



Lesson 11 How to grow old

oppress [ə'pres]

v. 使不开心, 忧郁, 别扭

oppress v. make sb. feel unhappy, worried or uncomfortable

The nightmare oppressed me.

The patient is oppressed by the fear of death.

I feel blue / down in the dumps / depressed / dejected.

I'm in low spirits.

In the old society, the Chinese people were in the miserable position as the oppressed, the enslaved and the exploited.

justification

[7dʒʌstɪfɪ'keɪʃn]

n. 正当理由

justice

justify

How can we justify spending so much money on arms?

The end justifies the means.

justifiable

reasonable

legitimate

a ~ explanation / excuse

justification



There is no justification for holding her in jail.

cheat [tʃi:t]

v. 作弊; 欺骗

You're cheating!

He cheated in the test by using a calculator.

cheat sb. (out) of sth.

He cheated me (out) of \$100.

cheat on sb.

He cheated on his wife.

deceive

The doctor deceived the patient by not telling him the truth.

trick sb. out of sth.

swindle sb. out of sth.

defraud sb. of sth.

ego ['i:gəʊ]

n. 自我

Sigmund Freud a pioneer in psychoanalysis

id

ego

super-ego



egoism

egoist

altruism

altruist

egocentric = self-centered

recede [rɪ'si:d]

v. 后退

The flood waters finally began to recede.

He was in his mid-forties, with a receding hairline.

“cede” / “ceed” = to go

recede: “re”(back) + “cede”

cede

cede territory

precede: “pre”(before) + “cede”

Oral language precedes written language.

proceed: “pro”(forward) + “ceed”

Much to the aristocrat's amusement, the gaoler returned a few moments later with a pair of glasses and the usual copy of the letter which he proceeded to read to the prisoner.

exceed: “ex”(out of) + “ceed”

exceed one's expectations

secede: “se”(away) + “cede”



Many in Quebec want to secede from Canada.

intercede: “inter”(between) + “cede”

passionately

[ˈpæʃənətli]

v. 激昂地, 充满激情地

passion (*for ...*)

religious / revolutionary passion

his passion *for* the girl / music

damp / dampen one's passion

passionate

a passionate supporter / admirer

enthusiasm (*for ...*) enthusiastic

ardor / ardour (*for ...*) ardent

fervor / fervour (*for ...*) fervent

zeal (*for ...*) zealous

damp / dampen one's ~

vitality [vɪˈtæləti]

n. 活力, 精力, 生命力



vitality n. energy and strength

He was a small man with enormous vitality.

economic vitality

vigor / vigour

Despite her great age, Anna is full of vigor.

vital

vigorous

energetic

dynamic

vital signs

crucial / essential

weariness ['wiərɪnəs]

n. 疲惫, 疲劳

weariness

fatigue

weary

fatigued

I'm weary / fatigued / exhausted / tired out / dog-tired / worn out / drained / beat / bushed.

How to grow old with a positive attitude

Bertrand Russell

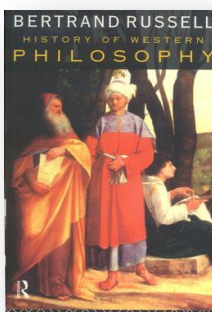
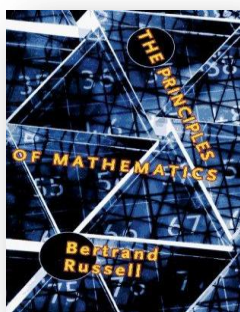


British philosopher, mathematician and Nobel laureate

He developed new ideas connecting mathematics and logic. He was also known as a pacifist, and he was one of the leading members of the opposition to nuclear weapons.

He received the Nobel Prize for literature in 1950.

The Principles of Mathematics A History of Western Philosophy



be oppressed by the fear of ...

因为怕.....而烦恼

Many people are oppressed by the fear of unemployment / inflation.

Many girls are oppressed by the fear of getting fat.

造句: 很多中国人因为怕看不起病, 上不起学, 买不起房而烦恼。

Many Chinese people are oppressed by the fear of being unable to afford the medical, educational and housing expenses.

You can feel helpfulness and care even in these small children.

In this tall lean man, you can see a leader of great modesty.



there is a justification for ...

In this condition, there is a justification for intervention.

there is no justification for ...

There is no justification for suicide bombing.

there be + 无灵主语

there is no denying that ...

there is no doubt that ...

there is every likelihood that ...

there is little likelihood that ...

there is no shortage of ...

Of course, New York is the ideal place for such an interesting study,
because there is no shortage of tall buildings.

there is an element of truth in ...

Perhaps there is an element of truth in both these pictures, but few of us
have had the opportunity to find out.

there is a good deal of truth in ...

Apparently, there is a good deal of truth in this idea.

There is probably an element of truth in this argument, but they ignore a
more basic fact that the freedom of the press is often abused.

Albert Einstein once attributed the creativity *in* a famous scientist to the
fact that he never went to school. There is undoubtedly a truth in his
observation, but such a truth is not criticism of schools.



Young men who have reason to fear that they will be killed in battle may justifiably feel bitter in the thought *that they have cheated of the best things that life has to offer*.

in battle

in action

His father told everybody that Eric had been killed in action.

Franz poured scorn on the idea, pointing out that his brother had been killed in action during the war.

bitter adj. painful; sorrowful

shed bitter tears

in the thought (that ...) = because they think (that ...)

