

Breakthrough to learning

by Mary Mason



Fasttrack



Answer book

Part 1 - Describing Language

Chapter 1 – Levels of language

Page 2	Exercise 2	For example: nip, sip, din, pin 1. the 2. Bobby 3. netball 4. kicked
3	3	For example: 1. Do some people not enjoy computer games? 2. Our family did not get a holiday this year. 3. I could go home early.
9	4	For example: 1. Hermann doesn't believe in ghosts, because he has never seen one. 2. She dyes her hair, which is naturally brown. 3. It's so cold today that we don't want to go outside.
10	5	4 1 6 3 7 5 2
11	6	5 3 1 7 4 2 6 8
12	7	1. spelling 2. grammar 3. complex 4. paragraph 5. stories

ANSWERS

Part 2 - The Patterns of academic texts

Chapter 2 – Problem-solution

Page 9	Exercise 1	<p>Situation: For my project in media studies I had to devise an alternative opening to "Brookside".</p> <p>Problem: As pictures of Brookside Close proved to be rare,</p> <p>Solution: I decided to use photographs of Liverpool to introduce the soap opera.</p> <p>Outcome: I think my opening shows a soap opera very much more involved with the city of Liverpool.</p>			
10	2	<p>Exercise 2</p> <p>A.2.(Sit), 4.(P), 1.(Sol), 3.(O),</p> <p>B.2.(Sit), 4.(P), 3.(Sol), 1.(O),</p> <p>C.4.(Sit), 1.(P), 3.(Sol), 2.(O),</p> <p>D.3.(Sit), 2.(P), 4.(Sol), 1.(O),</p>			
11					
12	3	A.2	B.4	C.1	D.3
15	4	<p>Situation: Background, Starting-point, State of affairs, What things were like before we started</p> <p>Problem: Task, Difficulty, Purpose, Need, Question, Gap in knowledge, What we had to do</p> <p>Solution: Action, Response, Answer, What we did about things</p> <p>Outcome: Comment, Result, Success, What happened as a result of our action</p>			
16	5	A. 2, 3, 4, 1.	B. 2, 3, 1, 4.	C. 3, 1, 4, 2.	

ANSWERS

Chapter 4 – General - particular: contraction

Page
27

Exercise
1

1. Rich people could afford to be fussy. (especially, such as)
2. In my opinion a good education should leave you a lot more independent. (include)
3. In both countries personal freedom was limited. (For instance)
4. Perennials are plants which do not die during the winter months. They persist, either with some foliage above ground or in dormant underground forms. (as, as)
5. During the week had no respect for them. (For example)

28

2

1. Perennials are plants which do not die during the winter months.
2. During the week when the ten Comprehensive School students spent time at a famous Public School, their views changed drastically.
3. The towers were judged by two teachers. Our tower won.
4. It is necessary to decide which type of drawing board will be suitable for my use.
5. President Truman now had an extra weapon at his disposal. It was the atomic bomb.

30

3

For example:

- | | |
|------------------------------|--|
| 1. New sporting facilities | 2. Offal |
| 3. What is a good education? | 4. Personal freedom in Italy and Germany |
| 5. Perennials | 6. Result of tower competition |
| 7. Making a drawing board | 8. A new weapon |

31

4

For example:

- | | |
|------------------------------|--------------------------------------|
| 1. Riots suppressed | 2. A quick method of bread-making |
| 3. Extracting sulphur | 4. How to put a fire out |
| 5. Using chicken left-overs | 6. Renewing Shanghai's sewage system |
| 7. Salmonella mystery solved | |

Chapter 5 – Ordering (1)

Page	Exercise
34	1

For example:

1. Not all pop stars are wild irresponsible people. For instance, Sebastian of Skid Row became the man of the house helping to bring up his little brother and sister, when his parents divorced. Sybil was good at school and got a degree in Speech and Theatre Arts. Her songs show she cares about big public issues.

The Language of Pop Magazines

2. Every group has its own special language and pop magazines are a good example of this.

You find long lists of adjectives that you don't find anywhere else. For instance, "dancey dancey - housey - hippy - hoppy - happy- rappy".

There are good words for when people are talking. Lisa Stansfield "twirnups", for example, and Sebastian "drools".

Sometimes the writers try to sound as though they are speaking. One letter writer uses emphasis - "I'm one mean rocker." He also writes "I lurve" and starts his letter with "Hi". In a piece about Kylie Minogue, the writer also imitates speech. He says "Does it work? Well, Yeeees, sort of", and later puts "Maan" in brackets.

