

Subject Title: Numeracy and Problem-Solving Skills (Mathematics, Science & Environment)

Introduction

Numeracy and Problem-Solving are the foundation skills for a knowledge-based economy. They are important not only from the point of view of the labour market, but are increasingly seen as important for an individual's ability to participate fully in the activities of the modern society. This strand aims at empowering students with the necessary knowledge, skills, and attitudes to solve problems requiring mathematical and scientific reasoning. Building on practical and real-life situations, it will provide students with opportunities to learn scientific ideas, processes and skills and relate these to everyday experiences. These everyday life experiences will also help them to make sense of the environment in which they live. The environment as a concept is not limited to nature or the living world but it has a broader meaning. Hence, students will gain knowledge and understanding of the other dimensions of environment, namely the physical, social, economic, cultural and political dimensions. They will be made to develop appropriate attitudes to protect the environment and develop a sense of belonging and caring for it. Information and Communication Technology (ICT) will be used across the strand as a tool to empower students to solve mathematical and scientific problems and also to understand the world in which they live. In summary, this domain will contribute in making students functionally numerate and scientifically literate to take informed decisions through rational and logical thinking.

The objectives of the domain are achieved through the following strands:

- (i) Functional Numeracy
- (ii) Understanding Nature (Science)
- (iii) Environment

while ICT will be used as a support in the development of these strands.

The aims of Numeracy and Problem-Solving Skills are to:

- develop problem solving skills in mathematical and scientific contexts through investigation;
- develop logical reasoning when dealing with mathematical and scientific issues;
- develop mathematical and scientific language as a means of communication;
- acquire and apply knowledge related to number, measure, geometry and statistics;
- acquire and demonstrate science process skills;
- develop a positive attitude towards Mathematics and Science including satisfaction, confidence, enjoyment and perseverance;
- demonstrate a positive attitude towards the contribution of Science in our everyday life;
- develop a broader understanding of the Environment and its components;
- demonstrate the skills to analyse the threats and risks associated with the Environment;
- develop a caring attitude towards the Environment;
- facilitate the acquisition of basic skills through the use of ICT tools;
- promote creative learning through ICT-supported learning processes.

Assessment objectives

Ongoing assessment should convey to teachers, where their students are in a particular knowledge domain and information gathered from students should guide instructional decisions. Assessment should also convey to students the skills they have already mastered and where they need improvement.

(a) Assessment for learning (formative) will be inbuilt in the teaching learning process to help learners construct appropriate knowledge structures. This would also enable teachers to identify learning difficulties and take constructive measures.

(b) Continuous assessment should form part of the overall assessment of the learners so that there is an objective evaluation of the competencies acquired with time. This will help teachers to take corrective measures and give learners a better opportunity to be able to climb to upper classes.

(c) Summative assessment will also be conducted at the end of each year to test overall competencies acquired.

Project-based assessment

Learners at pre-vocational level need to have prolonged engagement with the subject matter so that they are able to grasp the gist of the concepts being taught. The integrated approach guiding the implementation of the current curriculum requires that students be assessed through different projects. Among other innovative and informative ways in which their learning can be assessed, project work can be of valuable help to both the learner and the tutor. It is proposed that the learning of concepts and skills in Numeracy, Science and Environment be assessed through well structured projects. In order not to put too much pressure on the learners due to the time consuming nature of projects, one group project may be considered per school term based on Mathematics/Science/Environment concepts. These projects will allow students to connect concepts from different knowledge domains and appreciate the practical utility of what they are learning.

Curriculum content

Year 1

This section must reflect the level descriptors outlined in the curriculum framework secondary

Functional Numeracy

Working with whole numbers	<ul style="list-style-type: none"> • Counting, reading and writing numbers up to 1000 • Interactive Multimedia CD-ROM (MCA) • Counting forward and backward, skip counting • Comparing and ordering numbers (use of number line) • Interactive Multimedia CD-ROM (MCA) • Cardinal and ordinal aspect of numbers • Place value – Representing numbers on an abacus; writing numbers in expanded form and vice versa • Virtual manipulative: base 10 blocks • Perform operations involving addition, subtraction, multiplication and division. • Common mathematical vocabulary associated with numbers and the four arithmetic operations • Mental arithmetic • Virtual manipulative: multiplication and division
Making sense of fractions	<ul style="list-style-type: none"> • Meaning of fractions • Representation of fractions • Interactive Multimedia CD-ROM (MCA) • Reading and writing of fractions in words and figures • Equivalent fractions • Mixed numbers and improper fractions • Arithmetic operations (addition, subtraction) involving fractions (except mixed numbers)