The Swedes were the first to recognize that public officials like civil servants, police officers, health inspectors or tax-collectors can make mistakes or act over-zealously in the belief (=because they believe) that they are serving the public.

The men of our family waded down through our flooded meadows with boathooks, in the hope of being (=because they hope to be) able to grapple a corner of the raft and pull it out of the current towards our bank.

In the lift her thoughts were on lunch and a good rest; but when she got out at her own floor, both were forgotten in her sudden discovery (=because she suddenly discovered) that her front door was open.

They leave unwanted objects in drawers, cupboards and attics for years, in the belief (=because they believe) that they may one day need just



those very things.

at the ... of ... 一.....就.....

at the thought / idea / sight / mention / sound / news of ...

... your stomach would turn at the idea of frying potatoes in animal fat ...

... they always go into raptures at the mere mention of the country ...

be cheated (out) of sth.

cheat sb. (out) of sth.

rob sb. of sth.

deprive sb. of sth.

strip sb. of sth.

divest sb. of sth.

... they have been

robbed of the best things...

deprived of the best things...

stripped of the best things...

divested of the best things...

confiscate sth.

Miss Williams confiscated all our sweets.

But in an old man who has known human joys and sorrows, and has achieved whatever work it was in him to do, the fear of death is somewhat abject and ignoble.

know v. experience; see



China has known many wars.

The city must have known prosperity.

He has seen better days.

joys and sorrows: ups and downs

... whatever work (that / which) it was in him(=within his ability) to do, ...

somewhat

to some extent / degree

The best way to overcome it—*so at least it seems to me*—is *to make your interests gradually wider and more impersonal, until bit by bit the walls of the ego recede, and your life becomes increasingly merged in the universal life.*

overcome v. conquer

overcome / conquer fear / shyness

at least = at any rate

... and seriously believe—at any rate for short periods—that running, jumping and kicking a ball are tests of national virtue.

so it seems 看似是这样

— ‘So he’s not coming with us?’

— ‘So it seems.’

—so at least it seems to me—

In sum, without due respect for personal welfare, not only would the



motivations of a society's citizens be weakened, but the philosophical underpinnings of democracy would be undermined as well. Therefore, notwithstanding the significance of a society's overall success, the ultimate benchmark of the well-being of any society—so at least it seems to me—is the general welfare of all its people.

gradually adv. little by little; bit by bit; by degrees

to broaden / expand your interests gradually

to broaden / expand your horizons

to meet like-minded people

Don't indulge in solitude.

Don't be ego-centric.

Make yourself liberal and sociable.

tariff wall

The years had built a wall between the two families.

无我相，无人相，无众生相，无寿者相。

— 释迦牟尼佛

吾所以有大患者，为吾有身。及吾无身，吾有何患？

— 老子

The true value of a human being is determined primarily by the measure and the sense in which he has attained liberation from the self.



— Albert Einstein

be merged in / into ...

be joined in / into ...

The three companies were merged / joined in / into one.

merge into ...

The remote hills gradually merged into the dark sky.

universal

In spite of national differences, certain funny situations have a universal appeal.

cosmic

cosmic being

An individual human existence should be like a river—small at first, narrowly contained within its banks, and rushing passionately past boulders and over waterfalls.

扩喻 extended simile

Laws are like cobwebs, where the small flies are caught and the great break through.

when you are a baby/child

carefully protected by your parents

one bank is family, the other society

when you are in your youth

difficulties and obstacles



Gradually the river grows wider, the banks recede, the waters flow more quietly, and in the end, *without any visible break*, they become merged in the sea, and painlessly lose their individual being.

when you are in your middle age

You have more mature personality.

You have more steady outlook on life.

You have a happy family.

You've been married and you have kids.

And your career goes smoothly.

when you are in old age

visible adj. obvious

Any ship that crosses the Pacific is accompanied for many days by the smaller albatross, which may keep company with the vessel for an hour without visible or more than occasional movement of wing.

方生方死，方死方生。

—庄子

The man who, in old age, can see his life in this way, will not suffer from the fear of death, *since the things he cares for will continue.*

suffer (from) ...

be afflicted by / with ...

He is afflicted by / with diabetes / a sense of inferiority.

be racked / tormented / tortured by / with ...



God almighty, where are you when the world is racked / tormented / tortured by war.

By reason of	For
Because of	Owing to
Due to	On account of

- (A) She doesn't like the professor very much.
- (B) She doubts class will be canceled.
- (C) She doesn't want to attend the conference.
- (D) She wonders whether the professor is an accountant.

M: Do you think professor Smith will cancel class on account of the special conference?

W: Not likely.

Q: What does the woman mean?

Answer: (B) She doubts class will be canceled.

介词+名词+同位语从句=普通从属连词

for the reason that ...

because of the fact that ...

due to the fact that ...

on account of the fact that ...

= because / since / as ...

People who work in offices are frequently referred to as 'white-collar



workers' for the simple reason that they usually wear a collar and tie to go to work.

in spite of the fact that ...

despite the fact that ...

= although / though ...

Despite the fact that the bottle is tinted a delicate shade of green, an observant visitor would soon notice that it is filled with what looks like a thick, grayish substance.

care for ... 喜欢

care about ... 关心, 在乎, 介意

And if, with the decay of vitality, weariness increases, the thought of rest will be not unwelcome.

Old civilization may fall into decay.

The power of the Roman Empire was decaying at the time of Nero.