3. The names have changed and so has the style.

ANSWERS

Page
36

Exercise
2

1. Alphabetical.
2. Put the ones with the hardest water first and those with the softest last.
3. Birmingham and Nottingham (variable)
4. Bournemouth 5
Norwich 5
Oxford 5
Coventry 4-5
Newcastle 4
York 4
Stoke-on-Trent 3-4
Cambridge 3
Leicester 3
Edinburgh 2-3
Belfast 2
Derby 2
Exeter 2
Aberdeen 1
Bradford 1
Cardiff 1
Glasgow 1
Liverpool 1
Manchester 1

5. For example

The Hardest Water In the United Kingdom

I have always found our water hard here in Oxford, but recently I saw a table giving the comparative hardness of water in the 21 major cities of the United Kingdom. Oxford water is the hardest of all, equalled only by Bournemouth and Norwich! All the others have softer water than we do - six cities have really soft water, including Aberdeen and Liverpool. I hope the citizens of Oxford will not have to struggle forever with the problems created by hard water.

Page 38	Exercise 3	1. c, a, d, b, e 2. b, a, c 3. c, a, b 4. d, b, e, f, a, c
39	4	He starts on the outside of the diagram and works his way in.
40	5	4, 6, 1, 3, 5, 7, 2

Chapter 6 – Ordering (2)

Page 43	Exercise 1	1.C. A. B. 2.C. B. A.
45	2	Advantages: 6, 2, 5, 7. Disadvantages: 4, 1, 3, 8,
46	3	Advantages: 1, 4, 5, 8. Disadvantages: 2, 3, 6, 7.

Chapter 7 – Compare and contrast

Page 48	Exercise 1	Jenny and Claire	
		Same	Different
	Looks	✓	
	Clothes		✓
	Taste in men	✓	

ANSWERS

Page
49 **Exercise**
3

	The Beeches	The Fox
Hotel?	yes	no
Service	silver	plate
Dinner	yes	no
Seating in restaurant	less	more
bars	less	more
Prices	high	low
Hygiene rules		same
Overheads		same
Management of staff		same
Delivery of food		same
Special functions	yes	yes

51 **4**

A. Comparing three victoria sandwich cakes

	Home-made	Packet Mix	Bought
Time to make	longer	shorter	
Oven temperature	gas 4 (180°C)	gas 5 (190°C)	
Eggs	2	1	
Weight	433g	315g	227g
Height	tallest		
Colour			palest
Cost	33p	between 33p and 65p	65p

Page **Exercise**
51 **4**

B. Materials for kitchen units

	Strength	Weight	Working	Looks	Cost
Steel	strong	light			expensive
Plastic	strong	light	difficult		cheaper
Chipboard	weaker	heavy	some problems		
Hardboard	flimsy				cheap
Woods			harder		expensive
Plywood	strong			veneer needed	

C. Fascism In Italy and Germany

	Germany	Italy
Support		company owners, landowners, farmers
Gaining power		armed force
Communist Party		banned
Personal Freedom		limited
Extermination of minorities	Jews and gypsies	no
Concentration camps	yes	no

ANSWERS

Page **Exercise**
52 **5**

3. the main difference, different, while, unlike, more than, So do, a lot higher than, basically the same, both, both
4. **A.** Comparing, compared, longer, different, while, and, and, the tallest, the palest looking, the most expensive, the cheapest
- B.** weigh less, not as expensive as, one of the cheapest materials, harder to work with, more attractive
- C.** both, both, both, both, but, Nor, as

53 **6**

For example:

- A.** The annual rainfall in Lisbon (Portugal) is 708 mm, but in Bergen (Norway) it is 1930 mm.
- B.** The amount of water available per head of population in Finland is 21.33 thousand cubic metres, whereas in Malta it is 0.07.
- C.** In Manila the rainfall in January is 18 mm, but in July it is 253 mm. However, in Jakarta, the January rainfall is 335 mm and the July rainfall 61 mm.

54 **7**

For example:

- A.** The annual rainfall in Lisbon (Portugal) is less than half that in Bergen (Norway), being 708 mm and 1930 mm respectively.
- B.** The contrast between the amount of water available per head of population in Finland and Malta is very marked: in Finland it is 21.33 thousand cubic metres, while in Malta it is only 0.07 thousand cubic metres.
- C.** The wet and dry seasons in Manila and Jakarta are opposite. In Manila the rainfall in January is only 18mm, but in July it is 253mm. In Jakarta, by contrast, the January rainfall is 335mm, whereas the July rainfall is only 61mm.

Page
55 **Exercise**
8

For example:

- A.** Water for rich and poor
- B.** Bee and wasp stings
- C.** Newspapers in U.K. and Pakistan

56 **8**

For example:

The comparison is pointed up in the second version (horizontal). A clearer picture of each individual is given in the first (vertical).