Understanding decimals	<ul style="list-style-type: none"> • Meaning of decimals • Representation of decimal numbers • Reading and writing of decimal numbers in words and figures • Operations on decimal numbers (addition and subtraction) • Conversion of decimal numbers into fractions and vice versa
Understanding and applying Percentages	<ul style="list-style-type: none"> • Meaning of percentage • Representation of percentage • Conversion of fraction and decimal to percentage and vice versa
Ratio	<ul style="list-style-type: none"> • Multiplicative comparison of two quantities • Express a ratio in its simplest form • Express a fraction as a ratio and vice versa
Working with Length	<ul style="list-style-type: none"> • Express length in common units: m, cm, mm, km • Draw and measure line segments of given lengths • Relationship between units of length (e.g., m to cm) • Perform simple mathematical operations involving lengths
Working with Mass	<ul style="list-style-type: none"> • Mass in real life situations • Express mass in standard units (kg, g) • Perform addition and subtraction of 2 masses without conversion of units
Working with Capacity	<ul style="list-style-type: none"> • Capacity in daily life • Use of arbitrary units to estimate capacity • Use of standard units (litres, L and centilitres, cL) to measure capacity • Conversion of litres into centilitres and vice versa • Perform four basic operations involving capacity
Working with Time	<ul style="list-style-type: none"> • Express time in hours, minutes and seconds • Convert time form one unit to another (e.g., hours to minutes) • Read and represent given time on a clock face • Interactive Multimedia CD-ROM (MCA) • Read and write time in figures and in words (12-hour and 24-hour clock) • Read and write the name of the days of a week • Read and write the name of the months of a year • Calculate the number of days in each month of a year • Read a calendar

Working with Money	<ul style="list-style-type: none"> • Identify the coins and notes of the Mauritian currency • Interactive Multimedia CD-ROM (MCA) • Convert rupees into cents and vice versa. • Perform simple mathematical operations (4 rules) involving rupees and cents
Understanding shapes in the environment	<ul style="list-style-type: none"> • Rectangle, Square, Triangle, Circle • Interactive Multimedia CD-ROM (MCA) • Horizontal and vertical lines • Parallel and perpendicular lines • Isosceles and equilateral triangles • Parallelogram • Use geometrical instruments • Bisect a line segment • Construct parallel lines, geometrical shapes (triangles and quadrilaterals) • Draw circles • Measure angle (not more than 180°) between lines using a protractor • Straight angle and right angle • Angle properties in a rectangle, square and triangle (including isosceles and equilateral)
Handling data	<ul style="list-style-type: none"> • Use common words, phrases and symbols for collecting, recording and organising data (e.g., raw data, grouped data, tally marks, frequency, distribution and sample) • Collect and access data (e.g., through observations, experiments, surveys, existing data, newspaper and television) • Comment on how the way data is collected affects its interpretation, (e.g., only boys form part of a survey) • Use standard methods for representing data (e.g., tables, pictogram, bar/column chart) • Use of conventions of tables and graphs such as headings, titles, scales on axes and keys • Representation of data in Excel • Interactive Multimedia CD-ROM (MCA)

Air	<ul style="list-style-type: none"> • What is air made up of • Properties of pure air • Importance of air in sustaining of life, travel and entertainment • Web link 1 • Web link 2 <p>In these websites there are simple activities regarding air and its properties; teachers are expected to adapt and use these resources to supplement the lessons conducted.</p>
Water	<ul style="list-style-type: none"> • Properties of pure water • Importance of water in sustaining life, travel and entertainment • States in which water exists • Web link 3 • Web link 4 <p>These websites have a few simulations on water as well as other interactive resources; these can be adapted and used by teachers in lessons</p>
Pollution	<ul style="list-style-type: none"> • What is pollution • Causes and consequences of water and air pollution • How to avoid water and air pollution • Web link 5 • Web link 6 • Web link 7 • Web link 8 <p>This website has a large number of images to show what is water pollution</p>
Materials	<ul style="list-style-type: none"> • List materials commonly used in everyday life • Recognise materials used to make objects of everyday use • Differentiate between permeable/impermeable and soluble/insoluble substances • State the applications of permeable/impermeable and soluble/insoluble substances • Web link 9