Each civilization is born, it culminates, and it decays.

unwelcome adj. unwanted; undesirable

I should wish to die while still at work, knowing *that others will carry on what I can no longer do*, and content in the thought that (what was possible) has been done.

I should imagine it will take about 3 hours.

Metals expand when heated and contract when cooled.

Metals expand when they are heated and contract when cooled.



Metals expand when they are heated and contract when they are cooled.

Francis Preston Blair Jr., although born in Kentucky, lived and practiced in Missouri.

Francis Preston Blair Jr., although he was born in Kentucky, lived and practiced in Missouri.

We'll resolve the Taiwan issue with peaceful means when ever possible, with force when necessary.

We'll resolve the Taiwan issue with peaceful means when it is ever possible, with force when necessary.

We'll resolve the Taiwan issue with peaceful means when it is ever possible, with force when it is necessary.

..., and (being) content / satisfied in the thought (= *because I think*) that ...

Young men who have reason to fear that they will be killed in battle may justifiably feel bitter in the thought (= *because they think*) that they have been cheated of the best things that life has to offer.

Lesson 12 Banks and their customers

current ['kʌrənt]

adj. 当前的, 现在的, 流行的

current problems



current events / affairs

the current president

Current account
Checking account
Savings account
Deposit account

open an account

close an account

deposit / bank

You'd better deposit / bank your money.

draw / withdraw ... from ...

take ... out of ...

He drew / withdrew \$100 from his bank (account).

He took \$100 out of his bank (account).

overdraw

My account is overdrawn by \$200.

cash / encash

to cash / encash a check

debtor ['detə(r)]

adj. 债务人, 借方



debtor n. person who owes money to sb. 债务人, 借方

creditor n. person to whom money is owed 债权人, 贷方

debit v. 把.....计入借方, 记上客户支出的钱

Debit \$100 against Mr. Smith's account.

Debit Mr. Smith's account with \$100.

debit n. 账户的借方; 账户中提取的款项

credit v. 把.....计入贷方, 记上客户存入的钱

Credit Mr. Smith's account with \$100.

credit n. 账户的贷方; 账户中存入的款项

Your account is in credit.

obligation [ˈɒblɪˈɡeɪʃn]

adj. 责任, 义务

obligation to n. / to do sth

America's obligation to its allies

Employers have an obligation / are under an obligation to treat all employees equally.

meet / honor / fulfill one's obligation

sense of obligation

legal obligation



moral obligation

mutual / reciprocal obligation

duty

obligation

responsibility

complication

[7kɒmplɪ'keɪʃn]

n. 复杂的情况, 纠纷

complications between two parties / countries

legal complications

avoid complications

cause complications

produce further complications

If diabetes is not treated properly, complications will set in.

complicate complicated

“plic” = fold

implicate

He was implicated in the crime.

explicate

The teacher is explicating an abstruse poem.



duplicate

He duplicated his former mistakes.

supplicate

I supplicated her forgiveness.

specimen ['spesɪmən]

adj. 样品，标本

specimen

sample

a specimen / sample signature

a blood specimen / sample

a urine specimen / sample

samples of a new shampoo

adopt [ə'dɒpt]

v. 领养；采取，采用；正式批准

adopt an orphan

adopted son

adoptive parents

foster-parents

adopt a new idea



adopt a new technique

The Senate unanimously adopted the committee's proposals.

adoption n. 领养; 采纳, 采用

This textbook has adoptions in many countries.

adept adj. 熟练的, 内行的

be adept at / in ...

adapt v. (使) 适应; 改编

She quickly adapted to the new climate.

The movie was adapted from a novel.

facilitate [fə'sɪlɪteɪt]

v. 使某事更容易

Modern devices facilitate domestic work.

facility n. (常用复数) (使事情便利的) 设备, 设施

drainage facilities

medical facilities

recreational facilities

public health facilities

lodge and eating facilities

facile adj. easily obtained or achieved (and so not highly valued) 容易得到的 (因而没有太大价值的)



a facile success

“fac” = make

manufacture benefactor malefactor

“-ile” 易于的

fertile

fragile

facile (“fac” + “ile”)

When anyone opens a current account at a bank, he is lending the bank money, *repayment of which he may demand at any time, either in cash or by drawing a cheque in favour of another person.*

lend sth. to sb.

lend sb. sth.

loan sth. to sb.

loan sb. sth.

borrow sth. from sb. ✓

borrow sb. sth. X

你能不能借给我 100 块钱?

Would you borrow me ¥100? X

Would you lend me ¥100? ✓

Would you lend ¥100 to me? ✓

May I borrow ¥100 from you? ✓



May I borrow you ¥100? X

when anyone ..., he is ...

无论是谁 (做某事), 就等于在.....

造句: 无论是谁试图徒步穿越这个山口, 就等于在生命冒险。

When anyone tries to cross the pass on foot, he is risking his life.

“名词+介词+关系代词” 引导非限定性定语从句

This echo-location in bats is often compared with radar, the principle of which is similar.

The most valuable find of all was the ship's log book, parts of which it was still possible to read.

the repayment of debt

repay sb. sth.

repay sth. to sb.

pay sb. back

pay back sth.

I'll pay you back tomorrow.

pay off one's debts

clear one's debts

give sb. a refund

We'll give you a refund if you're not entirely satisfied.

reimburse sb.

