science at the Airport

怎样坐飞机?

AMY SARVER (美) 著

外语教学与研究出版社

FOREIGN LANGUAGE TEACHING AND RESEARCH PRESS

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如果你希望在享受英语阅读乐趣的同时又能增长知识、开拓视野，由外语教学与研究出版社与美国国家地理学会合作出版的“国家地理科学探索丛书”（英文注释版）正是你的选择。

“国家地理科学探索丛书”（英文注释版）第二辑分为8个系列，共46本，内容涉及自然科学和社会研究，除对本套丛书第一辑已包含的“生命科学”、“物理科学”、“地球科学”和“文明的进程”4个系列进行了补充外，又推出了4个新的系列——“生活中的科学”、“科学背后的数学”、“专题研究”以及“站在时代前沿的科学家”。

这套丛书秉承《国家地理》杂志图文并茂的特色，在书中配有大量精彩的图片，文字地道易懂、深入浅出，将科学性和趣味性完美结合，称得上是一套精致的小百科全书。特别值得一提的是本套丛书在提高青少年读者英语阅读能力的同时，还注重培养他们的科学探索精神、动手能力、逻辑思维能力和沟通能力。

本套丛书既适合学生自学，又可用于课堂教学。丛书各个系列均配有一本教师用书，内容包括背景知识介绍、技能训练提示、评估测试、多项选择题及答案等详尽的教学指导，是对课堂教学的极好补充。

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江苏工业学院图书馆
怎样坐飞机?
藏书章
AMY CARVER (美) 著



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Up, Up, and Away!


展翅高飞!



Pack¹ your bag and grab² your coat. The sky is clear and the sun is bright. It's a wonderful day for a ride in the sky!

- | | | |
|---------|----|-----------|
| 1. pack | v. | 把东西装入 (包) |
| 2. grab | v. | 抓起 |






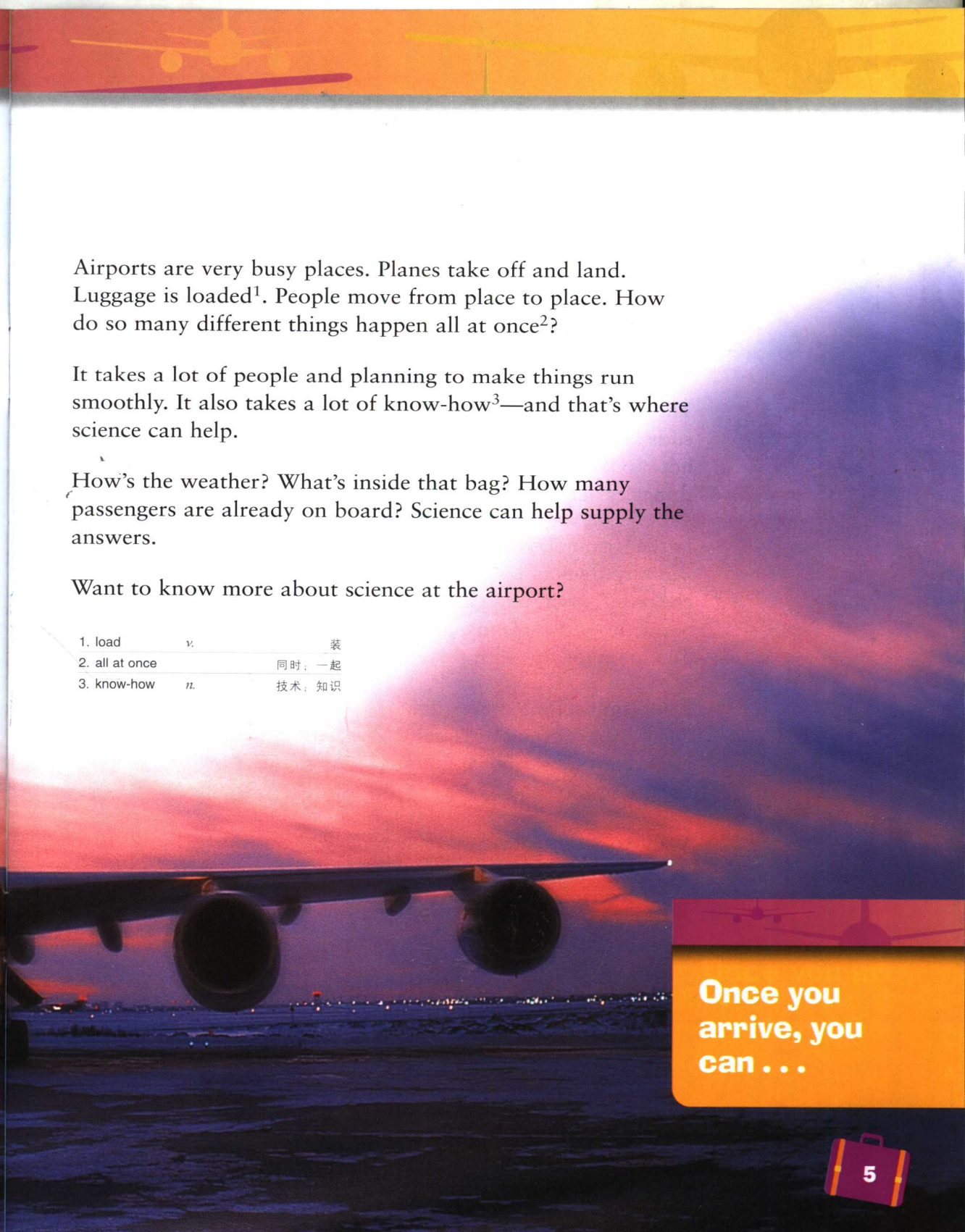
Airports are very busy places. Planes take off and land. Luggage is loaded¹. People move from place to place. How do so many different things happen all at once²?

