

RD GRADE

现代英语

第三级

• 读与写

READING AND
WRITING

STUDENTS'
BOOK 3

Patrick Goldsmith

M Macmillan
China
HEP

H31

1'95/3c

MODERN ENGLISH

for University Students

Reading and Writing

Students' Book
Grade 3

Patrick Goldsmith

版权所有。本书的任何部分，未经出版者书面同意，都不得以任何方法或任何形式加以传播。

参加《现代英语》审稿的有上海交通大学杨惠中，重庆大学韩其顺，北京外国语学院周献桃和高等教育出版社曹根望。

现代英语

读与写

第三册

帕特里克·戈德史密斯

中国高等教育出版社 出版
英国麦克米伦出版公司

新华书店北京发行所发行

外文印刷厂印装

*

开本787×1092 1/16 印张5.5 字数144 000

1987年7月第1版 1987年7月第1次印刷

印数 000 001-120 300

ISBN 7-04-000061-X/H·6

书号 9010·0313 定价 1.10元

ACKNOWLEDGEMENTS

The author and publishers wish to thank the following who have kindly given permission for the use of copyright material:-

BBC Enterprises Ltd for an extract from *Of Gods and Men* by Anna Benson-Gyles and Chloe Sayer

Blackie and Son Limited for extracts from *Arabian Knights* by Amabel Williams Ellis and illustrations by Pauline Baynes

Century Hutchinson Publishing Ltd for an extract from *The Tomb of Tutankhamen* by Howard Carter

Collins for an extract from *Life on Earth* by David Attenborough

Stanley Gibbons Publications Limited for an extract from *Stamp Collecting* (1983)

Hamish Hamilton Ltd for extracts from *The Thurber Carnival* by James Thurber

Alan C Jenkins for an adapted extract from *Mysteries of Nature*

Michael Joseph Ltd for extracts from *The Science in Science Fiction* edited by Peter Nicholls

Oxford University Press Inc for an extract from *Children and Adolescents* (3rd edition 1981)

Salamander Books Limited for Artificial Intelligence in Robots by Piers Burnett and Igor Aleksander from *Robots*

Shire Publications Limited for extracts from *Discovering Canals in Britain* by Peter L Smith

The author and publishers also wish to acknowledge with thanks the following photographic sources:

Barnaby's Picture Library

Camera Press

Griffith Institute

François Goshier

J. Allan Cash Ltd

Paul Popper

Popperfoto Ltd

Sphere Books

Topham

Every effort has been made to trace all the copyright holders but, if any have been inadvertently overlooked, the publishers will be pleased to make the necessary arrangement at the first opportunity.

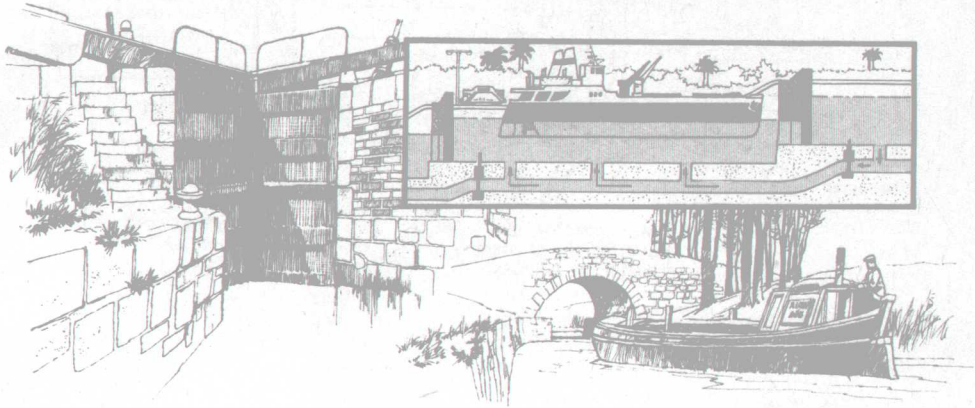
Illustrated by Malcolm Stokes and Brian Roll