Pay for the hotel room when you leave, and the company will reimburse



you later.

in favor of ... (支票) 以某人/某部门为收款人

Checks should be written / drawn in favor of New Oriental School.

Primarily, the banker-customer relationship is that of debtor and creditor—who is which depending on whether the customer's account is in credit or is overdrawn.

Primarily	Mainly
Principally	Largely
Chiefly	Above all
First and foremost	

heart and soul

knife and fork

Please pass me pencil and paper.

the relation between teacher and student

the conflict between mother and son

He worried about if he had hurt her feelings. X

He worried about whether he had hurt her feelings. ✓

be overdrawn = be in the red

Your account is overdrawn / in the red.

in addition to ...

besides ...



as well as ...

together with ...

along with ...

apart from ...

aside from ...

owe sth. to sb.

owe sb. sth.

owe obligations to sb.

have obligations to sb.

Parents owe / have obligations to their children.

I owe you (a lot).

You owe him an apology.

You owe him an explanation.

Many of these obligations can give rise to problems and complications but a bank customer, unlike, say, a buyer of goods, cannot complain that the law is loaded against him.

give rise to ...

The president's absence has given rise to speculation about his health.

This can give rise to curious situations, as it did in the case of Alfred Bloggs who worked as a dustman for the Ellesmere Corporation.

cause ...

lead to ...



result in ...

bring about ...

effect ...

set up ...

The slump on Wall Street set up a chain reaction in stock markets around the world.

produce / create / generate

His announcement produced / created / generated gasps of amazement.

trigger / spark / precipitate

One small error triggered / sparked / precipitated the calamity.

sth. is loaded against ... used to say that a system, situation, or organization is unfair and some people have a disadvantage 对.....不公平

The justice system is loaded against ethnic minorities.

be prejudiced against ...

be biased against ...

The early Christian church was prejudiced / biased against Jews.

The fact that the policeman was prejudiced against foreigners could not be recorded in the official files.

be biased in favor of ...

be partial to ...

The decision was biased in favor of / partial to the plaintiff.



obey instructions

take instructions

follow instructions

await instructions

When, for example, a customer first opens an account, he instructs the bank to debit his account *only in respect of cheques drawn by himself*.

US foreign policy

in respect of

with respect to

with regard to

concerning

regarding

respecting

He gives the bank specimens of his signature, and there is a very firm rule that the bank has no right or authority to pay out a customer's money on a cheque on which its customer's signature has been forged.

signature

autograph

I've got lots of famous actors' autographs.

sign

Where do you want me to sign my name?

sign for ...

Could you sign for this package, please?



initial

The memo has been initialled / initialed by the president.

authority n. [U] right to act in a specific way 职权, 权限

Only the treasurer has authority to sign checks.

pay out: to pay a lot of money for something 支付 (大笔的钱)

We're paying out \$300 a month on our mortgage.

make a difference

make some difference

make no difference

For this reason there is no risk to the customer in the practice, *adopted by banks, of printing the customer's name on his cheques.*

For this reason	so
Thus	Hence
Therefore	Thereupon
Ergo	Accordingly
As a result	Consequently
As a consequence	In consequence

the risk of serious injury

There is no risk to customers.

practice n. 习惯性的做法, 惯例

the practice of doing sth.



the practice of closing shops on Sundays

the practice of dumping waste into the sea

If this facilitates forgery, it is the bank which will lose, not the customer.

facilitate ...

ease / smooth the way for ...

The agreement will ease / smooth the way for other countries to join the EU.

it is ... that / who(m) ...

it is ... which ... (尤其用于科技、说明文体)

It is heat which makes matter expand and melt.

It is the release of nuclear energy within the Sun which enables it to send out so much energy to the earth.

if ..., it is ... that / which / who(m) ..., not ...

If this facilitates forgery, it is the bank which will lose, not the customer.

If there is one—which I take leave to doubt—then it is older people who create it, not the young themselves.

Lesson 13 The search for oil

mineral ['mɪnərəl]

adj. 矿物质的; n. 矿物质

mineral resources / spring / water / substance / deposits



China is rich in minerals.

metallic minerals

non-metallic minerals

ore iron ore uranium ore

mine a coal-mine a gold-mine

boring ['bɔ:riŋ]

n. 钻孔; 钻出的孔

bore bore a hole in wood

bore a tunnel through the mountain

drill drill for oil / water

an electric drill

perforate

Perforate the cover to let air in.

punch

prick / pierce

A small bead of blood formed where she had pricked her finger.

She had her ears pierced.

haul [hɔ:l]

v. (持续而缓慢地) 拖拉或提升

Rescue workers attached the men to ropes before hauling them to safety.



drag

He dragged the heavy chest across the floor.

The police dragged the soccer hooligan off the pitch.

tow

My car broke down and had to be towed to a garage.

trail

She walked slowly along the path, her skirt trailing in the mud.

tug

We tugged it so hard that the rope broke.

pull / draw

rotate [rəʊ'teɪt] ['routeɪt]

v. (使)(沿自身的轴) 旋转

rotate the handle gently

revolve

The restaurant revolves slowly, giving excellent views of the city.

The earth rotates on its axis while it revolves in its orbit.

spin

The ice skater began to spin faster and faster.

twirl

The couple was twirling to a waltz.

circulate



Blood circulates through the body.

