European Schools

Office of the Secretary-General of the Board of Governors

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Final version

Discovery of the World syllabus (primary cycle)

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Entry into force, for a transitional period of two years, from September 2003.

Full implementation from September 2005.

Purpose

In this subject, Exploring Our World, pupils will play an active part in their learning and development. The themes outlined below guarantee a common approach to knowledge and education across all the sections and in all the European schools. The outcome should be to create a responsible individual, a future European citizen, an informed consumer; someone who is aware of human rights, balance, heritage, openness to others and to the wider world.

Main Aims

Pupils should

- Acquire knowledge and understanding of themselves and the wider world (before / now / later, here / elsewhere)

- Rely on first-hand experience and research in order to progress outwards from their own locality, compare it with other environments such as their country of origin and move towards a global perspective.

- Develop scientific methods and thinking as well as biological, technological, geographical, historical and socio-cultural approaches.

- Use a variety of reference material and mathematical representations. (See appendix). Learn to use increasingly precise language.

- Act and behave in a way that is consistent with the knowledge acquired, respecting the balance of nature and society, taking points of view and cultural diversity into account, developing citizenship skills and becoming good Europeans.

- Realise that the child can play an active part in its present surroundings and in tomorrow's world.

So that pupils may develop an understanding of themselves, as well as the wider world, teaching units must offer activities involving both discovery and classification. This is to be done using an interdisciplinary approach.

Therefore, harmonised teaching at each year level is to be based on a few broad themes that lead to the development of knowledge in the broadest sense.

It is envisaged that each theme treated will consist of a number of aspects corresponding to some or all of the following areas of study in exploring our world:

- **Biological:** exploring the living world
- **Technological:** investigating the physical sciences and technology
- **Geographical:** finding one's place in space
- **Historical:** locating oneself in time
- **Socio-cultural:** finding one's role in society

In order to make the ever- changing world comprehensible, each aspect will be developed progressively, moving from perception to mental constructs and from information to education and will include:

- **Representations:** recording the units studied
- **Transformations:** becoming aware that change is ever present
- **Interactions:** becoming aware that units interrelate.
- **Interventions:** understanding how human beings affect processes.
- **Responsibilities:** judging the value and consequences of these interventions.

In order to lend structure to this method, themes and subjects for each school year have been organised into grids. Assessment grids will also be based on the categories outlined above.

Each school will then need to do the following:

- Link the subjects to the circumstances of the particular school and its environment.
- Make the best use of local resources: outings, documentation and visitors.
- Collaborate in the creation and exchange of lesson plans and resources.
- Build up a resource centre to make the best use of teaching materials.
- Coordinate themes and the methods used with successive classes in the primary school and the nursery school

Content Progression

Biological

1st year: direct observation of the external parts of living beings; growth;-origin of products;

2nd year: adaptation of nature to the seasons; viviparous and oviparous as keys to classification;

3rd year: more complex structures: the ear; reproduction in plants; vertebrates;

4th year: habitats-adaptation and the food chain; systems: respiration /circulation

5th year: vision; micro -organisms classification; digestion; changes in the body occurring at puberty;

Technological

1st year: use of materials and tools in class according to their characteristics

2nd year: the 3 states of matter; the water cycle; measurements: using clocks and thermometers;

3rd year: some special effects: sound; properties of water; magnets;

4th year: circuits: electricity; wind;

5th year: audiovisual-camera; cinema: sound; forces and movement;

Geographical

1st year: model of classroom; day and night, the seasons

2nd year: plan of the school and map of its local area; weather records; parts of the school;

3rd year: maps of the town and region; systems: rivers; public services; planning zones;

4th year: thematic maps; weather data; influence of climate;

5th year: maps of the world and use of a globe (coordinates); the earth and moon and observable phenomena;

Historical

1st year: the calendar; my life; toys in the past; traditional clothes;

2nd year: comparing the way of life of four generations; schools in the past; the past, the present, the future

3rd year: the centuries; thematic time lines; progress; evidence of the past in town;

4th year: time lines: centuries and periods before the Renaissance: life around (a place)

5th year: time lines: centuries and periods after the Renaissance; Europe before and after. …(events)

Socio- cultural

1st year: the class as part of the European School- festivals

2nd year: the organisation of school community- the extended family: origin and migration

3rd year: the city of and its distinctive features, economy and cultural heritage; -the Highway Code

4th year: life in …. and in our countries of origin; cultural exchange

5th year: Life in Europe and other continents; inequality; developing a European spirit

The content of each theme should emphasise those aspects of the world and society that involve enquiry. Teaching should encourage, with increasing independence, pupils to observe inside and outside of the classroom. It should also provide opportunities to measure and to classify, to experiment and to find out information through research.