Contents

UNIT 1	CANALS	1
UNIT 2	TWO HUMOROUS ANIMAL STORIES BY JAMES THURBER	9
UNIT 3	THE ELEPHANT	15
UNIT 4	SINDBAD AND THE ROC	22
UNIT 5	TUTANKHAMEN'S TREASURE	30
UNIT 6	STARSHIPS	38
UNIT 7	SONAR AND SONGS	45
UNIT 8	PACAL'S TOMB	52
UNIT 9	ARTIFICIAL INTELLIGENCE IN ROBOTS	59
UNIT 10	A CHILD'S VIEW OF THE WORLD	64
UNIT 11	THE OTHER SIDE OF THE STAMP	69
UNIT 12	TIME TRAVEL	75

UNIT 1

CANALS



When we think of canals, we perhaps think of major works of engineering like the Suez Canal, the Panama Canal, or the Grand Canal in China, or we may imagine a gondola in Venice. The first image that comes into our minds is probably not that of a narrow boat travelling down a tree-lined canal in England.

5 And yet there have been canals in England for at least two hundred years. A map of England will show an extensive network of them crisscrossing the country. Who used them? And who uses them now?

Before the end of the eighteenth century, inland transport in Europe away from the rivers was slow, expensive and unreliable, because of the lack of made-up roads. Horse-drawn carts were able to move
10 over the dry and dusty cart tracks during the summer months, but in the winter the thick mud made it impossible. Packhorses could travel almost all the year round, but with their limited carrying capacity they were not an ideal method of transport, especially for materials that were heavy or easily broken.

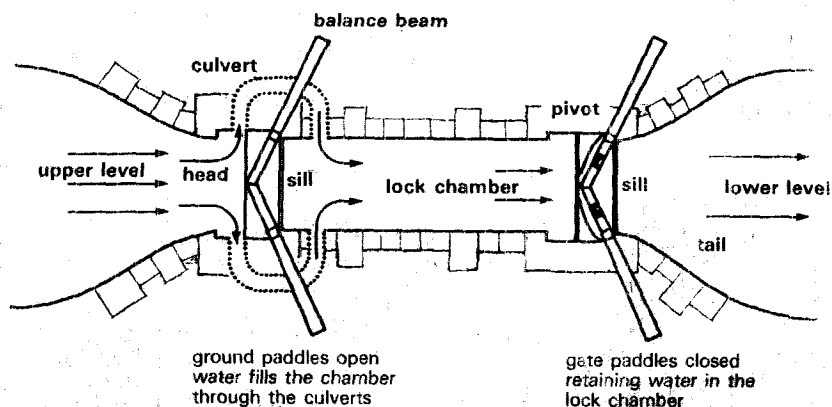
As the Industrial Revolution got under way in England it became necessary to find ways of transporting coal and manufactured goods cheaply and safely. Special roads were built, but goods
15 transported on them had to pay sums of money that increased their cost.

In 1755 the Duke of Bridgewater decided to build a canal to provide an adequate transport outlet for his coal mines. He employed the self-taught James Brindley as his engineer, with John Gilbert as surveyor, and launched the canal age in England. The Bridgewater canal was opened in 1761. Its route, all on one level, was independent of all rivers; its scale of operations reflected the new power of
20 engineering and the vision of its creators. Although there were no locks, the engineering problems were huge; an aqueduct was built at Barton over the river Irwell, preceded by an embankment 900 yards long; 15 miles of canal were built underground, so that boats could approach the coal face for loading — eventually there were 42 miles underground.