57 **10**

For example:

June and Jessie - vertical

June is sixteen years old and her birthday is in June. She is short and stocky in build. Her school performance is fair and she is interested in fashion and music.

Jessie is seventeen with her birthday in December. She is tall and thin, and her school performance is usually good. She enjoys sport and music.

June and Jessie- horizontal

June is a little younger than Jessie. She is sixteen, while Jessie is seventeen and a half. June's birthday is in June, and Jessie's is in December. June is short and stocky in contrast to Jessie, who is tall and thin. Jessie is better than June at school work - hers is usually good, but June's is only fair. They both like music, but June is keen on fashion and Jessie is fond of sport.

ANSWERS

Page 57 Exercise 11

For example:

A Comparison of Junior and Secondary Schools - vertical

Children go to Junior School between the ages of 7 and 11. They are in classes of between 30 and 40 and have the same teacher for most subjects. They have to do all the subjects offered. Junior schools usually have between 100 and 200 pupils.

Students go to Secondary School between the ages of 11 and 16. They are in classes of between 20 and 30. They have specialist teachers, different ones for each subject. They are offered a range of subjects and have some choice in what they study. Secondary schools are large with between 800 and 2000 students.

58 12

	mercury	alcohol
Expands more evenly	✓	
Expands more		✓
A better conductor	✓	
Useful at high temperatures	✓	
Useful at low temperatures		✓

Part 3 - The words of academic English

Chapter 8 – Latin words in academic English

<p>Page 60</p> <p>Exercise 2</p>	<p>un + help + ful self + ish + ness beast + li + ness mis + spell + ing dis + grace + ful + ly hope + less</p> <p>For example: unhappy, undo displease, discover mistake, misfortune</p>
<p>61</p> <p>2</p>	<p>For example: happiness, quietness thinking, dreaming greenish, smallish friendly, brightly thankful, playful</p>
<p>61</p> <p>3</p>	<p>The words split up:</p> <ol style="list-style-type: none"> 1. un + ironed and un + needed 2. sincere + ly and faithful + ly 3. dis + agreeable and dis + similar 4. the y changes to i because we rarely have y in the middle of a word.

ANSWERS

Page 62 **Exercise** 4

1. A measure of temperature divided into a hundred steps
2. A measure of length divided into a hundred parts
3. An insect with a hundred legs (give or take a few!)
4. A person who is a hundred years old
5. A hundredth part of a dollar
6. A hundredth anniversary

Latin: gradus – step pes, pedis – foot

For example: *gradation* (rising step by step), *grade*, *gradient* (degree of slope), *graduate* (a person who has passed the grades and so has a University degree), *degrade* (to reduce the status of), *regrade* (to change the status of)
pedestrian (a person who goes on foot), *pedal* (a lever pressed by the foot), *pedestal* (the foot of a column), *pedicure* (treatment of the feet), *pedometer* (an instrument for measuring how far one has walked), *impede* (to hinder), *expedite* (to hasten)

Greek: kentron – a sharp point

63 **5**

1. b 2. d 3. a 4. b 5. a 6. c 7. d 8. a

64 **6**

- | | | |
|----------------------|-------------------------|----------------------|
| a) pre-Conquest | b) post-natal | c) sub-marine |
| d) re-address | e) superannuated | |
| 1. post-natal | 2. superannuated | 3. re-address |
| 4. submarines | 5. pre-Conquest | |

65 **7**

- 1.** C **2.** D **3.** E **4.** A **5.** B
- | | | |
|----------------------|--------------------------|----------------------|
| 1. posterity | 2. pre-fabricated | 3. redecorate |
| 4. superhuman | 5. sub-human | |

66 **8**

- | | | | |
|-------------------|------------------|-------------------|-------------------|
| 1. avert | 2. revert | 3. divert | 4. pervert |
| 5. convert | 6. invert | 7. subvert | |

