

| | Skills | Language | Texts |
|--------------------------------------|--|--|---|
| UNIT 1 | Describing technical functions and applications | Words stemming from <i>use</i> <i>allow, enable, permit, ensure, prevent</i> | Listening GPS applications Space elevators Advantages of a new pump A guided tour |
| Technology in use page 6 | Explaining how technology works Emphasising technical advantages Simplifying and illustrating technical explanations | Verbs to describe movement Verbs and adjectives to describe advantages Adverbs for adding emphasis Phrases for simplifying and rephrasing | Reading Space elevators Otis lift technology Pile foundations |
| UNIT 2 | Describing specific materials | Common materials Categories of materials <i>consist of, comprise, made of, made from, made out of</i> | Listening An environmental audit Specialised tools High-performance watches |
| Materials technology page 14 | Categorising materials Specifying and describing properties Discussing quality issues | Properties of materials Phrases for describing requirements Compounds of <i>resistant</i> Adverbs of degree | Reading Materials recycling Regenerative brakes Kevlar |
| UNIT 3 | Describing component shapes and features | Shapes and 3D features Words to describe machining | Listening A project briefing Electrical plugs and sockets Metal fabrication UHP waterjet cutting Options for fixing Cluster ballooning |
| Components and assemblies page 22 | Explaining and assessing manufacturing techniques Explaining jointing and fixing techniques Describing positions of assembled components | Phrases for describing suitability Verbs and nouns to describe joints and fixings Prepositions of position | Reading Cutting operations Flow waterjet technology Joints and fixings The flying garden chair |
| UNIT 4 | Working with drawings Discussing dimensions and precision | Views on technical drawings Phrases related to <i>scale</i> Phrases related to <i>tolerance</i> <i>length, width, thickness, etc.</i> | Listening A drawing query Scale A floor design Design procedures Revising a detail |
| Engineering design page 30 | Describing design phases and procedures Resolving design problems | Drawing types and versions Verbs for describing stages of a design process Verbs and nouns for describing design problems | Reading Superflat floors Queries and instructions |
| UNIT 5 | Describing types of technical problem | Verbs and adjectives for describing technical problems | Listening A racing car test session Test session problems Technical help-line Tyre pressure problems A maintenance check |
| Breaking point page 38 | Assessing and interpreting faults Describing the causes of faults Discussing repairs and maintenance | Words for describing faults and their severity Phrases for describing certainty/uncertainty Adjectives with prefixes for describing technical problems Verbs for describing repairs and maintenance | Reading Air Transat Flight 236 |

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| UNIT 6 | Discussing technical requirements | Phrases for referring to issues | Listening |
| Technical development page 46 | Suggesting ideas and solutions | Phrases for referring to quantity and extent | Simulator requirements and effects |
| | Assessing feasibility | Phrases for suggesting solutions and alternatives | Lifting options |
| | Describing improvements and redesigns | Idioms to describe feasibility | Hole requirements and forming |
| | | Verbs with <i>re...</i> to describe modifications | A project briefing |
| | | Idioms to describe redesigning | Reading |
| | | | Mammoth problem |
| UNIT 7 | Describing health and safety precautions | Types of industrial hazards | Listening |
| Procedures and precautions page 54 | Emphasising the importance of precautions | Types of protective equipment | A safety meeting |
| | Discussing regulations and standards | Phrases for emphasising importance | Hazard analysis |
| | Working with written instructions and notices | Terms to describe regulations | Live line precautions |
| | | Common language on safety notices | Safety training |
| | | Language style in written instructions | Oral instructions |
| | | | Reading |
| | | | Live line maintenance |
| | | | Helicopter safety on oil platforms |
| UNIT 8 | Describing automated systems | Words to describe automated systems | Listening |
| Monitoring and control page 62 | Referring to measurable parameters | Words to describe measurable parameters | Intelligent buildings and automation |
| | Discussing readings and trends | Words to describe fluctuations | Monitoring and control systems |
| | Giving approximate figures | Words and phrases for approximating numbers | Electricity demand and supply problems |
| | | | Pumped storage hydroelectric power |
| | | | Internal reviews |
| | | | Reading |
| | | | Industrial process monitoring |
| | | | Dynamic demand controls |
| UNIT 9 | Explaining tests and experiments | Words to describe test types | Listening |
| Theory and practice page 70 | Exchanging views on predictions and theories | Words and phrases for stating assumptions | Vehicle design and testing |
| | Comparing results with expectations | Words and phrases for agreeing and disagreeing | Water rockets |
| | Discussing causes and effects | Phrases for comparing expectations and results | Air drop problems |
| | | Words for linking causes and effects | Moon landings |
| | | | Reading |
| | | | A rocket competition |
| | | | Chicken cannon |
| UNIT 10 | Discussing performance and suitability | Adjectives for describing suitability and performance | Listening |
| Pushing the boundaries page 78 | Describing physical forces | Words to describe types of forces | Wind turbine towers |
| | Discussing relative performance | <i>factor, criteria, criterion, consideration</i> | Tall structures |
| | Describing capabilities and limitations | Words and phrases to describe degrees of difference | TGV world speed record |
| | | Words to describe capabilities and limits | The story of John Paul Stapp |
| | | | Reading |
| | | | Wind turbines fact file |
| | | | Solar towers |
| | | | Transport alternatives |
| | | | The <i>Sonic Wind</i> tests |
| | | | The rocket sled proposal |

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| Answer key | page 96 |
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