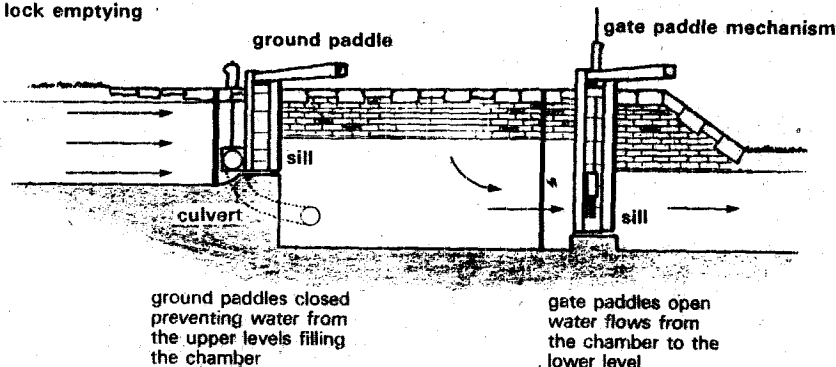
The advantages of canals over roads were seen at once. A single horse could pull 50 tons in a canal
25 boat, compared with less than one ton in a road wagon. Companies began building canals in competition with each other all over the country, until there were more than 2,000 miles of canals alone, not counting the navigable rivers, which brought the figure up to 4,000 miles.

The development of a truly efficient canal system was only possible with the extensive use of locks to allow vessels to travel up and down hills. One type of lock, with a single vertical door or 'gate', had
30 been used on the Grand Canal in China in the eighth century, and in Europe on the river Lek in the 1370s, but it is thought to have been Leonardo da Vinci who designed the double swinging gates that have been so widely used.

Plan: lock filling



Elevation:
lock emptying

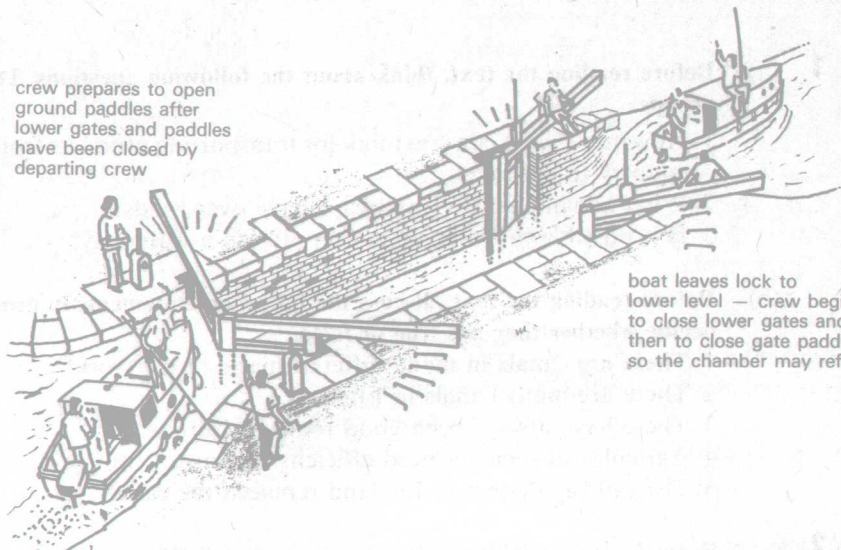


It is worth taking a little time to consider how a lock works, because this is one of the main features of canal travelling. The plan shows how the gates point uphill, the water pressure forcing them together. Water floods into the lock through the underground culverts that are operated by the ground paddles; when the lock is full, the 'top' gates (on the left in the drawing) can be opened. In the elevation, the bottom paddles have been raised — opened — so the lock empties. A boat would, of course, float down with the water. When the lock is 'empty', the bottom gates can be opened and the descending boat can leave the lock.

With the development of the railways in the nineteenth century, the canals faced considerable competition, and the situation grew worse in the twentieth century with the increase in the use of road transport. Even so, in the early 1950s near Birmingham there was still a million tons of short-distance traffic every year, but a decade later this had almost disappeared. One of the major factors in the commercial decline of the canals in England was that most of them were too narrow to allow large boats on them, unlike canals in Belgium, Holland, France, Germany and other parts of the world.