Using this approach, science and technology will not be a series of teacher centred lessons with worksheets to fill in. Instead, pupils will encounter models and investigations with the possibility for trial and error. They will use a variety of ways to record what has happened. There will be the chance to test the usefulness of the models and representations used, they will be able to apply them in increasingly complex situations.

Pupils will participate actively in their learning. History will not be a mere narrative of events nor will geography be restricted to a description of places. The use of artefacts, as well as pictures and documents will bring different types of societies from the past and the present to life. Pupils will learn to evaluate how well societies work now and how they functioned in the past. This will lead to an understanding of the wider world.

Building on the pupils' curiosity and their wish to know more about others, both nearby and far away, they will explore their place in their family, in our multicultural society, as well as in the global village, which our planet is now and will be in the future.

In socio-cultural education, the differences learned about in history and geography will lead pupils to a rich self-knowledge. To reach this point it is necessary

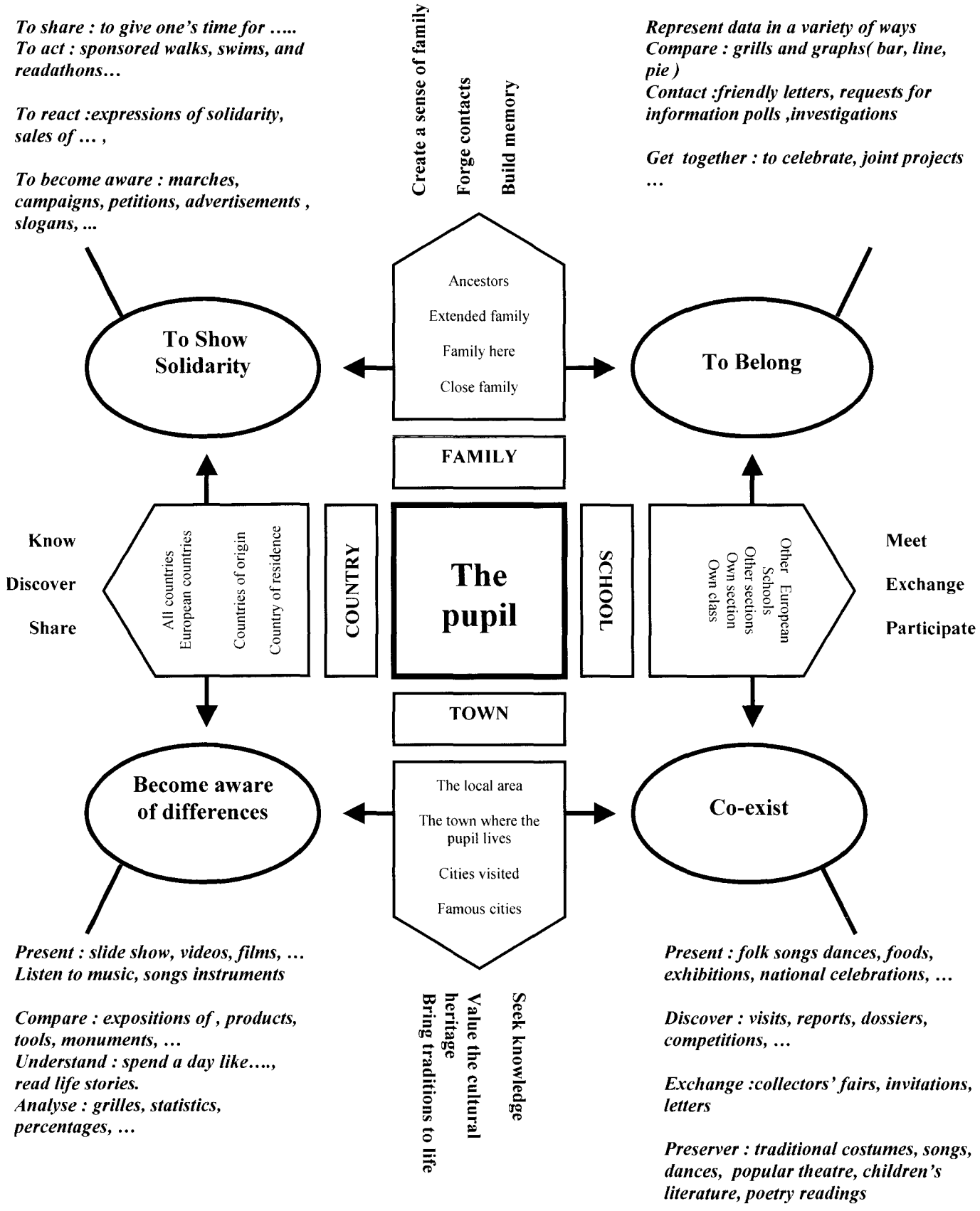
- to use themes that lend themselves to problem solving
- put these into practise using local resources.
- to treat them in a teaching unit which comprises:
  - questioning
  - investigating (action and representation,)
  - hypothesising
  - learning
- It is also necessary to keep records and evaluate the pupils' performance and their understanding of key ideas