Open the window to allow the air to circulate.

circulation

geologist [dʒi'ɒlədʒɪst]

n. 地质学家

geologist

geology

“geo” = earth + “logy” = to study

geological

geologically

From the shore-line out to a distance which may be anywhere from a few miles to a few hundred miles runs the gentle slope of the continental shelf, geologically part of the continents.

geographer

geography

“geo” + “graphy” = to write

geographical

geographically

geometry

“geo” + “metry” = to measure

solid geometry

strata ['strɑ:tə] ['streɪtə]

n. 岩层; 社会阶层

people of different social strata



stratum → strata

datum → data

medium → media

bacterium → bacteria

curriculum → curricula

Bore/drill a hole	Prick a hole
Punch a hole	Dig a hole
Knock a hole	Chop a hole
Eat a hole	Gnaw a hole
Make a hole	

I'll go down to Hangzhou tomorrow.

I'll go up to Dalian tomorrow.

go down to the countryside

go up to town

go down to as much as ...

The platforms extend to a depth of over 100 feet under the sea.

The deepest known cave in the world is the Gouffre Berger near Grenoble.

It extends to a depth of 3,723 feet.

extend to a depth of ...

She stood three feet high and her hands rested on her hips.

stand ... high



Above the surface of the water, the towers rise to a height of nearly 700 feet.

rise to a height of ...

How do I love thee?

How do I love thee?

Let me count the ways.

I love thee to the depth and breadth and height my soul can reach.

Elizabeth Barrett Browning

But we not need to send men down to get the oil out, as we must with other mineral deposits.

send sb. to do sth.

send sb. to sth.

send the boy to buy some beer

send the boy to school / bed

dispatch sb. to do sth.

dispatch sb. to sth.

The government dispatched 100 police to restore order.

An ambulance was immediately dispatched to the area.

transfer sb. to sth.

He was transferred to our Shanghai branch.

post sb. to sth.

He was posted to the embassy in London.



transport sb. to sth.

He was transported to Siberia for life.

..., as we must send men down with other mineral deposits.

less than+数词+计量名词(时间; 距离; 金额)

less than 20 minutes / a foot / 2 miles / 10 dollars

fewer than+数词+普通名词

There are fewer than 20 applications.

The whole of Switzerland has fewer than six million inhabitants.

no less than+数词+计量名词(时间; 距离; 金额)

“足足有……; 有……之多”

not less than+数词+计量名词(时间; 距离; 金额)

“至少有……; 不少于……”

He won no less than \$1,000,000 in the lottery.

He won not less than \$1,000,000 in the lottery.

no fewer than+ 数 词 + 普 通 名 词

“足足有……; 有……之多”

not fewer than+数词+普通名词 “至

少有……; 不少于……”

No fewer than a thousand people came.

Not fewer than a thousand people came.

no more than ... 只有……

not more than ... 最多……



No more than 20 people are present.

Not more than 20 people are present.

diameter

“dia”= across + “meter”/“metry”= measure

radius

caliber / calibre

particular adj. specific; individual

in this particular case

= in this specific case

his particular problems

= his individual problems

largely adj. chiefly / mainly / to a great extent

His success was largely due to luck.

do much / a lot / a great deal to ...

do little to ...

do nothing to ...

Though he was technically a prizefighter, Mendoza did much to change crude prizefighting into a sport, for he brought science to the game.

造句: 尽管严格地说只是一本书, 但圣经在把这个粗鄙的世界变成一个文明世界方面却做出了很大贡献, 因为它给人类带来了信仰(faith)。

Though it is technically a book, the Bible does much to change the crude world into a civilized one, for it brings faith to humanity.



do more to ... than ...

造句: 新概念英语比其他任何书对提高我写作能力的作用都大。

New Concept English has done more to improve my writing skills than any other book.

When it has been decided where we are going to drill, we put up at the surface an oil derrick.

put up: set up; erect

It has to be tall because it is like a giant block and tackle, and we have to lower into the ground and haul out of the ground great lengths of drill pipe which are rotated by an engine at the top and are fitted with a cutting bit at the bottom.

... we have to lower great lengths of drill pipe which are rotated by an engine at the top and are fitted with a cutting bit at the bottom into the ground and haul them out of the ground ...

It has to be tall because it is like a giant block and tackle, and we have to lower into the ground and haul out of the ground great lengths of drill pipe which are rotated by an engine at the top and are fitted with a cutting bit at the bottom.

造句: 请把我们急需的那个软件从网站上下载下来然后通过 e-mail 发送给我。

Please download from the website and send to me by email the software of which we are in urgent need.



a length of rope

a bar of chocolate

a loaf of bread

a cone of ice-cream

a bunch of grapes / bananas

a cake of soap

a flash / bolt of lightning

a peal of thunder

a gust of wind

a pane of glass

a bouquet of flowers

a nice cup of tea

a beautiful stretch of field

a stagnant pool of water

The geologist needs to know what rocks the drill has reached, so every so often a sample is obtained with a coring bit.

every so often sometimes

occasionally at times

(every) now and then

(every) now and again

once in a while

from time to time



It cuts a clean cylinder of rock, from which can be seen the strata the drill has been cutting through.

... from which the strata the drill has been cutting through can be seen.

Once we get down to the oil, it usually flows to the surface because great pressure, either from gas or water, is pushing it.

Let's get down to

business.

work.

fundamentals / basics.

This pressure must be under control, and we control it *by means of the mud which we circulate down the drill pipe*.

be under control

get sth. under control

(A) The air will be cleaner if they go to a different city.

(B) It'll soon be too late to control the pollution.