However, as commercial traffic decreased, more people became interested in travelling on the canals, and walking beside them for pleasure, during their holidays. It is now common to see brightly-painted narrow boats queuing to go through locks on a canal. When James Brindley decided to make his canals narrow he established a pattern that was followed throughout the country, and the restrictions on traffic that resulted ensured eventual commercial failure; but if it had not been for this failure there would not now be 2,000 miles of picturesque canals to be enjoyed by walkers and pleasure-boatmen escaping from the pressure of their jobs.

crew prepares to open
ground paddles after
lower gates and paddles
have been closed by
departing crew

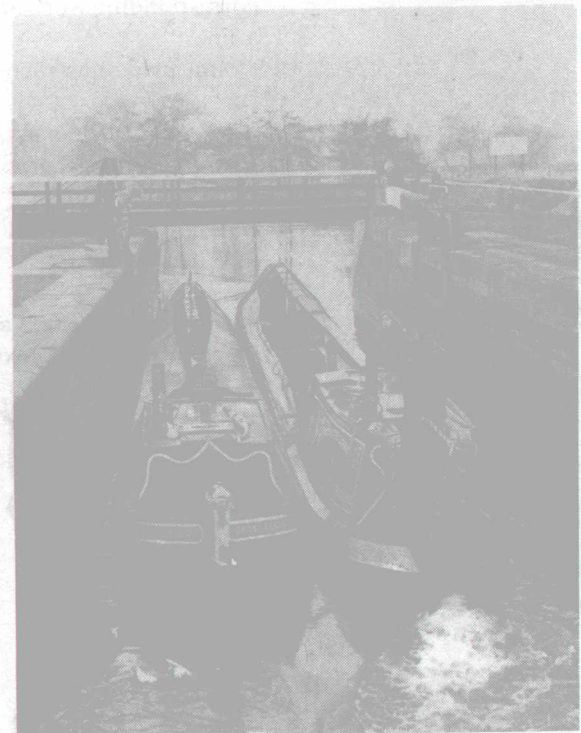


boat leaves lock to
lower level — crew begins
to close lower gates and
then to close gate paddles
so the chamber may refill

boat waiting to enter
from upper level after
chamber has been
refilled



Barges on the Grand Union Canal, London



Commercial narrow boats at Dighs Basin locks,
Worcestershire

EXERCISES

BEFORE READING

- 1 (a) Before reading the text, think about the following questions. Discuss them in groups.
- 1 How many ways can you think for transporting products from one part of a country to another?
 - 2 What advantages do waterways have over roads?
 - 3 Is it possible to travel up a steep hill on a waterway?
- (b) Before reading the text, discuss the following statements in groups and try to decide whether they are true or false.
- | | | |
|---|---|---|
| 1 There are canals in many different parts of the world. | T | F |
| 2 There are many canals in England. | T | F |
| 3 There have always been good roads in Europe. | T | F |
| 4 Agricultural societies need efficient systems of transport. | T | F |
| 5 The railway system in England replaced the canals. | T | F |

COMPRE- HENSION SCAN

- 2 (a) Scan the text quickly to find the answers to 1 (b).
- (b) Assign a number to each of the following words, like this:
- canal 1
boat 2
transport/ed/ing 3
lock 4

Now write the appropriate number in the margin every time the corresponding word appears — twice or more, if it appears more than once in a line.

Count pronouns such as *them* as repetitions of the word.

- (c) Now, working in pairs, consider how the frequency of these words varies from paragraph to paragraph, and answer the following questions, without reading the text in detail:
- 1 What is the subject of paragraphs 3 and 4?
 - 2 What is the subject of paragraphs 7 and 8?

SKIMMING 3

Skim through the text and give each paragraph a heading that corresponds to its function within the text, as in the example.

- | | |
|------------------------------|----------|
| 1 <u>Canals in the World</u> | 6 _____ |
| 2 _____ | 7 _____ |
| 3 _____ | 8 _____ |
| 4 _____ | 9 _____ |
| 5 _____ | 10 _____ |

COMPRE- HENSION IN DEPTH 4

Read the passage through carefully and then do the following exercises.