Chapter 9 – Greek words in academic English

Page	Exercise										
68	2	1. e 2. f 3. b 4. d 5. c 6. a									
69	3	For example: microphone, microscope, microbiology, microsurgery, phonograph, phonetician, microphone, homophone, graphite, biography, photograph, graphic, graph, photography, photosynthesis, photofinish, photosensitive, scope, microscope, stereoscopic, telescope, telephone, telescope, telepathy, telegraph, telecommunications.									
69	3	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. photography</td> <td style="width: 33%;">2. microscope</td> <td style="width: 33%;">3. telescope</td> </tr> <tr> <td>4. telephone</td> <td>5. microphone</td> <td>6. geology</td> </tr> <tr> <td>7. phonology</td> <td>8. microbiology</td> <td></td> </tr> </table>	1. photography	2. microscope	3. telescope	4. telephone	5. microphone	6. geology	7. phonology	8. microbiology	
1. photography	2. microscope	3. telescope									
4. telephone	5. microphone	6. geology									
7. phonology	8. microbiology										
70	4	<p>1. C 2. D 3. E 4. A 5. B</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. hypothermia</td> <td style="width: 33%;">2. paranormal</td> <td style="width: 33%;">3. anti-cyclone</td> </tr> <tr> <td>4. hypersensitive</td> <td>5. dialysis</td> <td></td> </tr> </table>	1. hypothermia	2. paranormal	3. anti-cyclone	4. hypersensitive	5. dialysis				
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4. hypersensitive	5. dialysis										
71	5	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1. sympathy</td> <td style="width: 33%;">2. antipathy</td> <td style="width: 33%;">3. apathy</td> </tr> <tr> <td>4. empathy</td> <td>5. telepathy</td> <td></td> </tr> </table>	1. sympathy	2. antipathy	3. apathy	4. empathy	5. telepathy				
1. sympathy	2. antipathy	3. apathy									
4. empathy	5. telepathy										

ANSWERS

Page **Exercise**
72 **6**

phlebitis	inflammation of the veins
appendicitis	inflammation of the appendix
arthritis	inflammation of the joints
dermatitis	inflammation of the skin
pneumonia	illness of the lungs
neuritis	inflammation of the nerves
tonsillitis	inflammation of the tonsils
anaemia	without blood

haematologist	blood
neurologist	nerves
gynaecologist	women
dermatologist	skin
ophthalmologist	eyes
geriatrician	old people
paediatrician	children

appendectomy	cutting out of the	appendix
hysterectomy	cutting out of the	womb
tonsillectomy	cutting out of the	tonsils
pneumonectomy	cutting out of the	lung
mastectomy	cutting out of the	breast

Part 4 - Grammar

Chapter 10 – Nouns

Page 74	Exercise 1	1. bulb 2. switch 3. battery	1. B 2. C 3. A
77	4	1. petal 2. stem 3. leaf 4. root	5. well 6. south-west tower 7. outer gate 8. east wall
78	5	1.C	2.E 3.B 4.A 5.D

Chapter 11 – Verbs

Page 80	Exercise 1	For example: Touch your knee. Write your name. Groan .			
81	3	invaded	murdered	dropped	built broke out
		1. built	2. dropped	3. invaded	
		4. broke out	5. murdered		
	4	1.D	2.C	3.E	4.B 5.A
82	5	For example: I brush my teeth. I comb my hair. I drink some milk. (present tense) I brushed my teeth. I combed my hair. I drank some milk. (past tense)			

ANSWERS

Chapter 12 – Sentences

Page
84

Exercise
2

- | | Verb |
|----|-------------|
| 1. | growl |
| 2. | swim |
| 3. | twitter |
| 4. | sneezed |
| 5. | collapsed |
| 6. | sparkles |

- | Subject | Verb |
|----------------|-------------|
| 1. Lions | growl |
| 2. Fishes | swim |
| 3. Birds | twitter |
| 4. The child | sneezed |
| 5. The house | collapsed |
| 6. The sea | sparkles |

85 **2**

- | Subject | Verb | Object |
|----------------|-------------|---------------|
| 1. Lions | eat | meat |
| 2. Fishes | lay | eggs |
| 3. Birds | build | nests |
| 4. The child | read | a book |
| 5. The house | cost | a fortune |
| 6. The sea | destroyed | the ship |

86 **3**

- | For example: | Subject | Verb | Object |
|---------------------|----------------|-------------|---------------|
| | Children | love | snakes |
| | Spiders | hate | cats |
| | Dogs | kill | rabbits |

Chapter 13 – Adjectives

Page 88	Exercise 1	1. carpet pencil candle 2. throw grab choose		
		comfortable blue large		
		For example: (a) blue jumper (the) large castle		
89	3	Adjective	Comparative	Superlative
		clever	cleverer	the cleverest
		big	bigger	the biggest
		cheerful	more cheerful	the most cheerful
		happy	happier	the happiest
		interesting	more interesting	the most interesting
		good	better	the best
90	4	1. green-and-yellow	2. blue	3. neutral
		4. earth	5. live	6. brown

Chapter 14 – Active and passive

Page 92	Exercise 1	Subject	Verb	Object
		1. Lions	eat	meat
		2. Caterpillars	eat	cabbage
		3. Sharon	groomed	the dog
		4. Chris	broke	the window
		5. The Americans	dropped	the bomb
		6. Shasta	likes	Science

ANSWERS

Page **Exercise**
94 **2**

1. The table was laid for tea (by Joe).
2. The fuse was mended (by Doreen).
3. A fire was started in the shed (by someone).
4. Football is played all over the world.
5. People are killed and injured on the roads every day.
6. The tin-opener was lost (by me).
7. The rat was allowed to die (by the scientist).
8. The castle is haunted.
9. The burglar was caught (by the police).
10. The factory will be closed (by the government).