Approaches to the creation of teaching units

	The scientific approach	The technological approach
Staring point	Observation, news, reading=a question posed to/by the class	+curiosity-breakdown-need-a question posed to/by the class.
Problem	A complete natural system	A complex structure.
Challenge	Find a way to analyse a complex situation	
Approach	Identify the problem	Identify a technological structure
Procedure	Formulate hypotheses Choose an approach • -work on an object observing experiencing measuring classifying -use information: • library • research poll • meeting	Observe the structure • Take to pieces in class • Visit installations • Documentation Describe the essential parts • Shape, material; number, … • Function • Construct a simple model • test it. • Adapt it to one's needs
Representation	Produce diagrams of the structure. Give it a generic name. Use scientific parameters Make interactions Draw conclusions from the model	
Proof	<u>Divergent thought</u> Other situations where one may find the same structure <u>Convergent thought</u> Other structure which may serve the same function	
Learning outcome	• Make a synthesis: • General principle • The relation between cause and effect • Proportionality • Categories • Understand balances in nature • Find one's place in the world • Formulate values	Link needs with means Appreciate the ingenuity of technology and its limitations Take account of the advantages and disadvantages • For the user • For the environment • For society
	Find models for the handling of future situations/ problems Become familiar with scientific forms of communication.	

	The geographical approach	The historical approach
Starting points	Object s brought t in- museum exhibitions- current affairs- reading= a question put to or by the class	
Problem	To find an explanation for a complex problem	
Procedure	Reconstruct a geographical or historical context a way of life e or a society comprehensible	
Bring documents to life	Observe and analyse • Localities, objects, photos, • Maps Research • Physical features • Statistics	Observe and analyse • Objects and traces • Documents Research • Contemporary witnesses/oral history • Documentary evidence
Compare with previous knowledge	Compare with • The situation in the home country • In observed situations • In studied situations	Compare with • Our own period • Similar events elsewhere • Other historic periods studied
Evaluate the situation	• Start with the locality's needs. Take account of • Physical geography • Local resources • Local economic structures • Consider alternatives. • Evaluate progress	Start with the needs of the era. Take account of • Previous situation • Educational level • Contemporary influences Envisage alternatives. Evaluate historical choices
Learn	• The interactions between • Physical and economic features, the way of life • Major events, inventions and changes in society • Models of thought and types of societies • People's ability/inability to influence events and particular changes	
To formulate points of reference	To become familiar with • Other ways of life • Other societies • Other levels of development	To consider oneself: heir witness actor • Of a family • Historical evolution • A cultural heritage • Social achievements
Become committed	To being curious: to discovering other worlds; to understanding where one has come from and where one is going To understand current affairs • In the light of acquired knowledge • Taking several points of view into account To defend fundamental values: democracy, the European ideal To refuse to accept that inequality is inevitable	