- 1 Working in pairs, make two lists of the advantages and disadvantages of canals as opposed to road or rail transport, A in the past and B now. Use

your own knowledge to supplement the information in the text.

A 1790

Advantages	Disadvantages

B 1990

Advantages	Disadvantages

2 Write step-by-step instructions explaining to somebody how to take a boat down through a lock. Begin as follows:

First, you must wait for the lock to fill with water.

Next...

VOCABU- LARY

5 (a) Find words in the text which mean approximately the same as the following words or phrases.

paragraph 2: crossing in all directions

paragraph 3: (of a road) having a hard surface; pulled by horses

paragraph 4: combustible mineral substance; at low cost

paragraph 5: started; ability to perceive future developments; artificial bank of earth

paragraph 7: boat

paragraph 8: small tunnel for water

(b) Now use the words you have found to fill the gaps in the sentences below.

1 He climbed up the ____ to the railway.

2 The water runs through a ____ under the road.

3 I bought this table very ____ from a friend.

4 There are many ____ mines in the Midlands.

5 Phoenician ____ may have crossed the Atlantic.

6 Jules Verne wrote about many things before they were invented; he was a man of great ____.

7 The Red Cross has ____ an appeal for funds.

8 ____ carts used to be a common form of transport.

9 There is a network of roads ____ the country.

10 This road is full of holes; it hasn't been ____.

REFERENCE 6

Choose the most satisfactory alternative.

1 *it* (line 10) refers to

A the winter

B the summer

C transport

2 *their* (line 15) refers to

A roads

B goods

C sums of money

3 *this* (line 33) refers to

A canal travelling

B a little time

- C how a lock works
 4 *this* (line 45) refers to
 A a decade
 B Birmingham
 C short distance traffic

VARIETIES OF MEANING

- 7 (a) Match each of the different meanings of *see* with the correct explanation (A-G) below.

- 1 I can *see* them in the distance.
 2 I don't know what he *sees* in her.
 3 How long have you been *seeing* Mary?
 4 I'll have to *see* the doctor about it.
 5 'I can *see* her now, standing there in her wedding dress.' 'Yes, it's hard to believe it was all so long ago.'
 6 He keeps on *seeing things*, you know.
 7 She can never *see* a joke.

- A go out with somebody
 B remember, visualize
 C receive an image through the eyes
 D receive an image, apparently through the eyes, that does not correspond to anything physically present
 E understand
 F talk to, ask for advice
 G like about something / somebody

- (b) With which of the above meanings does the word *see* appear in the text?

WORD FAMILIES

- 8 Choose the correct form of the following words to complete each of the sentences below.

DEPEND DEPENDENT DEPENDENCE INDEPENDENT INDEPENDENTLY

- 1 The country is now _____, but it used to be controlled by Spain.
 2 They _____ for their food supplies on imports from another country.
 3 His _____ on his mother increased when his brother died.
 4 These two parts of the motor operate _____.
 5 He was _____ on the money his wife brought in.

IMPERSON- AL CONSTRUC- TIONS

- 9 (a) Look at this sentence from the text: 'It is thought to have been Leonard da Vinci who designed the double swinging gates ...'

Using the prompts below, form sentences like the one above.

- 1 believe / Duke of Bridgewater / build / first canal in England
 2 think / Pythagoras / discover / the world was round
 3 know / Eratosthenes / measure / circumference of the earth
 4 say / Chinese / travel first / America
 5 believe / Chaldeans / originate / our method of calculating time
 6 say / Homer / write / *The Iliad*
 7 know / Chinese / invent / printing
 8 think / Walter Raleigh / introduce / tobacco into Europe
 9 think / Copernicus / propose / earth / go round the sun
 10 believe / Leonardo da Vinci / invent / the first flying machine

- (b) Look at this sentence from the text: 'It is worth taking a little time to consider how a lock works'. The negative form would be 'It is not worth....'.
Using the prompts below, form sentences like those above.
Decide whether to make them negative or positive, and add a justification beginning with 'because...'.
1 worth / visit / Venice because...
2 worth / learn / play the piano because...
3 worth / study / English because...
4 worth / take time / discover how a calculator works because...
5 worth / travel / Australia because...
6 worth / explore / moon / because...