1. The scientist lit the bunsen burner.
2. I set the stage.
3. My grandmother lit the lamp.
4. The town team did not win the shield.
5. Poland will win the World Cup.
6. No-one will win the next war.
7. Someone must have explored Greenland.
8. The rivers carry soil away.
9. Every year people cut forests down.
10. Someone should have turned the tap off.

95 **3**

The coastline is indented by narrow inlets called "fjords"
The high plateaus or "fjellen" are covered by (in) snow ...

The steep slopes can be used

The cattle are taken

The milk from the cattle is sold

Mountain streams may be used

It is then transported

The cattle are kept

They are fed on

Page 96	Exercise 4
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The experiment was set up as shown in the diagram. The ruler was suspended at a point to one side of its centre of gravity. Weights were hung on the shorter side of the ruler and moved about until the ruler was in equilibrium, i.e. balanced. The distance between the weights and the pivot and the centre of gravity was measured. The weights were placed on the top pan balance to find their mass. All results were recorded.

Part 5 - The language of ideas

Chapter 15 – Classification

Page 98	Exercise 1
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reptiles snake toad lizard
mammals whale human monkey donkey mouse dolphin
fish cod pike plaice shark
birds sparrow duck hawk penguin eagle

99	2
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Concrete nouns: foot, lion, animal, earth, bread, stone, oak
Abstract nouns: condition, peace, hope, idea, harmony

3

1. power source 2. genre 3. precipitation
 4. dynasty 5. footwear

100	4
------------	----------

For example: Size – huge, tiny, little
 Temperature – cold, freezing, warm
 Meanness – careful, fair, extravagant
 Age – young, aged, ancient
 Wealth – comfortable, poor, rich

ANSWERS

Page
101 **Exercise**
6

Temperature – freezing, cold, chilly warm, hot
 Meanness – stingy, careful, fair, generous, extravagant
 Age – young, middle-aged, elderly, aged, ancient
 Wealth – destitute, poor, comfortable, well-off, rich

102 **7**

1. Science subjects use mathematics as well as language.
2. For example: Psychology, Sociology, Economics
4. Geography: Oceanography, Meteorology, Geology etc.
 Technology: Cookery, Mathematics, Metalwork etc.
 Mathematics: Statistics, Arithmetic, Geometry, Algebra etc.

Chapter 16 – Qualities and conditions

Page
105 **Exercise**
2

unkindness	generosity	intelligence
stupidity	niceness	competence

1. meanness/cruelty/stupidity
2. brevity/length/readability (readableness)
3. smartness/cheapness/durability

106 **3**

dryness	wet(ness)	dampness	ripeness
rottenness	moisture	warmth	

1. warmth/cheerfulness/silence
2. dryness/heat/cold/wet(ness)
3. illness/poverty/loneliness

107 **4**

- 1.

Page 108	Exercise 5	<p>It gets colder as you go up a mountain. As the height of the land increases, the heat decreases. As the altitude increases, the temperature decreases.</p>	
109	6	<p>1. height 5. latitude 9. time spent in exercise</p>	<p>2. weight 6. temperature 10. health</p>
110	7	<p>1. secrecy 4. absence</p>	<p>2. difficulty 5. ingenuity</p>
8		<p>Noun</p> <p>dryness humidity altitude distance age temperature</p>	<p>Adjective</p> <p>arid moist high far young cool</p>

ANSWERS

Chapter 17 – Processes

Page 112	Exercise 1	1. thought	2. decision	3. hatred	4. pleasure
		5. feeling	6. dream	7. expectation	8. excitement
		9. fear	10. suffering		
113	2	greeting, operation, ascent, growth, pressure, contemplation, thought, amendment			
113	3	2.	4.	5.	8. 9.
114	4	<p>Geography: land-use, locations, specialization, planning (human actions), growth</p> <p>Cookery: Fish Cookery: classification, recognition, composition, value (Latin: valere – to be worth), choice, storing, preservation, preparation, cooking, effect</p> <p>Milk, cookery fats and oils: value, production, storage, preservation, composition, digestion, contamination (natural)</p> <p>Physics: Heat: measuring (human), expansion, conduction, convection, radiation, changing (natural)</p> <p>Mechanics: pushes, pulls, pressure, floating, sinking, force (Latin: fortis – strong), energy (Greek: ergon – to work), power (French: pouvoir – to be able), velocity (Latin: velox, velocis – swift), acceleration (Latin: celer – swift) (natural)</p> <p>Biology: translocation, transpiration, diet, digestion, absorption, metabolism, composition, function, circulation, breathing, excretion, control, reproduction, movement (natural)</p>			