The socio-cultural



1st year Exploring Our World

	Biological	Technological	Geographical	Historical	Socio-cultural
Representations	The external parts of: Plants Animals Humans Classification according to visible criteria: Ways of moving, number of limbs, body covering	Using senses to identify materials Texture of objects: marks, imprints, scratches wheels, spheres, smallest surface area	Model, plan of classroom, school buildings and playground Routes from one part of the school to another: gym, canteen, library, fire drill	Chronology: days, weeks, months, year seasons, (calendar) History of pupil's life using documents, photos, objects, clothes toys,	Every one is a unique being with similarities and differences Every one as a social being and member of various groups
Transformations	Growth of a -A seed -A bulb Growth of pupils Loss of milk teeth	Characteristics and specific use of materials E.g. –clothes -toys –school equipment Wear and tear Pencil, rubber, clothes	Arrangement of furniture in classrooms -Variations -Comparisons The school during day and night - throughout the seasons	The notion of a cycle- Calendar Nature- Movement Play A place before and after redecoration or building	Class birthday calendar Key moments in the year Holidays Shop windows Advertisements
Interactions	Animal or vegetable origin of -Foodstuffs -Textiles The effect of the seasons on animals and plants	Textiles, -Protection -permiability – absorption Objects which rely on more/ less friction e.g. tyres, soles, tool grips	Sun in classrooms throughout the course of a day The choice of clothing and footwear according to -Weather and activities	Evidence of the past and future in books, films, famous people, artefacts, toys, clothes Jobs in the past in traditional songs, stories and paintings	Dress in different countries in relation to their climate Toys from different countries
Interventions	Farms: livestock/ arable Conditions for the germination and growth of plants	Materials that can be squashed, bent, twisted, and stretched Construction of toys: the wheel Simple weaving and spinning	Floor coverings for different purposes Possible arrangement of the classroom, corridor, playground, the school	School time-table to allow the best use of spaces, people and time Light and heating / (night /day) seasons	Celebration of festivals here and in country of origin: Legends Costumes Customs Symbols
Responsibilities	Dental hygiene Respect for food and its source animal or vegetable Child's responsibility for healthy growth Exercise and diet	Conservation of resources (saving heat and light) Save wear and tear of clothes; Prevent waste of school resources	Respect for the space within and around the school Choice of places for different activities and vice versa	Punctuality and respect for the time-table Respect for objects from the past /Old things	Continuation of traditions from home country Respect for traditions of other communities

The five areas above may be tackled in an integrated way using themes and projects e.g.

My Body- Animals and Plants-Clothing-Toys-The Wheel-School-The Calendar-My Life

	Biological	Technological	Geographical	Historical	Socio-cultural
Representations	Edible parts o f plants Green/white Above ground/ underground Egg and Milk as keys to classifying animals into oviparous and viviparous	Different sorts of timepieces: sundials clocks and watches The thermometer and temperature: indoors outdoors	A plan of the school and its surroundings A plan of pupil's bedroom and home	A time line going back for four generations The past, the present, and the future: Related to time-table -jobs and professions --generations	The organisation of school as a community: classrooms, playground, library, care-takers workshop, canteen , head teacher's office, infirmary, The allocation of different roles in society
Transformations	Life cycles of plants, animals and human beings Adaptation to winter e.g. .-metamorphosis -migration -hibernation loss of leaves buds	The effects of heat and cold on a thermometer The three states of matter The water cycle	Different roles of people at school Different function of rooms and areas of school -weather records: -symbols - temperature graphs	Methods of measuring time used in the past: sand timer, water-timer, sun dial, pendulum	Important events in family life Different foods available in various countries
Interactions	The sun and green plants in relation to the food chain Attraction or not of green plants and small animals to light humidity	The forms of energy which make clocks and toys work The use of heat and cold in food preservation	School in the country side or in town Names addresses and telephone numbers of -classmates -absent parents	Family trees Generations Related to one's own family A school day spent like a pupil in the past	Different sections in European school -separate experiences -shared experiences How needs are met in local area: transport, public services, shops, leisure activities
Interventions	Preservation of milk, fruits Recipes for cheese, yoghurt, jam	Moulds used to make e.g. chocolate, ice-cubes bird seed cakes graduations -on a thermometer - measuring time	Safe and dangerous areas in the school locality Traffic signals/signs near school	Contact with grand parents Gifts in the past and now	Exchanges with other language sections Division of tasks within the class itself
Responsibilities	The importance of every meal The importance of a varied diet The care of plants in class and of pets at home	Hygiene in food -handling -protecting -cooking -preserving -use by date	Respect for the environment: Class school local district Road safety near school	Sense of being part of a family line Respect for previous generations	Recognition of importance of people who make sure that school works well Trying to get to know children from other sections/ local area

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E.g. **Food, The Thermometer, Clocks, The School Its Surroundings, Generations, and The Family**