(C) Society will not pay attention to the new laws.

(D) The situation will improve if changes are made.

M: Look at all the pollution going into the air from those factories. Do you think they'll ever get that under control?

W: With the new laws and social awareness, we'll turn things around.

Q: What does the woman predict will happen?

Answer: (D) The situation will improve if changes are made.



get out of control / hand

A day may begin well enough, but suddenly everything seems to get out of control.

(A) Discuss the situation with the person in charge of the dormitory.

(B) Ask her roommate not to make so much noise.

(C) Go to bed after midnight.

(D) Send a letter to the residents.

W: You know the noise in my dorm has really gotten out of control. My roommate and I can rarely get to sleep before midnight.

M: Why don't you take the problem up with the dorm supervisor?

Q: What does the man suggest the woman do?

Answer: (A) Discuss the situation with the person in charge of the dormitory.

We started burning some leaves in our yard, but the fire got ____ and we had to call the fire department to put it out.

(A) out of hand

(B) out of order

(C) out of the question

(D) out of the way

The car is under repair.

The castle is under attack.

The subject is under discussion.



The matter is under consideration.

You are under arrest.

The patient is under observation.

The case is under investigation.

The bridge is under construction.

The building is under renovation.

We endeavour to avoid the old, romantic idea of a gusher, which wastes oil and gas.

endeavor to do

make every endeavor to do

go to great lengths to do

The man went to great lengths to prove that the diamonds were real.

spare no effort to do

China will spare no effort to realize peaceful reunification.

do / try one's best / utmost to do

Though the doctor did his best, the patient's recovery was slow.

You play to win, and the game has little meaning unless you do your utmost to win.

give one's all to do

go all out to do

(A) They should wait for John to bring the dessert.

(B) He thinks John must have spent a lot of money for the dinner.



(C) The dessert also looks impressive.

(D) He helped John make the sandwiches.

W: Look at the delicious sandwiches. John's really gone all out this time.

M: Just wait until you see the dessert.

Q: What does the man imply?

Answer: (C) The dessert also looks impressive.

romantic adj. impractical

We can read of things that happened 5,000 years ago in the Near East, where people first learned to write.

We want it to stay down the hole until we can lead it off *in a controlled manner*.

Lesson 14 The butterfly effect

forecast

['fɔ:kɑ:st] ['fɔ:rkæst]

n. & v. 预测, 预报

forecast v. & n. to publicly say what will happen in the future with the weather or the economic or political situation, esp. when you have special or technical knowledge

weather forecast

the company's annual sales forecast

Rain has been forecast for tomorrow.



The Federal Reserve Bank forecasts the economy will grow 8% this year.

predict / foretell

He predicted / foretold that the improvement will continue.

Timely snow foretells a bumper harvest.

forebode

Black clouds forebode a storm.

prophecy

Jesus prophesied that one of his disciples would betray him.

speculative

['spekjələtɪv]

adj. 推测的; 投机的

speculative adj. based on guessing, not on information or facts

His conclusions are purely speculative.

speculative investments

speculate v. 1. 猜测

We can only speculate on the reasons for his sudden resignation.

speculate v. 2. to buy goods, property, shares etc., hoping that you will make a large profit when you sell them 投机

speculate in stocks

speculation

conjecture



guesswork / guess work

property speculation

blizzard ['blɪzəd]

n. 特大暴风雪

blizzard n. severe snowstorm

thunderstorm

snowstorm

windstorm

sandstorm

squall

dust devil

cyclone

hurricane

typhoon

tornado

deteriorate

[dɪ'tɪəriəreɪt]

v. 变糟, 恶化

Alan's health has deteriorated.

America's deteriorating economy

deteriorate into ...

The discussion deteriorated into a bitter quarrel.

degenerate

Our relationship has degenerated over the years.

degenerate into ...



Don't allow your comments degenerated into a personal attack.

worsen

The weather worsened during the night.

get worse

go from bad to worse

go downhill

Moving in together was a mistake, and our relationship rapidly went downhill.

turbulent ['tɜ:bjələnt]

adj. 汹涌而不稳定的; 动荡的

turbulent adj. air or water moving violently and unevenly

turbulent waves

the turbulent times of the French Revolution

turbulence

political turbulence

social turbulence

“turb” = disturb 搅乱

turbid

turbine

perturb

Mother was perturbed by my illness.

imperturbable

humidity [hju:'mɪdəti]



n. 湿度

humid

humid air / atmosphere

humid summer nights

wet

Her hands were wet.

a wet sponge

damp / moist

Bring me a moist towel.

a cold, damp collar

meteorologist

[7mi:tiə'rolədʒɪst]

n. 气象学家

meteorologist

meteorology

meteor

shooting / falling star

meteor shower

meteor swarm

meteorite

asteroid

deviation [7di:vi'eɪʃn]

n. 偏差，偏离常规



deviation n. a difference from what is expected or acceptable

Left deviation

Right deviation

sexual deviation

Any deviation from the party's faith is seen as betrayal.

At noon the spaces between the sensors will hide fluctuations that the computer will not know about, tiny deviations from the average.

deviate from ...

deviate from one's plan / principles

deviant

a sexual deviant

“de”=away from + “vi(a)”=道路 + ate (动词字根)

via

go from London to Washington via New York

viable

a viable proposal

economically viable

obviate

The new treatment obviates the need for surgery.

a social butterfly

have butterflies (in one's stomach)

It was the morning of the World Cup Final and most of the players had



butterflies (in their stomach).

chaos theory

Small changes in initial conditions can lead to large-scale and unpredictable variation in the future state of the system.

