

# Universal Contents

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## SCIENCE

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### Grades 5-10 (Ages 10-16)

1. The structure of matter
2. Matter
3. Substances, mixtures, and solutions
4. The Universe
5. Planet Earth
6. The atmosphere and the void
7. The chemical composition of the atmosphere
8. Meteorology
9. Hydrosphere
10. Geosphere, rocks and minerals
11. Biosphere and biodiversity
12. What is a living being?
13. Bacteria, protists and fungi
14. Plants
15. Invertebrate animals
16. Vertebrate animals
17. Kinematics
18. Forces
19. Dynamics
20. Work and energy
21. Energy transfer
22. Internal geological processes
23. Vital functions
24. Ecosystems

## MATHEMATICS

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### Grades 5-10 (Ages 10-16)

1. Natural numbers
2. Divisibility
3. Integers
4. Fractions
5. Decimal numbers
6. Linear equations
7. Polynomials
8. Equations and first degree systems
9. Systems of measurement
10. Fundamental concepts of plane geometry
11. Perimeter and area
12. Thales' theorem and the pythagorean theorem
13. Circumference and circle
14. Space geometry
15. Volume and area of geometric bodies
16. Proportionality
17. Tables, graphs and functions
18. Statistics
19. Real numbers
20. Powers and radicals
21. Logarithms
22. Second degree equations
23. Polynomials
24. Inequalities
25. The affine function
26. The parabola
27. Functions
28. Polygonal chains and polygons
29. Perimeter and area
30. Trigonometry
31. Vectors
32. Combinatorics
33. Probability

## INDUSTRIAL TECHNOLOGY

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### Grades 7-10 (Ages 12-16)

1. Theory of technology: The technological process
2. Drawing: Technical drawing
3. Drawing: Computer-aided design
4. Materials: In general
5. Materials: Wood
6. Materials: Metals
7. Materials: Plastics
8. Materials: Stone
9. Materials: Tools
10. Personal computers: Hardware
11. Personal computers: The operating system
12. IT: Word processors
13. IT: Spreadsheets
14. IT: Presentations
15. IT: Web pages and the Internet
16. Electricity: Energy
17. Electricity: The basics
18. Electricity: Electric circuits
19. Electricity: Electric motors
20. Machines: Simple machines
21. Machines: Transmission and transformation of motion
22. Machines: Heat engines
23. Theory of technology: Industrial technology
24. Communication: Long distance systems
25. Materials: Structures
26. Housing: Practicalities
27. Housing: Domestic utilities
28. Electricity: Analog electronics
29. Electricity: Digital electronics
30. Machines: Neumatics and Hydrolics
31. Machines: Control systems
32. Machines: Robotics

## BIOLOGY

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### Grades 7-10 (ages 12-16 years )

1. Biosphere and biodiversity
2. What is a living being?
3. Bacteria, protists and fungi
4. Plants
5. Invertebrate animals
6. Vertebrate animals
7. The human body
8. Human reproduction
9. Nutrition
10. Responses to stimuli
11. Defense
12. The cell
13. Genetics
14. Evolution
15. Changes in the ecosystems

## CHEMISTRY

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### Grades 7-10 (ages 12-16 years )

1. The structure of matter
2. Matter
3. Substances, mixtures, and solutions
4. Gases and atoms
5. Chemical reactions
6. Electrons and bonds
7. Compounds and formulation
8. Acid-Base reactions
9. Carbon chemistry

## EARTH SCIENCE

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### Grades 7-10 (ages 12-16 years )

1. The Universe
5. Planet Earth
6. The atmosphere and the void
7. The chemical composition of the atmosphere
8. Meteorology
9. Hydrosphere
10. Geosphere, rocks and minerals
11. Internal geological processes

12. History of the Earth
13. Plate tectonics
14. Dynamics of the atmosphere
15. Orography
16. Geomorphology
17. Human beings and the environment

## PHYSICS

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### **Grades 7-10 (ages 12-16 years )**

1. Kinematics
2. Forces
3. Dynamics
4. Work and energy
5. Energy transfer
6. Electrostatics
7. Electricity and magnetism
8. Electrochemistry
9. Kinematics
10. Forces
11. Work and energy
12. Waves

## ENGLISH (AS A SECOND LANGUAGE)

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### ENGLISH Grade 9 (14-15 years)