Chapter 18 – Variables

Page 116	Exercise 1	1. reproduce	2. absorb	3. toxin	4. flourish
		5. culminate	6. deteriorate	7. intervene	8. inhibit
		9. process	10. preservation		
119	2	1. T	2. T	3. F	4. F
		5. T	6. T	7. T	8. T
		9. F	10. T		
119	3	preservation	food	decay	action
		breakdown	effect	speeding up	process
		destruction	browning	growth	storage
		freezing	heating	understanding	
120	3	warmth		presence	
120	3	temperature			
120	4	100°C	116°C		
120	4	thermometer			
120	4	death of micro-organisms in food			

ANSWERS

Chapter 19 – Factors

Page	Exercise	
125	4	Climate: amount of sunshine; temperature; seasons; precipitation Landscape: kind of rocks; vegetation; rivers, lakes etc.; relief Plant growth: sunshine; water; soil; temperature
126	5	Historians limit what they study in time (e.g. 1700–1750), place (e.g. the British Isles) aspect (e.g. political/economic/social etc.)
127	6	12: 2, 3, 4, 6. 49: 7. 100: 2, 4, 10, 20, 25, 50 5

Chapter 20 – Instructions/Systems

Page	Exercise	
130	1	1. sugar 2. flour 3. margarine 4. S.R. (baking powder), egg 5. coconut
131	2	1. E 2. D 3. A 4. B 5. C

Page **Exercise**
132 **3**

1. For example: Turn left out of the side entrance of Euston Station. Walk along Cardington Street. Cross the Euston Road. Continue in the same direction along Gordon Street to the end of Gordon Square. Turn right then take the second left (Malet Street) to the end. The British Museum is opposite.

2. For example: Turn right out of the British Museum along Montague Street. Cross Russell Square Gardens opposite. Turn left on Woburn Place and continue in the same direction, crossing Gordon Square and Euston Road to the side of Euston Station.

3. As 2 to Russell Square Gardens. (Tavistock Square Gardens also shown.)

4. Continue along Montague Street until you come to Gower Street. Turn right along Gower Street. University Street is the third on the left. The University Maternity Hospital is on the left on University Street.

134 **4**

the solvent may be used
 The mixture is added to water, warmed and stirred
 The mixture is then filtered
 The residue is washed and dried
 It is collected
 The filtrate is evaporated

135 **5**

1. dissolving	2. filtering	3. evaporating
4. salt	5. sand	6. salt

ANSWERS

Page 135	Exercise 6	1. water	2. dissolved	3. filter	
		4. filtrate	5. evaporated	6. residue	
136	7	(a). solids	(b). solvent	(c). filtering	(d). evaporating
137	8	<p>For example: Instructions for separating a mixture of sodium carbonate and calcium carbonate</p> <ol style="list-style-type: none"> 1. Add the mixture of sodium carbonate and calcium carbonate to water. 2. Heat the water until the sodium carbonate has dissolved. 3. Filter the mixture. 4. Remove the calcium carbonate from the filter paper. 5. Boil the sodium carbonate and water until the water has evaporated. 6. Remove the sodium carbonate from the beaker. 			
138	9	1. Adding	2. Warming and stirring	3. Pouring	
		4. Removing	5. Boiling	6. Removing	

Chapter 21 – Structures/Functions/Systems

Page 140	Exercise 1	1. well	2. south-west tower	3. outer gate	4. east wall			
141	2	1. petal	2. stem	3. leaf	4. root			
142	3	1. E	2. C	3. F	4. D	5. G	6. A	7. B

ANSWERS

Chapter 23 – Using variables and systems

Page	Exercise			
156	1	All except political opinions and religion (probably). You cannot change your heredity.		
157	2	1. weight	2. upthrust	3. weight
		4. reaction	5. weight	6. lift
159	3	1. (a) and (d)	2. (b)	3. (c)
160	4	1. climate	2. landscape	
		For example: 1. wind	2. sea, lakes	
161	4	light	water	soil
163	6	Wrong	Correct	
		Gobi	Sahara	
		hilly	flat	
		cold	warm	
		cool	very hot	
		very high	very low	
		many crops	only a few thorny bushes	
		possible	impossible	