A frequent metaphor for one aspect of chaos theory is the Butterfly Effect: butterflies flapping their wings in the Amazon affect the weather in Chicago.

beyond prep. after ...; later than ...

Exceeding two or three days, ...

... are based on speculation / conjecture.

... are based on guesswork / guess work.

... they are valueless

... they are useless

... they are of no earthly use.

... they are totally useless.

The Butterfly Effect is the reason for / behind it.

The Butterfly Effect accounts for it. ✓

The Butterfly Effect underlies it. ✓

The reason is the Butterfly Effect. ✓

The reason lies in the Butterfly Effect. ✓

The reason is because of the Butterfly Effect. X

For small pieces of weather — and to a global forecaster, small can mean



thunderstorms and blizzards — any prediction deteriorates rapidly.

mean v. be likely to result in ...

The merger will mean the eventual closure of the company's Shanghai Office.

... any prediction gets worse / degenerates / becomes inaccurate rapidly.

Errors and uncertainties multiply, cascading upward through a chain of turbulent features, *from dust devils and squalls up to continent-size eddies that only satellites can see.*

multiply v. to increase by a large amount or number, or to make sth. do this (使) 大幅增加

Within the last 10 years, both sales and profits have multiplied.

Smoking multiplies the risk of heart attacks.

snowball

Unemployment snowballed at the beginning of 1980s.

proliferate

Small businesses have proliferated in the last ten years.

mushroom

Trade between the two countries has mushroomed.

explode

China's population exploded after 1949.

population explosion

a chain of ...

a series of ...



a train of ...

a string of ...

a succession of ...

a progression of ...

feature n. characteristic

from A to B

from A up to B

The modern weather models work with a grid of points of the order of 60 miles apart, and even so, some starting data has to be guessed, since ground stations and satellites cannot see everywhere.

work v. (of a machine, device, etc) function; operate (指机器、设备等)
运作, 运转

This machine works by electricity.

The delete key doesn't work.

grid n. a pattern of straight lines that cross each other to form squares

streets laid out on a grid pattern

of / in / on the order of ... = approximately

The house cost him something on / in / of the order of \$200,000.

The house cost him something in the neighborhood / vicinity of \$200,000.

The house cost him approximately \$200,000.

starting adj. beginning

initial



at the initial stage / phase

incipient

incipient tumor

the incipient light of day

opening

his opening remarks

the opening scene of the movie

preliminary

a preliminary exam / contest

But suppose the earth could be covered with sensors spaced one foot apart, *rising at one-foot intervals all the way to the top of the atmosphere*.

space v. 将.....均匀隔开

Space your workouts two days apart to avoid sore muscles.

Bean plants should be spaced three inches apart.

interval n. 1. (两事件中的) 间隔时间

..., and by measuring the time interval between the taps and the receipt of the echoes the depth of the sea at that point can be calculated.

interval n. 2. (物体之间的) 间隔空间

They planted trees in the intervals between the houses.

all the way 一直.....

He ran all the way home.

Eventually the turtle has been butted all the way down to the floor of the



tank.

Suppose every sensor gives perfectly accurate readings of temperature, pressure, humidity, and any other quantity a meteorologist would want.

take the meter reading

read the meter

Precisely at noon an infinitely powerful computer takes all the data and calculates what will happen at each point at 12.01, then 12.02, then 12.03...

at high noon

at 12 o'clock sharp

at punctually 12 o'clock

infinite The universe is infinite.

finite Human knowledge is finite.

infinitive

definite

indefinite an indefinite answer

definitive a definitive verdict

work out figure out

compute reckon

The inflation is reckoned to be 10%.

At noon the spaces between the sensors will hide fluctuations that the computer will not know about, tiny deviations from the average.



... will have snowballed to ...

... will have proliferated to ...

... will have rocketed to ...

... will have soared to ...

on a small scale

on a limited scale

on a large / grand scale

on a / an colossal / enormous / gigantic scale

on a national / nationwide scale

on a / an global / international / world / worldwide scale

and so on

and so forth

etc. (et cetera)

and the like

and what not

global size

global scale

international / world / worldwide scale

Lesson 15 Secrecy in industry

secrecy ['si:krəsi]

n. 保密



secrecy n. keeping secrets, or state of being secret

in secrecy / in secret / secretly

Many civilians were slaughtered and buried in secrecy / in secret / secretly.

in the secrecy of one's heart

The personable young man is Mary's true love in the secrecy of her heart.

be veiled / shrouded / cloaked in secrecy

The president's exact itinerary was veiled / shrouded / cloaked in secrecy for security reasons.

effectiveness

[ɪˈfektɪvnis]

n. 有效, 见效

effective

take effective action / measures / steps ...

a very effective ruler

effectual

take effectual measures ✓

an effectual ruler X

efficacious

an efficacious medicine

Vaccination is efficacious in preventing smallpox.



efficient

efficient methods

an efficient secretary

inquiry [in'kwaɪəri]

n. 询问, 查询; 调查, 研究

inquiry / enquiry ~ desk

inquiry inquisition

investigation inquest

research

inquiry on the spot inquiry

official inquiry sampling inquiry

inquisition

The suspect was pushed toward the edge by the inquisitions of the police.

investigation

The case is under investigation.