DURING/ FOR

- 10 (a) Look at these sentences from the text:
'Horse-drawn carts were able to move over the dry and dusty cart tracks during the summer months...'
'... more people became interested in travelling on the canals... during their holidays.'

Compare the following sentences:

A I went to London during my holidays.

B I went to London for my holidays.

In sentence A, I went on one or more occasions to London. In sentence B, I was in London the whole time.

During therefore indicates that something happens once, or a few times, in a period, whereas *for* indicates that something happens throughout a given period.

- (b) Match the items in columns A and B to make logical sentences.

A	B
She often played tennis	for a week.
He lived in Mexico	during the night.
She visited Paris	during the summer.
She woke up three times	for the weekend.
He went away	for thirteen years.
She came to stay	during her holiday.

SUMMARY WRITING

- 11 (a) Writing summaries, like taking notes, requires understanding of the most important points in a passage. The question is, of course, how to distinguish what is important from what is not. It is important to realise that there are many different kinds of writing: a text may be primarily descriptive, or narrative; it may provide instructions, or be argumentative; it may be an account of an experiment, or present a series of deductions; it may be a combination of all of these, or it may be something quite different. Texts are structured in different ways according to their functions, and they are as different from one another as human faces are. A summary is a little like a caricature: the picture is still recognizable as so-and-so, but an enormous amount of detail has been left out. A good cartoon allows us to recognize a person immediately; a bad cartoon does not. A good summary allows us to see the points a writer is making; a bad summary does not.

Some kinds of writing contain 'topic' sentences (also called theme or key sentences), often found at the beginning of each paragraph. They can be very useful in telling you what to look for in a paragraph, and even, on occasions,

summarize a paragraph for you. But not all writing and not all writers use such sentences. It must be remembered that an enormous amount of scientific and technical writing is done by scientists and researchers who do not always express themselves as clearly as we would like. It will often be necessary to look further to find the subject of a paragraph. This was the purpose of exercise 2 (b) in this unit: to provide you with a strategy for identifying topics. The repetition of words in a paragraph tells us a great deal about the main points of that paragraph; if a word appears fifteen times in ten lines it is obviously significant, and should be included in a summary. But you must look for more than direct repetition. Pronouns may replace the word, or a synonym may be used instead. Sometimes it is not one word that gives us the clue, but a series of related words: if we see the words 'train, bus, car, plane' in one paragraph we can assume that the paragraph is about transport.

As a general rule in summary writing, replace the specific with the general. Eliminate examples, and simplify complex sentences. Since each paragraph of a text normally contains at least one idea which is an important part of the whole text, summarize paragraph by paragraph unless you can see an alternative structure, as in Unit 8 in this book. If, after summarizing paragraph by paragraph you find that the summary is still too long, then join two ideas together, or eliminate one of them if it seems less important.

- (b) **Underline all the examples in the first eight paragraphs of the text at the beginning of this unit, and indicate what they are examples of.**

PARA- GRAPH WRITING

12

Write a paragraph of about 50 words about a canal system you are familiar with.

UNIT 2

TWO HUMOROUS ANIMAL STORIES BY JAMES THURBER



1 The Moth and the Star

A young and impressionable moth once set his heart on a certain star. He told his mother about this and she advised him to set his heart on a lamp instead. 'Stars aren't the thing to fly around,' she said; 'lamps are the thing to fly around.' 'You get somewhere that way,' said the moth's father. 'You don't
5 get anywhere chasing stars.' But the moth would not listen to either parent. Every evening at dusk when the star came out he would start flying towards it and every morning at dawn he would crawl back home exhausted with the impossible task he had set himself. One day his father said to him, 'You haven't burned a wing in months, boy, and it looks to me as if you were never going to. All your brother have been badly burned flying around street lamps and all your sisters have been terribly
10 burned flying around house lamps. Come on, now, get out of here and get yourself burnt! A big strong moth like you without a mark on him!'

