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Madrid

3º ESO

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The technological process	Designing a drip irrigation system	<ol style="list-style-type: none"> What is technology? What factors are involved in the technological process? The classroom workshop <ol style="list-style-type: none"> Order and organization of workshop activity Hygiene and safety rules Signage Stages of the technological process <ol style="list-style-type: none"> Approach to and analysis of the need or problem Gathering together and analysing precedents Individual design of the idea Pooling of ideas and choosing the best solution Developing the solution Planning the work of the group: action plan Manufacturing budget Construction and experimentation Evaluation and checking of the product Record of manufacture Materials for technical use The influence of technology on society Technology and the environment 	PROCEDURES: Creating the project documents FINAL ACTIVITIES FINISHING THE FINAL TASK
Graphic communication and expression	Making a photo frame with wooden clothes pegs	<ol style="list-style-type: none"> Technical documents used in a project <ol style="list-style-type: none"> Presentation of technical drawings Materials for drawing: pencil and paper <ol style="list-style-type: none"> Drawing tools: pencil Base for the drawing: paper Sketches, outlines and plans <ol style="list-style-type: none"> Sketch Outline Outlined plans Drawing tools: measuring and designing <ol style="list-style-type: none"> Basic measuring tools Drawing tools: isosceles and scalene set-squares, compass Scales <ol style="list-style-type: none"> Choosing scales Graphical scale Scalometer Standardisation Drawing the boundaries <ol style="list-style-type: none"> Boundary drawing rules Views of an object Multiview orthographic projection 	PRODUCT DOCUMENTATION PROCEDURES: Computer-aided drawing PROCEDURES: Introduction to computer-aided 3D drawing FINAL ACTIVITIES FINISHING THE FINAL TASK
Materials for technical use	Experimenting with materials. Learning about the technological properties of wood, metals and plastics by making three objects.	<ol style="list-style-type: none"> Raw materials, materials and products <ol style="list-style-type: none"> Materials Technological products Materials for technical use Properties of materials <ol style="list-style-type: none"> Technical properties Ecological properties Tools, equipment and machines <ol style="list-style-type: none"> Measuring Marking and drawing Treating Cutting Drilling Carving and shaping Polishing Joints <ol style="list-style-type: none"> Of wood Of metal Of plastic 	PROCEDURES: Making a wooden puzzle PROCEDURES: Making an aluminium flower PROCEDURES: Making a vehicle FINAL ACTIVITIES FINISHING THE FINAL TASK

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Hardware and software	Hardware board	<ol style="list-style-type: none"> 1. Computer language <ol style="list-style-type: none"> 1.1 Binary code 1.2 Binary system of numbering 2. Hardware <ol style="list-style-type: none"> 2.1 Hardware components 3. Software and the operating system <ol style="list-style-type: none"> 3.1 Types of software 3.2 Operating system 4. Windows operating system <ol style="list-style-type: none"> 4.1 Working with Windows 5. Linux operating system 6. Mobile operating systems <ol style="list-style-type: none"> 6.1 Using an operating system: iOS and Android 7. IT applications <ol style="list-style-type: none"> 7.1 Word processors 7.2 Presentations 	IT APPLICATION: Office automation in the Cloud PROCEDURES: Creating a template for entering a record of the project FINAL ACTIVITIES FINISHING THE FINAL TASK
Internet: safety and networks	Designing computer graphics about IT security	<ol style="list-style-type: none"> 1. Communication systems 2. Computer networks <ol style="list-style-type: none"> 2.1 Parts of a computer network 2.2 Interconnected nets 3. Internet, the net of nets <ol style="list-style-type: none"> 3.1 Internet domains 3.2 Internet services 4. Connecting to the Internet 5. Searching for information on the Internet <ol style="list-style-type: none"> 5.1 Online dictionaries and encyclopedias 6. Publishing on the Internet <ol style="list-style-type: none"> 6.1 Creating a web page 6.2 Creating a blog 7. Comparing information <ol style="list-style-type: none"> 7.1 Sharing information using cloud services 7.2 Sharing information on social networks 	FINAL ACTIVITIES FINISHING THE FINAL TASK
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UNIT	FINAL TASK	DEVELOPMENT	FINAL PAGES
Project planning	Designing a portable air-conditioning unit	<ol style="list-style-type: none"> Technology solves problems <ol style="list-style-type: none"> The different aspects of technology Stages of a technological process <ol style="list-style-type: none"> Need Individual analysis and solving of the problem Pooling of ideas and choosing the group solution Developing the group solution Construction Verification, presentation and evaluation Commercialisation Necessary technological tools Organisation and management of a workshop Companies, advertising and the environment 	ANALYSIS OF A TECHNOLOGICAL OBJECT: Formal, technical, functional and socioeconomic analysis of an object PROCEDURES: Creation of a personal collaborative ITC environment FINAL ACTIVITIES FINISHING THE FINAL TASK
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UNIT	FINAL TASK	DEVELOPMENT	FINAL PAGES
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