It takes a lot of people and planning to make things run smoothly. It also takes a lot of know-how³—and that's where science can help.

How's the weather? What's inside that bag? How many passengers are already on board? Science can help supply the answers.

Want to know more about science at the airport?

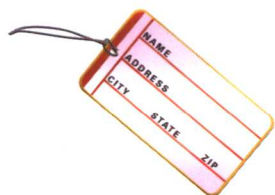
- | | | |
|----------------|----|-------|
| 1. load | v. | 装 |
| 2. all at once | | 同时；一起 |
| 3. know-how | n. | 技术；知识 |



Once you
arrive, you
can . . .

Tour the Terminal

了解机场的设施



People line up to check their bags. Others grab a bite to eat¹ or buy a book to read. Inside the airport, everyone is on the move.

The terminal is the heart of the airport. Every trip begins and ends here. Behind the scenes², airport planners figure out how to move people around the airport and how to make things easier for everyone.

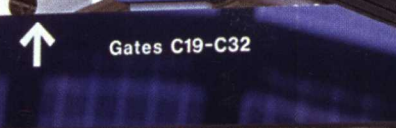
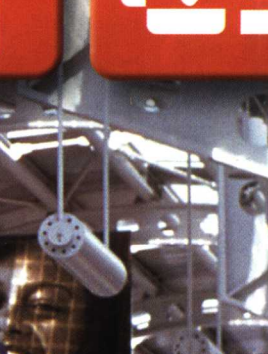
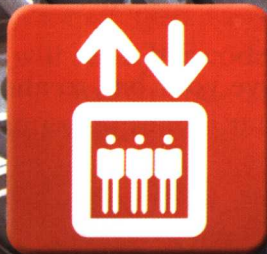
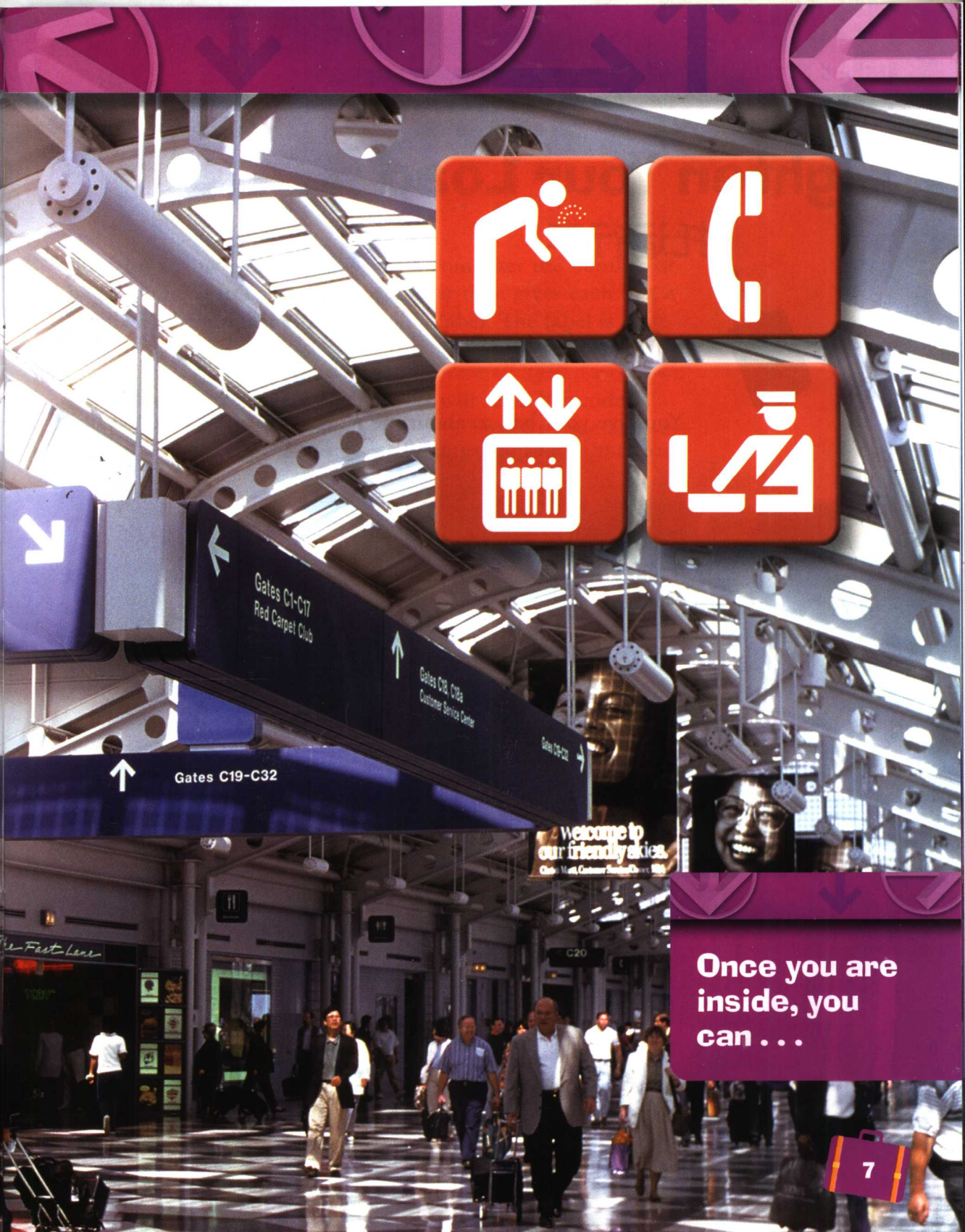
In the terminal, you see hamburger shops and souvenir stands³. But airport planners see people. They plan where people will check in⁴, wait, and get on planes. They also plan where telephones, rest rooms, and first aid stations⁵ will be found. To communicate with travelers, the planners use pictographs.

Pictographs are pictures that are used as signs or symbols. They help people find what they need, no matter what language they speak. Can you guess what the pictographs on these pages mean?

Want to know more about science at the airport?

- | | | | |
|----------------------|-------|----------------------|--------------|
| 1. a bite to eat | 一点食物 | 4. check in | (在机场) 办理登机手续 |
| 2. behind the scenes | 在幕后 | 5. first aid station | 急救站 |
| 3. souvenir stand | 纪念品摊位 | | |





Welcome to
our friendly skies.
Club World, Customer Service Center, 100



Once you are
inside, you
can ...



Lighten Your Load

托运行李



You lug¹ your bag to the airline counter. Once you check your bag, it'll be easier to get around. But how does your bag "know" where to go?

You give your bag to an airline worker. But how can you be sure that it goes the same place you do?

1. lug

v.

使劲拉



First, an airline worker types into a computer the number of bags you need to check. The computer then gives each bag a number. The number is printed on a label. The label is then attached¹ to your bag.

If you look at the luggage label, you will see a bar code². That doesn't mean your bag is for sale. The bar code allows computers to keep track of³ where your bag is going.

Have you ever noticed the three big letters on your bag label? Every airport has its own three-letter code. This code identifies⁴ the airport where you and your bag will finally end up.

