

b) How come?

How come (that) *it's* called a bike?

(= Why is it called a bike?)

How come? 是由 How did it come about 演变过来的。它的意思相当于 Why?。在美国电影里常听到这个口语, 现在很多澳大利亚人也常用。

PART IV - Exercises

1. 请你从所提供的词中选出最合适的来回答下面的问题。

Example:

(sugar, soap, paper)

What's a book made of?

Answer:

It's made of *paper*.

(glass, paper, wood, leather)

- a) What's a table made of?
- b) What's a window made of?
- c) What are shoes made of?
- d) What's a dictionary made of?

2. 按示范例句, 将下列各句改成被动语态。

Example:

We cut meat with that knife.

Answer:

That knife is used for cutting meat.

- a) We clean the floor with that soap.
- b) We play table tennis with those bats.
- c) We count with an abacus.
- d) We make bread with flour.

PROGRAMME 84

PART I - The Dialogue

Tony 来到了 Uncle Brian 的家。Uncle Brian 的家里有一套太阳能热水装置。Tony 在问他一些有关的问题。

(有关太阳能热水装置的详细内容请看 Part IV。)

TONY:

What's that thing on your roof called?

UNCLE BRIAN:

That? That's called a solar hot water system.

TONY:

Is it used to heat all your water for showers and things, Uncle Brian?

UNCLE BRIAN:

Yes, it's used for all that. It produces about three quarters of all the hot water we need, by using the heat of the sun.

TONY:

How does it work?

UNCLE BRIAN:

Well, the heat of the sun is collected and used to heat the water. When the water's hot, it's stored so that it can be used when it's needed.

TONY:

Well, yes, but can you explain that for me, please, Uncle Brian?

(后来, Uncle Brian 接着说)

UNCLE BRIAN:

Water is circulated through the pipes, the sun's energy - sunlight - is absorbed and the water is heated.

TONY:

And how is it stored?

UNCLE BRIAN:

When it's hot, it flows up into the storage tank above the collector.

TONY:

But water flows down, Uncle Brian,
not up!

UNCLE BRIAN:

When water is heated, it rises. So it
does flow up, and the cold water in
the bottom of the tank flows down
into the collector.

TONY:

Then it gets heated and flows up into
the tank, and the whole process starts
all over again?

UNCLE BRIAN:

Right!

TONY:

But what happens if it's cloudy and
there's no sun to heat the water?

UNCLE BRIAN:

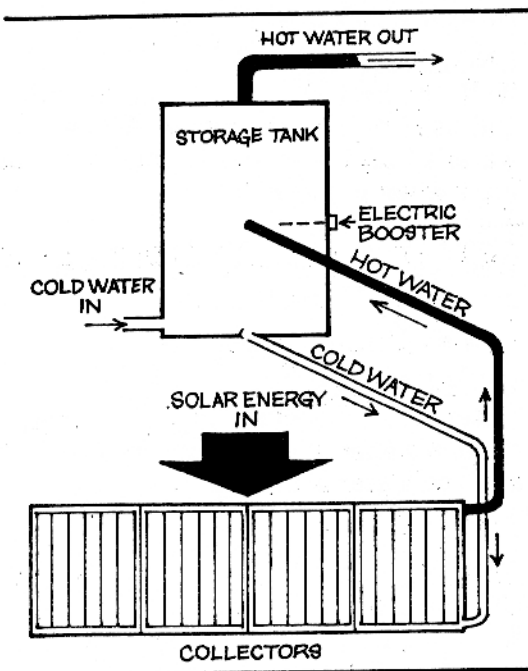
Most solar systems have got an
electrical back-up system.

TONY:

That only gets used when the water
isn't heated enough by the sun?

UNCLE BRIAN:

Exactly.



PART II - Vocabulary

a back-up system

['bæk ʌp sistəm] 辅助设施

a collector [kə'lektə] 集热器

copper ['kɒpə] 铜

a copper pipe ['kɒpə 'paip] 铜管

cost [kɒst] 费用

a direction [də'rekʃən] 方向

electricity 电

[i:lek'trisəti:/elek'trisəti:/elik'trisəti:]

glass [glɑ:s] 玻璃

a hemisphere ['heməsfɪə] 半球

a hot water system

['hɒt 'wɔ:tə sistəm] 热水系统

memory ['meməri:] 记忆

a pipe [paip] 金属管

a process ['prəʊsɪs] 过程

a roof [ru:f] 屋顶

a shower ['ʃaʊə] 淋浴

solar energy [səʊlər 'enədʒi:] 太阳能

storage ['stɔ:ridʒ] 储存

a storage tank ['stɔ:ridʒ tæŋk] 储水箱

a system [sistəm] 系统

absorb [əb'zɔ:b] 吸收

circulate ['sə:kjəleit] 循环流动

expand [ik'spænd] 膨胀

face (north) [feis] 朝(北)

flow ['fləʊ] 流动

heat [hi:t] 加热

hold... in ['həʊld... 'in] 保持

insulate ['ins(j)əleit/'inʃəleit] 绝缘

keep... down ['ki:p... 'daʊn]