#### **Chapter 1: WELCOME TO OUR FLAT**

1. Flat buddies
  - 1.1 Welcome to our flat
    - 1.1.1 Understanding the text
  - 1.2 Word lab
  - 1.3 Giving your opinion
2. Vocabulary review
  - 2.1 Weekend activities
  - 2.2 Places in a town
  - 2.3 Things in a room
3. Grammar review
  - 3.1 Present Simple: to be
    - 3.1.1 Let's practise
  - 3.2 Present Simple: have got
    - 3.2.1 Let's practise
  - 3.3 Adverbs of frequency
    - 3.3.1 Let's practise

#### **Chapter 2: LET'S RENT A ROOM**

1. Flat buddies
  - 1.1 Let's rent a room
    - 1.1.1 Understanding the text
  - 1.2 Word lab
    - 1.2.1 Adverbs
  - 1.3 Giving your opinion
2. Vocabulary
  - 2.1 Home appliances
  - 2.2. Housework
3. Grammar 1
  - 3.1 'Have to' and 'don't have to'
    - 3.1.1 Let's practise
4. Out in the real world
  - 4.1 At the supermarket
5. Pronunciation
  - 5.1. Intonation of questions
6. Cultural corner
  - 6.1 Pixar Animation Studios
7. Grammar 2
  - 7.1 Present tense contrast
    - 7.1.1 Let's practise



- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 Two brothers who reached the top
      - 8.1.1.1 Understanding the text
  - 8.2 Listening
    - 8.2.1 A phone conversation
  - 8.3 Writing
    - 8.3.1 Describing a flat
  - 8.4 Speaking
    - 8.4.1 Making arrangements
- 9. Online resources
  - 9.1 USA Learns

### **Chapter 3: THE INTERVIEW**

- 1. Flat buddies
  - 1.1 The interview
    - 1.1.1 Understanding the text
  - 1.2 Word lab
    - 1.2.1 Phrasal verbs
  - 1.3 Giving your opinion
    - 1.3.1 Looks and personality
- 2. Vocabulary
  - 2.1 Adjectives to describe things
- 3. Grammar 1
  - 3.1 Comparatives and superlatives
    - 3.1.1 Let's practise
  - 3.2 'Too' and 'not enough'
    - 3.2.1 Let's practise
- 4. Out in the real world
  - 4.1 On the tube
- 5. Pronunciation
  - 5.1 Word stress
- 6. Cultural corner
  - 6.1 The Stolen Generations
    - 6.1.1 Understanding the text
- 7. Grammar 2
  - 7.1 Past Simple of 'to be'
    - 7.1.1 Let's practise
  - 7.2 Past Simple
    - 7.2.1 Let's practise
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 A letter from a friend
      - 8.1.1.1 Understanding the text
  - 8.2 Listening
  - 8.3 Writing

- 8.3.1 An informal letter
- 8.4 Speaking
  - 8.4.1 Giving advice
- 9. Online resources
  - 9.1 Phrasal verbs

## **Chapter 4: JEFF GETS A JOB**

- 1. Flat buddies
  - 1.1 Jeff gets a job
    - 1.1.1 Understanding the text
  - 1.2 Word lab
    - 1.2.1 Negative prefixes
  - 1.3 Giving your opinion
    - 1.3.1 Part time jobs
- 2. Vocabulary
  - 2.1 Things in a classroom
- 3. Grammar 1
  - 3.1 Past Simple
    - 3.1.1 Let's practise
- 4. Out in the real world
  - 4.1 At the café
- 5. Pronunciation
  - 5.1 'was' and 'were'
- 6. Cultural corner
  - 6.1 Reverend Martin Luther King, Jr.
  - 6.2 Let's practise
- 7. Grammar 2
  - 7.1 Past Simple and Past Continuous
    - 7.1.1 Let's practise
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.2 Social networks
  - 8.2 Listening
    - 8.2.1 News on the radio
  - 8.3 Writing
    - 8.3.1 Word order
  - 8.4 Speaking
    - 8.4.1 Talking about last night
- 9. Online resources
  - 9.1 World news

## **Chapter 5: KELLY'S EXHIBIT**

- 1. Flat buddies
  - 1.1 Kelly's exhibit
    - 1.1.1 Understanding the text

- 1.2 Word lab
  - 1.2.1 Collocations
- 1.3 Giving your opinion
  - 1.3.1 What is art?
- 2. Vocabulary
  - 2.1 Natural disasters
- 3. Grammar 1
  - 3.1 'Can' and 'could'
    - 3.1.1 Let's practise
- 4. Out in the real world
  - 4.1 Personal information
- 5. Pronunciation
  - 5.1 /eə/ and /ɜ:/
- 6. Cultural corner
  - 6.1 Haiti earthquake
    - 6.1.1 Understanding the text
- 7. Grammar 2
  - 7.1 'A', 'an', 'some' or 'any'
    - 7.1.1 Let's practise
  - 7.2 'Much', 'many' and 'a lot of'
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 Healthy habits
      - 8.1.1.1 Understanding the text
  - 8.2 Listening
    - 8.2.1 Volunteer work
  - 8.3 Writing
    - 8.3.1 Conjunctions
  - 8.4 Speaking
    - 8.4.1 Talking about abilities
- 9. Online resources
  - 9.1 ESL Tower