Want to know more about science at the airport?

- | | | |
|------------------|----|----------|
| 1. attach | v. | 缚上; 贴上 |
| 2. bar code | | 条形码 |
| 3. keep track of | | 保持与……的联系 |
| 4. identify | v. | 确定 |



**Once you
check your
bag, you can . . .**



Go Through Security

通过安全检查



You've got your boarding pass¹. But you can't get on the plane yet. Security needs to check you out.

At the airport, security is serious business. Before people can board an airplane, they must be carefully screened². This is where some high tech equipment³ can really help.

Airport security workers check to make sure that no one is carrying dangerous objects onto the plane. Metal detectors help them do this job. All travelers walk through a special gateway that sounds an alarm⁴ if someone is carrying a metal object. Keys, jewelry, shoe buckles⁵, and coins can set off⁶ the alarm. If an object is dangerous, it is taken away before it gets near the airplane.

Carry-on⁷ bags also get checked as you enter this secure section of the airport. Each bag is placed on a moving belt⁸. The belt moves the bag past cameras. The cameras show an x-ray picture of items⁹ in the bag. X-ray images¹⁰ help security workers find items that could be dangerous.

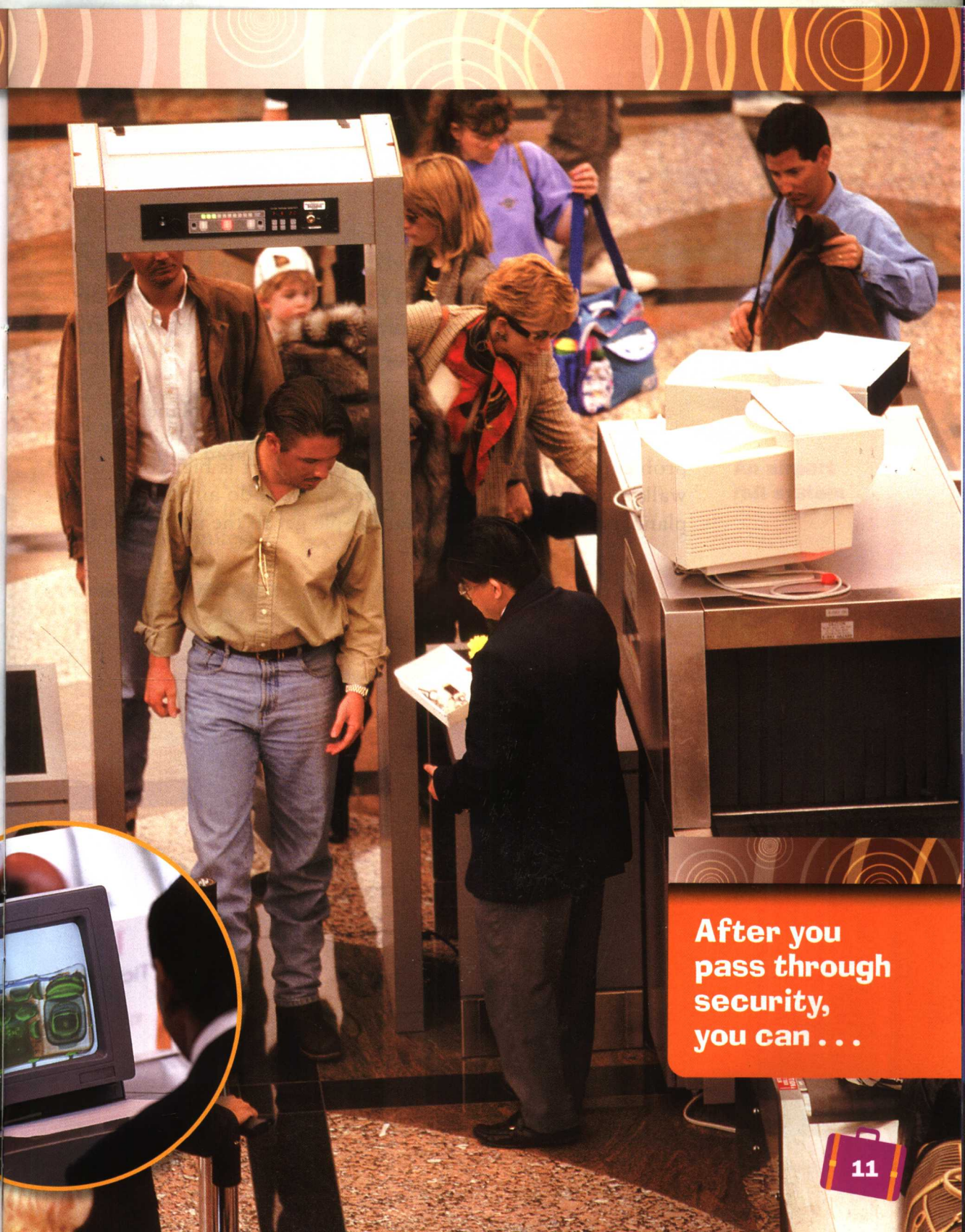
Want to know more about science at the airport?