The investigation into the cause of the air crash is continuing.

inquest

an inquest into the death of the actor

research

scientific research

process



['prəʊses] ['praɪsɪs]

n. 过程, 进程, 步骤;

制作方法, 工艺流程

process: n. 1. a series of actions that are done in order to achieve a result

过程, 进程, 步骤

the process of aging

the process of digestion

the Middle East peace process

process n. 2. method in industry to make sth. 工业上制做某种产品的方法, 工艺流程

法, 工艺流程

They have developed a new process for extracting aluminum from bauxite.

in the process of doing sth.

We're still in the process of moving house.

process v. 加工, 处理

central processing unit (CPU)

data processing

weigh one's words

weigh the pros and cons

We must weigh the pros and cons before deciding whether to invest our money.



weigh with sb.

It weighs heavily with me.

It matters to me.

It means a lot to me.

It makes a lot of difference to me.

weigh in one's favor

These facts will weigh in your favor.

weigh against ...

The lady's evidence will weigh against him. I'm not optimistic about the verdict.

One is the general atmosphere of secrecy in which it is carried out, the other the lack of freedom of the individual research worker.

atmosphere n. the mood or feeling that exists in a place and affects the people who are there 气氛

After Joe left there was a more relaxed atmosphere at home.

atmosphere of ...

There is an atmosphere of tension in the city today.

One is the general atmosphere of secrecy in which it is carried out, the other (being) the lack of freedom of the individual research worker.

In so far as any inquiry is a secret one, it naturally limits all those engaged in carrying it out from effective contact with their fellow



scientists either in other countries or in universities, or even, often enough, in other departments of the same firm.

in so far as ... / insofar as ...

1.= to the extent that ...

She cites other scholars' work only insofar as it supports her own theories.

2.= because / since / in that

He can be trusted insofar as he has never told a lie.

limit ... from ...

His wife keeps him from alcohol.

The problem barred / prevented me from completing the work.

I dissuaded him from committing suicide.

prohibit ... from ...

ban ... from ...

disqualify ... from ...

His criminal record disqualifies him from serving on a jury.

save / rescue ... from ...

restrain ... from ...

Please restrain yourself from coughing during the performance.

keep in contact with sb.

keep in touch with sb.



Please don't hesitate to contact with me if you have further questions. X

Please don't hesitate to contact me if you have further questions. ✓

vary greatly / widely / significantly / dramatically / enormously / substantially

vary slightly / somewhat

vary in size / degree / length ...

Rooms vary in size but all have television and telephone.

vary according to ...

The leaf's size varies widely according to the area where it grows.

Every solid object will reflect a sound, varying according to the size and nature of the object.

vary from ... to ...

Tests scores vary from school to school.

The amount of sleep we need varies from person to person.

Office hours vary from company to company and country to country.

Some of the bigger firms are engaged in researches which are of such general and fundamental nature *that it is a positive advantage to them not to keep them secret.*

of ... nature

of the most perilous nature

treaties of a political nature



questions of an academic nature

articles of a technical nature

... which are so general and fundamental that it is ...

... it is in their best interests not to ...

... to keep them open (to the public).

Yet a great many processes depending on such research are sought for with complete secrecy until the stage *at which patents can be taken out*.

research [U] / researches [pl.]

a research X two researches X

a study ✓ two studies ✓

seek

seek refuge / shelter / asylum

seek revenge seek comfort

seek for / after ...

seek for solutions

His book is much sought after.

take out a patent

apply for a patent

give / grant a patent

infringe a patent

... until they own the intellectual property rights.

This applies particularly to chemical industries, where chance discoveries



play a much larger part than they do in physical and mechanical industries.

apply to ...

The rules of safe driving apply to everyone.

The restriction no longer applies to him because he is over 18.

chance adj. accidental

a chance meeting / encounter

deliberate

intentional

chance / happen to do

He chanced / happened to be out when I called him.

as chance would have it

as luck would have it

play a ... role / part in ...

Legend has it that the antibiotic penicillin is a chance discovery by British bacteriologist Sir Alexander Fleming.

If I have ever made any valuable discoveries, it has been owing more to patient observation than to any other reason.

— Isaac Newton, English physicist

Sometimes the secrecy goes to such an extent that the whole nature of the research cannot be mentioned.

Many firms, for instance, have great difficulty in obtaining technical or



scientific books from libraries because they are unwilling to have their names entered as having taken out such and such a book, *for fear the agents of other firms should be able to trace the kind of research they are likely to be undertaking.*

have difficulty (in) doing sth.

have trouble (in) doing sth.

have a hard time doing sth.

She had a hard time writing the dear John letter.

be hard pressed to do sth.

Although negotiators are optimistic, the details are complex enough that they may be hard-pressed to get a deal at all.

be unwilling to do sth.

be reluctant to do sth.

Though he was reluctant to do so at first, we eventually persuaded him to take us.

be disinclined to do sth.

I was disinclined to talk to him about it.

be indisposed to do sth.

He seemed somewhat indisposed to depart.

be willing to do sth.

be ready / prepared to do sth.



be inclined to do sth.

be disposed to do sth.

take out 1. borrow books from a library

You can take out six books at a time.

take out 2. obtain an official document

take out an insurance policy / a mortgage / a patent

They find a house, agree a price, and take out a mortgage.

such and such a person

such and such a place

for fear (that) ...

in case (that) ...

I daren't tell you what he did, for fear that he should be angry with me.