Page **Exercise**
163 **6**

Wrong

the same as
Thames
East
West
summer
freezes
to dry up
very little silt

Correct

quite different from
Nile
South
North
winter
melts
to flood
a great deal of silt

During this century
nowadays
in the past
Doors
boat

for thousand of years
traditionally
now
Channels
silt

commercial
apples
elephants
tea

subsistence
wheat
cattle
dates and citrus fruits

fishing
river
rainfall
industry

agriculture
land
sunshine
agriculture

164 **7**

- | | | |
|------------------------------|--------------------------|-------------------------------|
| 1. very cold | 2. cool | 3. heavy |
| 4. mountainous | 5. little | 6. snow and rain |
| 7. little | 8. animal farming | 9. milk, cheese etc. |
| 10. oats, barley etc. | | |
| 11. hot | 12. very hot | 13. none |
| 14. flat | 15. a lot | 16. flooding of river |
| 17. a lot | 18. crop-growing | 19. cotton, dates etc. |
| 20. maize, wheat etc. | | |

ANSWERS

Chapter 24 – Theory and practice

Page	Exercise	
166	1	1. C. 2. E. 3. B. 4. F. 5. D. 6. A.
168	2	For example: 1. What happens to cheese in the stomach? 2. What is the source of the infection? 3. How is the weather created?
168	3	A. 2. B. 3. C. 1.
168	4	For example: 1. What is the chemical composition of hard water? 2. What has changed since the times when there was enough food? 3. How can you kill wasps? 4. How can we kill the enemy without being killed ourselves? 5. What other sources of energy are there? 6. What happens to food in the body? 7. What has caused wars and revolutions in the past? 8. What do these creatures need to stay alive? 9. How do you keep accounts? 10. What causes cancer?
169	5	For example: 1. Chemistry 2. Geography, History 3. Biology, Chemistry 4. Physics, Chemistry, History 5. Physics, Geography 6. Biology, Home Economics 7. History 8. Biology 9. Mathematics, Commerce 10. Biology, Chemistry

Page 169	Exercise 5	Engineering: 4, 5. Ecology: 2, 3, 4, 5, 8. Economics: 2, 4, 5, 7, 8, 9. Psychology: 2, 4, 6, 7, 10. Bio-chemistry: 3, 4, 6, 10.
171	7	1. C. 2. F. 3. B. 4. D. 5. G. 6. A. 7. E.
172	8	For example: 1. The Function of Eyelids 2. The Prevention of Bacterial Contamination of Food 3. How Plants Store Food 4. Stages of Development 5. U.S. Policy after the First World War 6. Fuels 7. X-Rays
172	9	1. How do you plan new developments in old towns? 2. What are fertilizers used for? 3. How are molecules made up? 4. What led to the First World War? 5. How does the blood circulate round the body? 6. What is the composition of air?
173	10	1. What is a force? 2. What are the vocal cords and how do they work? 3. What changes have occurred in the patterns of human settlement in the Chilterns? 4. What is the effect of using chemicals to control insect pests? 5. Who were the poor in the nineteenth century?

ANSWERS

Page
173 **Exercise**
11

For example:

1. Forces
2. The Structure and Function of the Vocal Cords
3. Changes in Settlement Patterns in the Chilterns
4. Chemical Control of Insect Pests
5. The Condition of the Poor in Nineteenth Century England

174 **12**

Chemists: measuring equipment, graphs, gas jars, bunsen burners, computers, statistics, centrifuges, language
Geographers: measuring equipment, documents, aerial photographs, graphs, computers, statistics, maps, language, questionnaires, geometry
Physicists: measuring equipment, telescopes, graphs, bunsen burners, computers, statistics, algebra, centrifuges, language
Historians: measuring equipment, documents, aerial photographs, graphs, computers, statistics, maps, language, questionnaires
Biologists: measuring equipment, graphs, computers, statistics, maps, language

Chapter 25 – Problem/Solution in examination questions

Page
178 **Exercise**
1

A.6. B.2 C.4. D.5. E.1. F.3. or
A.6. B.5. C.1. D.2 E.4. F.3.