Understanding Nature - Year 1

Air	<ul style="list-style-type: none">• What is air made up of• Properties of pure air• Importance of air in sustaining of life, travel and entertainment• Web link 1• Web link 2 <p>In these websites there are simple activities regarding air and its properties; teachers are expected to adapt and use these resources to supplement the lessons conducted.</p>
Water	<ul style="list-style-type: none">• Properties of pure water• Importance of water in sustaining life, travel and entertainment• States in which water exists• Web link 3• Web link 4 <p>These websites have a few simulations on water as well as other interactive resources; these can be adapted and used by teachers in lessons</p>
Pollution	<ul style="list-style-type: none">• What is pollution• Causes and consequences of water and air pollution• How to avoid water and air pollution• Web link 5• Web link 6• Web link 7• Web link 8 <p>This website has a large number of images to show what is water pollution</p>
Materials	<ul style="list-style-type: none">• List materials commonly used in everyday life• Recognise materials used to make objects of everyday use• Differentiate between permeable/impermeable and soluble/insoluble substances• State the applications of permeable/impermeable and soluble/insoluble substances• Web link 9• This website provides lots of images of objects made of different materials

The Environment

Environment as a broader concept	<ul style="list-style-type: none">• Definition and types of environment• Plants in our environment and their importance• Parts of the plants• Germination and factors affecting germination
Role of human beings	<ul style="list-style-type: none">• Human beings as part of the environment• Protecting environment and natural resources• http://www.seql.org/100ways.cfm• http://www.innovativedesign.net/pdf/05environment.pdf• these websites contain notes on protection of environment

Year 2

Functional Numeracy

Working with whole numbers	<ul style="list-style-type: none">• Counting, reading and writing numbers up to 10000• Compose and decompose numbers up to 10000• Perform operations involving addition, subtraction, multiplication and division• Common mathematical vocabulary associated with numbers and the four arithmetic operations• Solve simple word problems involving the four operations• Number patterns and sequences• Interactive Multimedia CD-ROM (MCA)• Types of numbers (including even, odd, square and prime numbers)• Interactive media CD ROM (MCA)• Factors and multiples• Mental arithmetic
Making sense of fractions	<ul style="list-style-type: none">• Ordering fractions• Operations on fractions (including multiplication, division, mixed numbers)• Solve simple word problems involving fractions• Virtual manipulative: fraction
Understanding decimals	<ul style="list-style-type: none">• Ordering decimal numbers• Operations on decimal numbers• Conversion of decimal numbers into fractions and vice versa• Solve simple word problems involving decimals• Virtual manipulative: arithmetic operations on decimals
Understanding and applying Percentages	<ul style="list-style-type: none">• Finding percentage• Solve simple word problems involving percentage• Increase and decrease a quantity by a percentage• Percentage profit and loss

Ratio, proportion and rate	<ul style="list-style-type: none"> • Solve simple word problems involving ratios • Meaning of direct proportion • Solve simple word problems involving direct proportion
Working with Length and Area	<ul style="list-style-type: none"> • Perform conversion of units of length (m to cm; m to mm; km to m) • Perform simple mathematical operations involving lengths (including fractions and decimals) • Solve simple word problems involving lengths
Working with Mass	<ul style="list-style-type: none"> • Conversion of masses from kilograms to grams and vice-versa • Perform four basic operations (addition, subtraction, multiplication and division) of masses with conversion from one unit to another • Solve simple word problems involving masses with conversion
Working with Capacity	<ul style="list-style-type: none"> • Introduce millilitre as another unit of capacity • Conversion of litres, centilitres into millilitres (mL) and vice versa • Perform four basic mathematical operations involving litres, centilitres and millilitres with conversion • Solve simple word problems involving capacity (use of L, cL and mL)
Working with Time	<ul style="list-style-type: none"> • Perform conversion of units of time (hours to minutes; minutes to seconds and vice versa) • Perform simple mathematical operations involving time • Read and record date in different ways • Solve simple word problems involving time
Working with Money	<ul style="list-style-type: none"> • Perform simple arithmetic operations involving coins and notes • Interactive Multimedia CD-ROM (MCA) • Solve simple problems involving total cost, buying, selling, profit, loss and change
Understanding shapes in the environment	<ul style="list-style-type: none"> • Polygons up to six sides • Components of circle (centre, radius, diameter, circumference) • Trapezium, Kite • Circumference of circle • Area of circle, trapezium and composite shapes • Understand the terms acute, obtuse and reflex angles • Calculate unknown angles in a triangle and quadrilateral • Draw angles using a protractor