## **Chapter 6: AN ACCIDENT**

- 1. Flat buddies
  - 1.1 An accident
    - 1.1.1 Understanding the text
  - 1.2 Word lab
    - 1.2.1 False friends
  - 1.3 Giving your opinion
- 2. Vocabulary
  - 2.1 Hobbies
- 3. Grammar 1
  - 3.1 Present Perfect
    - 3.1.1 Let's practise
- 4. Out in the real world

- 4.1 Have you ever?
- 5. Pronunciation
  - 5.1 /ʌ/ and /æ/
- 6. Cultural corner
  - 6.1 English á la carte, French on the menu
    - 6.1.1 Understanding the text
- 7. Grammar 2
  - 7.1 Present Perfect with 'just'
    - 7.1.1 Let's practise
  - 7.2 Present Perfect with 'for' and 'since'
  - 7.3 Let's practise
  - 7.4 Present Perfect questions with 'How long'
  - 7.5 Let's practise
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 Lewis Hamilton
  - 8.2 Listening
    - 8.2.1 Adventure sports
  - 8.3 Writing
    - 8.3.1 Personal experiences
  - 8.4 Speaking
    - 8.4.1 A class debate
- 9. Online resources

## Chapter 7: COMPUTER PROBLEMS

- 1. Flat buddies
  - 1.1 Computer problems
    - 1.1.1 Understanding the text
  - 1.2 Word lab
  - 1.3 Giving your opinion
- 2. Vocabulary
  - 2.1 Computers and the Internet
- 3. Grammar 1
  - 3.1 'Will' and 'won't'
    - 3.1.1 Let's practise
- 4. Out in the real world: Offering help
- 5. Pronunciation
  - 5.1 'Will' and 'won't'
- 6. Cultural corner
  - 6.1 Natural resources
- 7. Grammar 2
  - 7.1 First conditional
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 Social networks
      - 8.1.1.1 Understanding the text

- 8.2 Listening
  - 8.2.1 Mark Zuckererg
- 8.3 Writing
  - 8.3.1 Language and the Internet
- 8.4 Speaking
  - 8.4.1 An Internet profile

## **Chapter 8: A FOOTBALL MATCH**

- 1. Flat buddies
  - 1.1 A football match
    - 1.1.1 Understanding the text
  - 1.2 Word lab
  - 1.3 Giving your opinion
    - 1.3.1 Football fans
- 2. Vocabulary
  - 2.1 Sports
- 3. Grammar 1
  - 3.1 Going to
    - 3.1.1 Let's practise
- 4. Out in the real world
  - 4.1 Reporting a theft
- 5. Pronunciation
  - 5.1 Sentence stress
- 6. Cultural corner
  - 6.1 The origins of football
- 7. Grammar 2
  - 7.1 Present Continuous for the future
  - 7.2 Let's practise
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 Living abroad
      - 8.1.1.1 Understanding the text
  - 8.2 Listening
    - 8.2.1 International friends
  - 8.3 Writing
    - 8.3.1 Plans for the future
  - 8.4 Speaking
    - 8.4.1 Inviting someone to the cinema
- 9. Online resources

## **Chapter 9: NEW NEIGHBOURS**

- 1. Flat buddies
  - 1.1 New neighbours
  - 1.2 Understanding the text
  - 1.3 Word lab

- 1.3.1 Compound nouns
- 1.4 Giving your opinion
- 2. Vocabulary
  - 2.1 Social events
- 3. Grammar 1
  - 3.1 Present Simple passive
    - 3.1.1 Let's practise
- 4. Out in the real world
  - 4.1 Introducing yourself to someone
- 5. Pronunciation
  - 5.1 Weak forms
- 6. Cultural corner
  - 6.1 Globalisation
    - 6.1.1 Understanding the text
- 7. Grammar 2
  - 7.1 Passive with 'by'
    - 7.1.1 Let's practise
- 8. Developing abilities
  - 8.1 Reading
    - 8.1.1 A traditional process
      - 8.1.1.1 Understanding the text
  - 8.2 Listening
  - 8.3 Writing
  - 8.4 Speaking
    - 8.4.1 Suggestions
- 9. Online resources