保持在低水平上

paint... black

['peint... 'blæk] 涂成黑色的

refresh (one's memory) [rə'frefʃ]

重新想起, 回想

set [set] 放置

set, set [set]

store [stɔ:] 储存

cloudy ['klaudi:] 多云的, 阴天的

complicated ['kɒmpləkeɪtəd] 复杂的

electrical [ə'lektrikəl] 电的

insulated 绝缘的

['ɪns(j)əleɪtəd / ɪn'fəleɪtəd]

southern ['sʌðən] 南边

well-informed ['wel ɪn'fɔ:md]

消息灵通的, 了解很多的

all over again [ɔ:l əʊvə ə'gen]

重新来一次

What direction does it face?

['wɒt də'rekʃən dəz ət 'feɪs]

朝哪个方向的?

PART III - The Lesson

1. FINDING OUT HOW SOMETHING WORKS

怎样就某物的操作过程提问

在第83讲里, 我们学习了如何就不熟悉的事物提问, 比如问它的名称、结构和用途。如果想进一步了解它的功能和操作过程, 我们就可以用下面的句型来提问:

(直接问句)

How does it work?

What does it do?

(间接问句)

Can you tell me how it works?

Can you tell me what it does?

当有人给我们介绍一套设备是如何工作

的, 而我们想要知道更多的情况, 那么就可以用现在一般时的被动语态来提问, 如:

How is it stored?

Where is it stored?

2. DESCRIBING HOW SOMETHING WORKS

怎样说明工作过程

如果要说明一套设备怎样工作, 或一个科学过程怎样进行, 我们就用现在一般时的被动语态 (is/are + past participle), 例如:

The collector is placed on the roof.

The heat of the sun is collected.

The water is circulated through the pipes.

They're placed in an insulated box and covered with glass.

When the water's hot, it's stored.

句子里除了用动词 be 以外, 我们还可以用动词 get, 如:

The water gets heated and flows up into the tank.

The back-up system only gets used when the water isn't heated enough by the sun.

注意:

● 只有及物动词 (v.t.) 才能用于被动语态, 如:

When things are painted black, they absorb heat better. (Active)

When things are painted black, heat is absorbed better. (Passive)

● 有一些动词例如 rise, lie 和 be 只能作不及物动词用, 因此不能用于被动语态。不过, 也有一些词既可作及物又可作不及物动词用, 如:

I work every day. (intransitive)
I can work this machine. (transitive)
Heated copper expands. (intransitive)
I'll expand my report. (transitive)

在 Heated copper expands 句里, expand 当作不及物动词用, 表示铜本身膨胀, 没有外力促使。Improve, increase, stop 等动词也可以这样来用。

PART IV - Background Material

利用太阳能给水加热

科学家们认识到传统的燃料如煤、天然气及石油渐渐缺乏, 因而一直在寻求可以代替的能源。太阳能看来是一种很好的能源, 既容易获得, 又取之不尽, 而且利用太阳能不影响大自然的生态平衡, 因而生态学家也极为赞同。

澳大利亚所处的地理位置对利用太阳能极为有利。目前澳大利亚的住户主要利用太阳能加热用水。

这种加热装置由太阳能集热器、热水储水箱及管道组成。集热器应能尽多地吸收太阳能, 而尽量少地消耗能量。集热器可以安装在房顶或地面上, 也可以做得象个遮篷。储水箱储存热水供人们使用。储水箱还配备一套辅助电气加热器供阴天时使用。一般四口之家需有一个四平方米大小的集热器, 300 立升的水箱。这样一套设备可储存供四口人用一天半的热水。

澳大利亚联邦科学与工业研究组织(简称为 CSIRO)的机械工程处, 在几年前曾作过一项研究, 说明在澳大利亚大部分地区, 65 - 80% 的家用热水都可以用太阳能加热装置来提供。

PROGRAMME 85

PART I - The Dialogue

Nigel 是一位澳大利亚大学生, 交换去美国留学三年。现在他刚学完回到 Perth。

TANIA:
Hello, Nigel. Great to see you.
How are you?

NIGEL:
Fine, thanks, Tania.

TANIA:
Hey, you don't look too bright.

NIGEL:
Oh, don't I? Phew! I'm not used to this heat! I'd forgotten what an Australian summer was like. It was snowing in New York when I left.

TANIA:
How long were you in the States?

NIGEL:
Three years, altogether.

TANIA:
Oh... fantastic. You must miss it.

NIGEL:
Well... in some ways.

TANIA:
What do you miss most?

NIGEL:
Mm... well... I miss the crowds in New York. The rush, the noise... you know. I got used to all that. It was exciting.

TANIA:
And Perth's pretty quiet in comparison, hey?

NIGEL:
Yes. Mind you, I did get a bit homesick at times.

TANIA:
Really?