	Biological	Technological	Geographical	Historical	Socio-cultural
Representations	Function of the ear The skeleton and joints Classification: vertebrates/invertebrates reproduction in plants	Sound: noise and music Water in the home: from water meter to tap magnets and compasses	Map of the town where school is situated Orienteering: use a compass Map of the region where the school is Local river	Time lines organised into centuries + selected themes Evidence of the past in the town and region: remains, buildings, statues, road names, museum exhibitions	Local museums Local public facilities: crèches- schools- libraries- parks- stadiums- hospitals- residential homes- police-fire-fighters- town halls
Transformations	Accidents and injuries to skeleton and joints and appropriate care. Water as a constituent of all living beings From flower to fruit	Means of changing sound: study of musical instruments The importance of water in a manufacturing process: e.g. bread, cheese, paper	Town zoning Development in a district The path of a river from its source to the sea (+altitude and water cycle)	Historical origins of the town The evolution of a town over centuries (remains, engravings, post cards and maps)	The need for rules -in class -in school -in the town
Interactions	Muscular power Parasites: -Mushrooms -Head lice Dispersal of pollen and seeds (insects, birds, wind…)	Propagation, amplification and insulation of sound Water filtration (model) horizontality and verticality (use of spirit level and plumb line)	Comparison of distances and time taken -coming to school -going to…..	Manual/ Mechanical/ /Electric/Electronic Versions of household appliances, toys….. The development of a job/profession over time	Tourism and its economic impact on a town Elections and majority voting in class Highway code for pedestrians and cyclists
Interventions	Using gym and sport to build up muscles Matching materials to the needs of the skeleton: -table and chairs, -weight of school bag -position and movement	Making simple musical instruments and devices for transmitting sounds The moated castle and communicating vessels The use of magnets in play	Town infrastructure e.g. -transport -Post -drinking water -drains -rubbish collection	The evolution of our way of life e.g. the home • lighting • heating • furniture -transport -clothing -work and leisure -health	Provision in buildings and the town for people with limited • vision, • hearing • mobility Significant features of a town
Responsibilities	Protection of the ear from : loud music, walkman ….. Responsibility for one's body -cleanliness -keeping fit -moderation	Noise pollution Saving water _at home -at school Recycling: paper, glass, plastic, water	Advantages of public transport Sorting rubbish for collection Water treatment or River pollution	Municipal life	Protection of natural and historical heritage Respect for law and order Respect for majority decisions

These five areas above may be tackled in an integrated way using themes and projects e.g.

The Ear And Sound- Reproduction-The Skeleton-The Town- Public Utilities-Rivers-Cultural Heritage

	Biological	Technological	Geographical	Historical	Socio-cultural
Representations	A habitat e.g. pond, river, coast, dune, forest , mountain,(= a place and a function for all) Major systems in the human body : respiration and circulation	An simple electric appliance e.g. a torch, an Electro, A simple electric circuit, Air and wind (Beaufort scale)	Regional climate -observations, -readings and measures -recording -statistics Reading maps: political, relief, weather, (use of atlas)	Time lines in centuries and periods (> Renaissance) Life around a..... River and hill, villa, farm, castle/abbey, city and cathedral, market, port	Effects of mythology e.g. Legends Planets Names of days and places Architectural styles shown on euro notes
Transformations	Adaptation to habitat -in animals -in plants exchange of gases -in animals -in lungs (compare)	Materials which conduct/insulate electricity Using simple electric circuits e.g. lighting, alarm, toys, games, electromagnets	Comparison of climatic conditions: -region and country -country of origin -other European Schools (exchanges)	Way of life _nomad -tribal -feudal -in the city	Use aforementioned models to understand the way of life certain peoples today -current affairs -news stories
Interactions	Complete model of food chain Levels of vegetation In forests -on mountains -throughout the world	The effects of electric current on -heat -magnetism -movement wind power	Climatic factors -European climatic regions -the role of air pressure in weather forecasting: the barometer	Evolution of societies according to region -Mediterranean -rest of Europe -other continents	The benefits of two societies encountering each other over the centuries e.g.-invasions,-pilgrimages-fairs, travelling minstrels
Interventions	Forestry Deciduous / coniferous? Improvements to cultivated land e.g. terraces, drainage, choice of crops, fertiliser	Use of simple electric appliances Types of electric generators Weather forecasts	Weather station: create one or visit The effect of climate on landscape and agriculture in the region (in the locality of the school and in the country of origin) National grid	An event or A person that has had a major impact on history before the Renaissance	Discovering a variety of museums with -collections of objects, -reconstructions -instruction -workshops
Responsibilities	The conservation of natural environments Anti-smoking campaigns Benefits of organic farming	The dangers of electricity Reducing energy use Preference for renewable sources of energy	The effort to reduce environmental damage involved in -urbanisation -industrial pollution -urban pollution- -deforestation -desertification	Knowledge of the past in -the town -the host country -country of origin -in Europe	Conservation of cultural heritage -legends -folksongs and dances -traditions