179 **2**

A. Problems E F
B. Solutions before C19 G A C
C. Solutions during C19 B D

Page 180	Exercise 3	<p>1. c. 2. a. 3. b.</p> <p>2. a. is very general - disease. The others are particular - germs and bacteria.</p>
181	4	<p>You are asked for one example.</p> <p>For example: The spread of disease in humans can be halted by killing the bacteria which cause food to become poisonous by freezing them.</p> <p>Or: The spread of disease in humans can be halted by vaccination, which means that germs have fewer hosts to infect.</p>
182	5	<p>A. 4. B. 3. C. 1 D. 2.</p>
182	6	<p>1. b. 2. a. 3. d. 4. c. 5. e.</p>
183	7	<p>dehydrated soup: 2. pickled onions: 1,3,4 crusty bread: 5</p> <p>You are asked for one reason.</p> <p>For example:</p> <p>(a) Dehydrated soup is packaged in a foil-lined packet because this is a strong material and the sharp points of the soup will not penetrate it.</p> <p>(b) Pickled onions are packed in a glass jar, because glass will not react with the acid in the vinegar.</p> <p>(c) Crusty bread needs to be kept clean yet has to be exposed to the air to remain crisp. A wrapping with holes in it is therefore used.</p>

ANSWERS

Page 185	Exercise 9	2. 4. 3. 1.
185	10	Solution.
185	11	Question: How do you get the salt out of sea-water? Answer: By distillation.
185	12	For example: Purifying petrol, making alcoholic drinks
186	13	evaporation and condensation
188	14	1. b 2. d 3. a 4. c
188	15	One word. Photosynthesis
190	16	1. b 2. a 3. a

Chapter 26 – General/Particular in examination questions

Page 192	Exercise 1	C
193	2	For example: The heroines of most novels have basically good characters. Otherwise we would not find them sympathetic. But they may have weaknesses. For example, Silas Marner is a miser. In many novels the hero or heroine is poor. For example, Oliver Twist was born in the workhouse. A hero or heroine has to suffer. For example, Jane Eyre nearly dies, penniless and alone, on the moor.

Page	Exercise
194	3

b

195	5
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Page 179: History. *First sentence:* The development of surgery before the nineteenth century. *Whole question:* The developments in surgery during the nineteenth century.

Page 181: Biology. *First sentence:* the spread of disease
Whole question: the prevention of disease.

Page 183: Catering. *First sentence:* Packaging of food
Whole question: Reasons why food is packaged in certain ways.

Page 184: Science:
First sentence: Round the World boat race
Whole question: distillation

Page 186: Science: no problems

Page 188: Science. *First sentence:* the structure of the cell
Whole question: one part of the cell (the chloroplast which carries out photosynthesis)

Page 192: Music. *First sentence:* listening to music
Whole question: How to describe a piece of music.

Page 193: English Literature. *First sentence:* Characteristics of true heroine or hero (general)
Whole question: Characteristics of true hero or heroine, illustrated from a particular text or texts.

Page 194: Statistics. *First sentence:* Mr. Merit
Whole question: maximum absolute error.

ANSWERS

Page 196	Exercise 6	Abstract: weight, time, pain, kindness, death, heroism Concrete: iron, clock, surgeon, scar, germ, Mr. Darcy
196	7	Processes: grief, treatment, farming, distillation, freezing, dissolving, evaporation, separation Qualities: thoughtfulness, prosperity, cruelty Properties: height, warmth, altitude, depth
197	8	sounds, instruments, rhythm, melody, dynamics, shape, texture, harmony
199	9	c (ii) For example: the financial independence of women, greater ease of divorce c (iv) For example: Six factors which may contribute to the happiness of a home are: the support of relatives, the stability of adult relationships, a regular income, good health, a lot of shared laughter and the fact that the parents wanted to have children.
200	10	Page 179: History: (c) Page 180: Biology: (b) Page 183: Catering: (b) Page 184: Science: (a) Page 186: Science: (a) - not even one word - just labels Page 188: Science: (a) Page 192: Music: (d) - using the headings given Page 193: English Literature: (d) Page 194: Statistics: (a) - figures not words
202	11	1. a 2. b 3. c

Chapter 27 – Compare/Contrast in examination questions

Page	Exercise	
205	1	differences
205	2	most
205	3	C (b) most likely increasing (before and after) percentage
206	4	sounds, instruments, speed, rhythm, melody, dynamics, shape, texture, harmony If all the factors are relevant, two marks for each point. The remaining two marks may go for two points under one of the factors.
207	5	Anaesthetics (for pain control) and antiseptics (to prevent infection)
207	5	For example: wetness and acidity You are asked for one reason. You will give one reason. Two marks for each reason.
209	7	There are fifteen points in the plan of the answer. This would make two marks for each point - two if the points are accurate and well-made, one if there is something there but not totally clear or accurate.
210	8	range

ANSWERS

Page 211	Exercise 9	variety height and build
211	9	A mark for each of the correct words, half a mark for each factor, leaving two marks for three suitable sports.
213	10	1. A. (i) and (ii) - examples from the cartoon 2. A. Cartoon: more equal, changed (before and after) B. Table: more, percentage, 50:50 C. different D. (ii) changed E. more 3. C, D, E
216	11	1. c 2. c 3. c