## **Chapter 10: SUMMER'S HERE!**

- 1. Flat buddies
  - 1.1 Summer's here!
  - 1.2 Understanding the text
  - 1.3 Word lab
  - 1.4 Giving your opinion
- 2. Vocabulary
  - 2.1 Travelling
- 3. Grammar 1
  - 3.1 Past Simple passive
- 4. Out in the real world
  - 4.1 At the pharmacy
- 5. Pronunciation
  - 5.1 Sentence stress
- 6. Cultural corner
  - 6.1 English speaking countries
- 7. Grammar 2
  - 7.1 Grammar review
- 8. Developing abilities

- 8.1 Reading
  - 8.1.1 Halloween
- 8.2 Listening
  - 8.2.1 Trick or treat!
- 8.3 Writing
  - 8.3.1 A tradition in your country
- 8.4 Speaking
  - 8.4.1 Saying goodbye
- 9. Online resources

## ENGLISH Grade 10 (15-16 years)

### Chapter 1: TWO FRIENDS

- 1. Travel Journal
  - 1.1 Two friends
  - 1.2 Understanding the text
  - 1.3 Giving your opinion
- 2. Vocabulary
  - 2.1 Packing up: Toilet accessories
  - 2.2 Packing up: Clothing
  - 2.3 Phrasal verbs
- 3. Grammar Review
  - 3.1 Present Simple
  - 3.2 Present Continuous
  - 3.3 Like, love and hate + ing
  - 3.4 Comparative and superlative adjectives
  - 3.5 Have to and don't have to
  - 3.6 Much, many and a lot of

### Chapter 2: FIRST STOP - LONDON

- 1. Travel Journal
  - 1.1 First stop: London
- 2. Vocabulary
  - 2.1 Leisure
  - 2.2 Means of transport
- 3. Grammar 1
  - 3.1 Present Simple vs Present Continuous
- 4. Out in the Real World
  - 4.1 Asking for directions
- 5. Pronunciation
  - 5.1 Word stress
- 6. Cultural Corner
  - 6.1 Stephenie Meyers and the Twilight series
- 7. Grammar 2
  - 7.2 Past Simple

- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 Arsenal Football Club
  - 8.2 Listening
    - 8.2.1 Cesc Fàbregas
  - 8.3 Writing
    - 8.3.1 How to write an e-mail
  - 8.4 Speaking
    - 8.4.1 Telephone conversations
- 9. Online Resources

### **Chapter 3: A CHANGE OF APPEARANCE**

- 1. Travel Journal
  - 1.1 A change of appearance
- 2. Vocabulary
  - 2.1 Appearance
  - 2.2 Personality
- 3. Grammar 1
  - 3.1 Past Continuous
  - 3.2 Past Continuous vs Past Simple
- 4. Out in the Real World
  - 4.1 At the store
- 5. Pronunciation
  - 5.1 Sentence stress
- 6. Cultural Corner
  - 6.1 The boat race
- 7. Grammar 2
  - 7.1 Used to
- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 20th anniversary of the World Wide Web
  - 8.2 Listening
    - 8.2.1 Tim Berners Lee
  - 8.3 Writing
    - 8.3.1 How to write an essay
  - 8.4 Speaking
    - 8.4.1 Let's meet for dinner
- 9. Online Resources

### **Chapter 4: AN UNSUAL SUSPECT**

- 1. Travel Journal
  - 1.1 An unusual suspect
- 2. Vocabulary
  - 2.1 Crime
  - 2.1 Health problems



- 3. Grammar 1
  - 3.1 Present Perfect
  - 3.2 Present Perfect with ever and never
- 4. Out in the Real World
  - 4.1 At the doctor's
- 5. Pronunciation
  - 5.1 Vowel contrast: /i/ and /I/
- 6. Cultural Corner
  - 6.1 The United Kingdom
- 7. Grammar 2
  - 7.1 Present Perfect with 'just'
- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 Fresh News
  - 8.2 Listening
    - 8.2.1 News on the radio
  - 8.3 Writing
    - 8.3.1 News articles
  - 8.4 Speaking
    - 8.4.1 Apologising
- 9. Online Resources

## **Chapter 5: AN ADVENTURE IN DUBLIN**

- 1. Travel Journal
  - 1.1 A chef from Dublin
- 2. Vocabulary
  - 2.1 Food
  - 2.2 Kitchen utensils
- 3. Grammar 1
  - 3.1 Present Perfect with yet and already
  - 3.2 Present Perfect with for and since
- 4. Out in the Real World
  - 4.1 At a restaurant
- 5. Pronunciation
  - 5.1 -ed form
- 6. Cultural Corner
  - 6.1 The world's youngest chef
- 7. Grammar 2
  - 7.1 Present Perfect vs Past Simple
- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 A comic book
  - 8.2 Listening
    - 8.2.1 A recipe
  - 8.3 Writing
    - 8.3.1 Creating a comic book