	<ul style="list-style-type: none"> • Bearing • Construct angles using bisection • Construct symmetrical designs • Line of symmetry (horizontal and vertical) • Basic LOGO
Handling data	<ul style="list-style-type: none"> • Record and organise ungrouped data using frequency tables and pie charts (with percentage and/or angles) • Read data that have been presented using standard methods • Representation and analysis of data in Excel
Working with unknown quantities	<ul style="list-style-type: none"> • Simple algebraic representation of mathematical situations

Understanding Nature – Year 2

Air	<ul style="list-style-type: none"> • Explain what is wind and how it is formed • Describe how wind is used in the production of electricity • State the dangers of cyclonic winds • Web link 10 • Web link 11 <p>These web sites provide information about wind, cyclones and so on.</p>
Water	<ul style="list-style-type: none"> • List the uses of water in relation to life and health • Describe the water cycle • Explain how rain water harvesting takes place • Differentiate between the conditions of drought and flooding • Web link 12 <p>This web link provides images and explanations for water cycle</p>
Plants	<ul style="list-style-type: none"> • Describe the culture of cash crops • Explain how composting of plants can be undertaken • Web link 13
Animals	<ul style="list-style-type: none"> • Differentiate between food habits, movements and habitats of animals • Classify animals as domestic or wild • Explain how animals are useful to humans • Web link 14 <p>This web site describes some useful animals</p>
Energy	<ul style="list-style-type: none"> • List forms and sources of energy • Differentiate between sources and forms of energy • Explain how energy can be converted from one form to another • Web link 15 <p>This web site provides useful information regarding energy forms, sources and changes</p>

The Environment

Human impact on environment	<ul style="list-style-type: none"> • How the environment is shaped by man over time? • Causes of environmental problems and risks
Threat to the environment	<ul style="list-style-type: none"> • Identifying issues and risks related to the environment • Ways of managing resources at home and/or at school • Audit of resources, developing a checklist for audit • The Reduce, Reuse and Recycle (3Rs) principle

Year 3

Functional Numeracy

Working with whole numbers	<ul style="list-style-type: none">• Counting, reading and writing numbers up to 1 000 000• Compose and decompose numbers up to 1 000 000• Perform operations involving addition, subtraction, multiplication and division• Solve practical problems involving the four operations• Order of operations• Number patterns and sequences• Application of factors and multiples (LCM and HCF)• Use of calculators to perform arithmetic operations• Powers• Square roots
Making sense of fractions	<ul style="list-style-type: none">• Practical problems involving fractions
Understanding decimals	<ul style="list-style-type: none">• Practical problems involving decimals
Understanding and applying Percentages	<ul style="list-style-type: none">• Practical problems involving percentage
Ratio, proportion and rate	<ul style="list-style-type: none">• Solve practical problems involving ratios (e.g., map scales)• Solve practical problems involving direct proportion• Speed• Conversion of units of speed
Working with Length and Area	<ul style="list-style-type: none">• Find the perimeter of a rectangle, square, triangle and circle• Solve word problems involving perimeter of these shapes• Find the area of a square, rectangle, triangle and circle• Use the units m^2 and cm^2• Conversion of units of area• Estimation

Working with Mass	<ul style="list-style-type: none"> • Use of other units of mass (tonne and milligram) • Conversion of tonnes into kilograms, grams into milligrams and vice versa • Perform four basic operations (addition, subtraction, multiplication and division) involving tonnes, kilograms, grams and milligrams with conversion (including fractions, decimals and percentages)
Working with Volume and Capacity	<ul style="list-style-type: none"> • Use of cubic metres and cubic centimetres • Conversion of litres into cubic metres and cubic centimetres and vice versa • Determine volume of cube, cuboid and cylinder • Perform four basic mathematical operations involving capacity with conversion (including fractions and decimals) • Estimation
Working with Time	<ul style="list-style-type: none"> • Perform simple arithmetic operations (with fractions and decimals) involving units of time • Solve word problems involving leap and common years
Working with Money	<ul style="list-style-type: none"> • Perform simple calculations involving total cost, change, profit and loss
Understanding shapes in the environment	<ul style="list-style-type: none"> • Develop and construct 3D shapes (cube, cuboids, cylinders, pyramids and prisms) • Sphere • Use the concept of perimeter in practical situations (e.g., fencing, design of photo frame) • Use the concept of area in practical situation (e.g., tiling, designing of covers) • Apply Pythagoras' Theorem and trigonometrical ratios to find unknown lengths in a given right angle triangle • Basic LOGO
Handling data	<ul style="list-style-type: none"> • Record and organise grouped data using frequency table. • Calculate features of ungrouped data (e.g., mode, median, mean), including data in frequency table • Representation and analysis of data in Excel
Working with unknown quantities	<ul style="list-style-type: none"> • Solve simple linear equations • Subject of formula