The five areas above may be tackled in an integrated way using themes and project e.g.,

An Eco-System, Respiration, Weather Forecasting, Electricity, History > Renaissance

	Biological	Technological	Geographical	Historical	Socio-cultural
Representations	Function of the eye The digestive system in humans Using identification grids on plants and insects	The camera Colours Forces and movement e.g. corkscrew, bicycle	Use of co-ordinates on world maps and globes The planet earth and the moon in space The map of Europe Means of communication	Time lines in centuries and periods in Europe before and after major events (<the Renaissance) the development over the centuries of maps of the world and of the solar system	Map of the European schools in relation to local European institutions Historical maps showing the development of the European Union
Transformations	Difficulties related to vision Changes in the body at Puberty Synthesis of classification of animals by time and habitat	Optical instruments to look at very small objects /very distant(?) objects Ways of reducing force required e.g. use of levers, gears inclined planes…..,	Natural cycles related to the rotation (and orbit?) of the earth and the moon Evolution of a population e.g. -life expectation -population density -age pyramid - immigration rate	Economic and social changes caused by -inventions -great voyages -colonisation -driving forces -immigration -vaccination -the media	Evolution of professional sectors during the 20th century: mining, manufacturing, commerce, services and the development of the EISC, the Common Market, the European Community, the EU
Interactions	Micro-organisms -uses digestion bio degrading fermentation -dangers infection/illness	Opposing forces As shown in Flight Equilibrium Buoyancy Weightlessness Light and mirrors	GMT Causes of natural phenomena: Eclipses Rainbows Tides Volcanic eruptions Earthquakes	The rise and fall of particular regions because of technological developments The path towards democracy in Europe	The spread of European languages throughout the world Inequality in the world e.g. Rights of the child Poverty Access to water Natural resources
Interventions	Optical illusions Vaccination Balanced diet -energy -growth -fibre	Simple constructions showing the development of audiovisual machines e.g. -cartoons -turntables glasses (spectacles)	The role of artificial satellites in -map-making -communications -weather forecasting	The creation of the European Union as a response to the history of the 20th century e.g. compare old and recent atlases	Historic events and the development of particular movements e.g. -Trades Unionism, -Campaign for universal suffrage -feminism -green movement -reunification -globalisation
Responsibilities	Personal responsibility for -diet -hygiene -vision -avoiding germs -body	Establishing good working conditions Room to work Light Noise Rhythm Planning Method Result	The sense of interdependence -local -national -European -multicultural -global	Importance of elections at the -Local -National -European level	The European Spirit -Democracy -Tolerance -Solidarity Becoming aware of the problems children experience throughout the world

The five areas above may be tackled in an integrated way using themes and projects

E.g. **Digestion Micro-Organisms-Vision-Puberty-Forces-Space-< Renaissance-Elections**

Europe

Exploring Our World is an essential component of the primary curriculum. It provides the possibility of working across subject barriers, from the first year onwards. From the third year onwards, it is accorded a major part in the timetable.

Exploring Our World consists neither of rote learning nor of the simple arousal of curiosity. Pupils are expected to become active participants in their own learning. An important role is given to trial and error, individual research and reflection. So EOW has a very specific part to play in the assessment and observation of the individual pupil.

EOW seeks no less than to harmonise knowledge in the broadest sense across all sections and in all European schools.

This is reflected in the cognitive and educational objectives listed in the following grids of competences.

Local constraints will affect the choice of themes and way of teaching. However the competences will assure the convergence and unity required in European Schools.

In complete accordance with the programme, the competences touch on aspects met over the course of the school year. Pupils may be observed whilst engaged in a variety of activities. Pupils' approaches to problems will need to be observed. Performance must be evaluated. Finally, there must be an appraisal of the extent to which pupils can use autonomously that which has been learned.

The following pages, one per year group, are the tools of communication for teachers to inform parents of their child's progress in this area of the curriculum.

Each teaching unit anticipates those elements of observation and evaluation that will provide the basis for the report.

NB Apart from those competences linked specifically to Exploring Our World, the activities described above will often allow an opportunity to evaluate competences in other areas of the curriculum.