- 8.4 Speaking
  - 8.4.1 Making a hotel reservation
- 9. Online Resources

## **Chapter 6: A RAINY DAY IN CORK**

- 1. Travel Journal
  - 1.1 A rainy day in Cork
- 2. Vocabulary
  - 2.1 Weather
  - 2.2 Shopping
- 3. Grammar 1
  - 3.1 Passive: Present Simple
  - 3.2 Passive: Past Simple
- 4. Out in the Real World
  - 4.1 Shopping for clothes
- 5. Pronunciation
  - 5.1 The schwa
- 6. Cultural Corner
  - 6.1 Global warming
- 7. Grammar 2
  - 7.1 Relative pronouns and relative clauses
- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 A war correspondent
  - 8.2 Listening
    - 8.2.1 Greenpeace
  - 8.3 Writing
    - 8.3.1 although, however, but and nevertheless
  - 8.4 Speaking
    - 8.4.1 Inviting someone to a party
- 9 Online Resources

## **Chapter 7: MY FAMILY IN BELFAST**

- 1. Travel Journal
  - 1.1 My family in Belfast
- 2. Vocabulary
  - 2.1 Occupations
  - 2.2 Emotions
- 3. Grammar 1
  - 3.1 Indeterminate pronouns
  - 3.2 Modal verbs: should
- 4. Out in the Real World
  - 4.1 Formal introductions
- 5. Pronunciation

- 5.1 Consonant clusters
- 6. Cultural Corner
  - 6.1 Cultural gestures
- 7. Grammar 2
  - 7.1 Going to and will
- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 Space tourism
  - 8.2 Listening
    - 8.2.1 Jobs
  - 8.3 Writing
    - 8.3.1 both and neither
  - 8.4 Speaking
    - 8.4.1 Saying thank you
- 9. Online Resources

## **Chapter 8: WE'VE MET AN ACTOR**

- 1. Travel Journal
  - 1.1 We've met an actor
- 2. Vocabulary
  - 2.1 Money
  - 2.2 Money verbs
  - 2.3 Theatre
- 3. Grammar 1
  - 3.1 First conditional
- 4. Out in the Real World
  - 4.1 Making plans for the weekend
- 5. Pronunciation
  - 5.1 Irregular verb endings
- 6. Cultural Corner
  - 6.1 The Edinburgh International Festival
- 7. Grammar 2
  - 7.1 Second conditional
- 8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 If I could travel anywhere in the world
  - 8.2 Listening
    - 8.2.1 Studying abroad
  - 8.3 Writing
    - 8.3.1 How to structure a paragraph
  - 8.4 Speaking
    - 8.4.1 Giving advice
- 9. Online Resources

## **Chapter 9: LET'S WATCH A FILM**

1. Travel Journal
  - 1.1 Let's watch a film!
2. Vocabulary
  - 2.1 Television
  - 2.2 Relationships
3. Grammar 1
  - 3.1 Second conditional
4. Out in the Real World
  - 4.1 Talking about movies
5. Pronunciation
  - 5.1 Rhythm and intonation
6. Cultural corner
  - 6.1 How does a camera work?
7. Grammar 2
  - 7.1 Third conditional
8. Developing Abilities
  - 8.1 Listening
    - 8.1.1 Lost: beyond a TV show
  - 8.2 Speaking
    - 8.2.1 Talking about films
  - 8.3 Writing
    - 8.3.1 Expressing opinions
9. Online Resources

## Chapter 10: Homecoming

1. Travel Journal
  - 1.1 Homecoming
2. Vocabulary
  - 2.1 Music
  - 2.2 Books
3. Grammar 1
  - 3.1 Modal verbs of probability
4. Out in the Real World
  - 4.1 At the bookshop
5. Pronunciation
  - 5.1 One language, different accents
6. Cultural Corner
  - 6.1 British music through the decades
  - 6.2 Bearlin
7. Grammar 2
  - 7.1 Review
8. Developing Abilities
  - 8.1 Reading
    - 8.1.1 The videogame industry
  - 8.2 Listening
    - 8.2.1 A concert

8.3 Writing

8.3.1 A letter of complaint

8.4 Speaking

8.4.1 Talking about a trip

9. Online Resources