- | | | |
|------------------|-------------|-------------|
| 1. boarding pass | | 登机卡 |
| 2. screen | <i>v.</i> | 检查 |
| 3. equipment | <i>n.</i> | 仪器；设备 |
| 4. alarm | <i>n.</i> | 警报 |
| 5. shoe buckle | | 鞋扣 |
| 6. set off | | 触发；引起 |
| 7. carry-on | <i>adj.</i> | 可随身携带（上飞机）的 |
| 8. moving belt | | 移动带 |
| 9. item | <i>n.</i> | 项目（此处指各种物品） |
| 10. image | <i>n.</i> | 图像 |

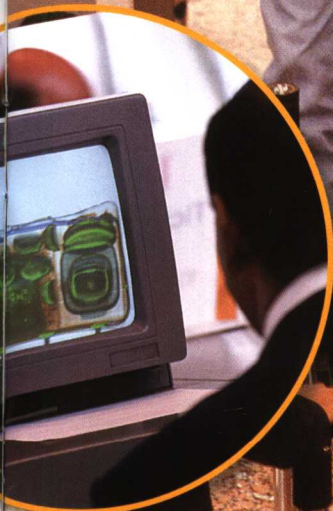


An x-ray picture shows items inside a bag.





**After you
pass through
security,
you can . . .**



Find Your Gate

找到登机口



Sometimes they're close by. Other times they're far away. Look at the gate number carefully. You have to be at the right place before takeoff.

The gate is the place where you go to board the plane. If you're in a small airport, chances are you won't have any problem finding your gate. But if the airport is big, you could walk a mile or more to your gate. So what do airport planners do to make sure that people get to the right places?



Gate  12 B36

304



Food, Shops,
Restrooms

Gate
Rec

One way to move people quickly over a long distance is to use moving walkways¹. On the walkway, you move forward even if you're standing still.

Some airports, such as the Tampa Airport² in Florida³, have rail systems⁴. People ride in large coaches that move along an electric track⁵. A computer controls each coach. This system can move more than 10,000 people from the main terminal to their airplanes in about 10 minutes!



An airport rail system

Want to know more about science at the airport?

- | | |
|-------------------|-------|
| 1. moving walkway | 自动人行道 |
| 2. Tampa Airport | 坦帕机场 |
| 3. Florida | 佛罗里达州 |
| 4. rail system | 轨道系统 |
| 5. electric track | 电气铁道 |

**As you wait
at your gate,
you can ...**

Gates B15 to B32
Red Carpet Club West



Gates B33, B35, B37
Customer Service Center



Check Out the Weather

察看天气



If it's a sunny day, you might not think about the weather. But behind the scenes, teams of people keep an eye on¹ the sky.

The weather is important at airports. Heavy fog can keep planes from taking off or landing. Heavy snow can close down runways². Thunderstorms³ can cause wind shears⁴, or strong shifts⁵ in the wind. This can be dangerous for planes.

Many airports have their own weather stations. In the weather station, meteorologists⁶ use tools to understand and predict⁷ the weather. A windsock⁸ shows the direction of the wind. An anemometer⁹ measures¹⁰ the speed of the wind.

1. keep an eye on		密切注视	6. meteorologist	n.	气象学家
2. runway	n.	(机场的) 跑道	7. predict	v.	预报
3. thunderstorm	n.	雷暴	8. windsock	n.	风向袋
4. wind shear		风切变	9. anemometer	n.	风速记录仪; 风速计
5. shift	n.	改变方向	10. measure	v.	测量