The moth left his father's house, but he would not fly around street lamps and he would not fly around house lamps. He went right on trying to reach the star, which was four and one-third light years, or twenty-five trillion miles away. The moth thought it was just caught in the top branches of an
15 elm tree. He never did reach the star, but he went right on trying, night after night, and when he was a very, very old moth he began to think that he really had reached the star and he went around saying so. This gave him a deep and lasting pleasure and he lived to a great old age. His parents and his brothers and sisters had all been burned to death when they were quite young.

Moral: He who flies far from our sphere of sorrow
20 Is here today and here tomorrow.

2 The Glass in the Field

A short time ago some builders left a huge square of glass standing upright in a field one day. A goldfinch flying fast across the field struck the glass and was knocked unconscious. When he came to, he hurried to his club, where they bandaged his head and gave him a strong drink. 'Whatever
25 happened?' asked a sea-gull. 'I was flying across a field when all of a sudden the air crystallized on me,' said the goldfinch. The sea-gull and a hawk and an eagle all laughed loudly. A swallow listened seriously. 'For fifteen years, baby and bird, I've flown this country,' said the eagle, 'and I assure you there is no such thing as air crystallizing. Water, yes; air, no.' 'You were probably hit by a stone,' the

- 30 hawk told the goldfinch. 'Or he may have had a stroke,' said the sea-gull. 'What do you think, swallow?' 'Why, I—I think maybe the air crystallized on him,' said the swallow. The large birds laughed so loudly that the goldfinch became annoyed and bet them each a dozen worms that they couldn't follow the course he had flown across the field without encountering the hardened atmosphere. They all took his bet; the swallow went along to watch. The sea-gull, the eagle, and the hawk decided to fly together over the route the goldfinch indicated. 'You come, too,' they said to the swallow. 'I—I—well, no,' said the swallow. 'I don't think I will.' So the three large birds took off together and they hit the glass together and they were all knocked unconscious.

Moral: He who hesitates is sometimes saved.

EXERCISES

BEFORE READING

1

Before reading the text, think about the following questions. Discuss them in groups.

- 1 Have you read any fables (stories in which animals represent people)?
- 2 What is the purpose of fables?
- 3 Do you think fables are only suitable for children?
- 4 What do you know about the habits of moths?

WORD SCAN

2 (a)

Assign a number to each of the following words, like this:

- 1 *The Moth and the Star*
 - moth 1
 - star 2
 - lamp 3
 - burn/ed 4
 - parents, father, mother, brother, sisters 5
- 2 *The Glass in the Field*
 - glass 1
 - bird, goldfinch, sea-gull, hawk, eagle, swallow 2

- (b) Now, as in previous units, write the appropriate number in the margin every time a corresponding word appears, including any pronouns which replace the words.

COMPRE- HENSION SCAN

3

Answer the following questions.

- 1 *The Moth and the Star*
 - 1 Why didn't the moth want to fly round lamps?
 - 2 Why did the moth's parents want him to fly round lamps?
 - 3 Did the moth's father think it was a good thing or a bad thing that his children had been burned?
 - 4 Did the moth reach the star?
 - 5 Does James Thurber think the moth acted correctly? Explain your answer.
- 2 *The Glass in the Field*
 - 1 The birds in the passage act very much like humans. Underline those parts of the passage (like *club*) which show you that the writer is treating the birds as if they were human.

- 2 Why does the goldfinch say that the air crystallized on him?
- 3 What is the eagle referring to when he speaks of water crystallizing?
- 4 The moral of this fable is a variation on an old proverb, 'He who hesitates is lost.' Think of a situation where this proverb might be applicable. Which do you prefer, the traditional proverb, or Thurber's version? Explain your answer.

VOCABULARY

- 4 (a) Find words and expressions in the texts that mean approximately the same as the following words or phrases.

Text 1

paragraph 1: decide to get something at any cost; the time of day **before** it is completely dark; sunrise

paragraph 2: permanent

Text 2

(in different parts of the text): construction workers; left senseless; recover consciousness; put strips of cloth on the wound; harden; promise; an attack affecting the brain; creatures often eaten by birds; air; agreement to give money or something valuable on winning or losing

- (b) Now use the words you have found to fill the gaps in the sentences below.

- 1 He was _____ in the first round of the fight.
- 2 He had always eaten and drunk too much, and finally he had a _____.
- 3 In the hospital, they put a _____ on his leg.
- 4 After a few days, the water evaporates and the salt _____.
- 5 'I _____ you a million pounds you couldn't do it!'
- 6 He was digging for _____ to put on the fishing line.
- 7 He had _____ on winning at the Olympics.
- 8 This record will give you _____ enjoyment.
- 9 The cows come home at _____.
- 10 He didn't get back from the party until it was almost _____.
- 11 He _____ a week later and had no idea what had happened.
- 12 At the top of Mount Qomolangma (Everest), the _____ is very thin.
- 13 The _____ left the roof worse than it had been when he arrived.
- 14 The politician _____ them that he would solve all his country's problems.

COHESION 5

Choose the most suitable completion for each of the following sentences.

(All the questions in this section refer to *The Glass in the Field*)

- 1 *and was knocked unconscious* (line 23) means
 - A and the goldfinch was knocked unconscious
 - B and the glass was knocked unconscious
 - C and the field was knocked unconscious
- 2 In *where they bandaged his head* (line 24), 'they' refers to
 - A the builders
 - B a sea-gull and a hawk
 - C a sea-gull and a hawk and an eagle
 - D the passage does not say

- 3 *baby and bird* (line 27) means
 A the hawk and the sea-gull
 B the goldfinch
 C when you were a baby and I was an adult
 D as a baby bird and as an adult bird
- 4 *I've flown this country* (line 27) means
 A I've flown into this country
 B I've flown all over this country
 C I've flown across this country

VARIETIES OF MEANING

- 6 (a) Match each of the different meanings of *mark* with the correct explanation (A-H) below.
- 1 I don't want this book, it's got a *mark* on it.
 - 2 You'll be sorry, you *mark* my words.
 - 3 On your *marks*, get set, go!
 - 4 'How did you get on in the exam?' 'Oh, I got quite good *marks*.'
 - 5 She has a birth *mark* on the back of her neck.
 - 6 Have you *marked* the test yet?
 - 7 This watch cost me fifty *marks*.
 - 8 I see you've got a *Mark 2* model.
- A lines drawn on the ground
 B grade in a test
 C pay attention to
 D German money
 E something that spoils the appearance of an object
 F to grade a test
 G used for numbering models of cars, planes etc
 H distinguishing feature
- (b) With which of the above meanings does the word *mark* appear in the text?

WORD FAMILIES

- 7 Choose the correct form of the following words to complete each of the sentences below.

CERTAIN CERTAINLY CERTAINTY UNCERTAINTY

- 1 It seemed _____ that he would lose.
- 2 I wish I knew if he was alive or dead; the worst thing is the _____.
- 3 He now realised that his defeat was a _____.
- 4 The film has _____ good points.
- 5 I _____ enjoyed it!

TENSE

- 8 Fables normally invite us to consider what the consequences might have been if the characters had not acted as they did. As we read, we tend to think things like this: 'If the moth had followed his father's advice, he would have burned to death at an early age', or 'If the swallow had not refused to fly with the other three birds, he would have been knocked unconscious'.
- The grammatical structure of these sentences is known as the third conditional, and its basic pattern is