Understanding Nature – Year 3

Natural resources	<ul style="list-style-type: none">• Explain what are natural resources• State which natural resources are available in Mauritius• Web link 16• Web link 17• Web link 18• These websites give an indication of what do we mean by natural resources, what types of natural resources are available and which ones are not applicable to Mauritius
Natural calamities	<ul style="list-style-type: none">• List the common natural calamities affecting us• Explain why natural calamities are dangerous• Describe the precautions taken in case of natural calamities• Web link 19• Web link 20• Web link 21• Web link 22• Web link 23 <p>These websites explain the list of natural phenomena and calamities/disasters that exist, their effects and what precautions could be taken</p>
Water	<ul style="list-style-type: none">• Explain the purification and distribution of water for domestic purposes• Demonstrate understanding of water conservation• Web link 24• Web link 25• All these websites provide discussions on water conservations and simple tips to go about
Electricity	<ul style="list-style-type: none">• What are the uses of electricity• What are the dangers of electricity• Which Protective measures are taken when using electricity• Web link 26• Web link 27

	<ul style="list-style-type: none"> • Web link 28 • Web link 29 <p>These useful websites are providing with elementary steps for preventing electric shocks and other dangers by taking appropriate precautions</p>
Living things	<ul style="list-style-type: none"> • What are the characteristics of life • Identify life threatening hazards • Web link 30 • Web link 31 • Web link 32 • These websites have interactive flash files where parameters can be changed and growth of plants can be observed, other characteristics of life are explained

The Environment

Environmental Impact Assessment	<ul style="list-style-type: none"> • Developing tools for environmental impact assessment • Conducting environmental audit identifying areas for improvement • Proposing ideas for better management of resources
Conducting environmental audit	<ul style="list-style-type: none"> • Developing a checklist for conducting an audit of a resource at school • Adopting the 3Rs principle to manage resources at school

Year 4

Functional Numeracy

Working with whole numbers	<ul style="list-style-type: none">• Estimation• Introduction to negative numbers• Use of calculators to perform arithmetic operations
Making sense of fractions	<ul style="list-style-type: none">• Practical problems involving fractions
Understanding decimals	<ul style="list-style-type: none">• Practical problems involving decimals• Decimal places• Significant figures
Understanding and applying Percentages	<ul style="list-style-type: none">• VAT• Wages and salaries• Hire Purchase• Simple interest
Ratio, proportion and rate	<ul style="list-style-type: none">• Rates in practical situations (e.g., interpreting water bills, electricity bills, telephone bills)
Working with Length and Area	<ul style="list-style-type: none">• Solve practical problems involving perimeter of triangular, rectangular and circular shapes• Solve practical problems involving area of rectangular, triangular, circular shapes(e.g., painting of surface, tiling)
Working with Mass	<ul style="list-style-type: none">• Estimation of mass• Solve practical problems involving masses with conversion
Working with Volume and Capacity	<ul style="list-style-type: none">• Solve practical problems involving volume, surface area and length of cube, cuboid, cylinder• Solve practical problems involving capacity and volume
Working with Time	<ul style="list-style-type: none">• Appreciate the difference in time from place to place on the globe, relate international time to GMT and vice versa• Calculate number of days between two given dates (of same and different months)• Interpret timetables
Working with Money	<ul style="list-style-type: none">• Work with different currencies (\$, €, £)• Use calculator to convert Mauritian currency to \$, € and £ and vice versa

Understanding shapes in the environment	<ul style="list-style-type: none"> • Use the concept of angle in practical situations (e.g., construction of triangular frames, navigation) • Solve practical packing problems involving shapes (2D and 3D) • Solve problems using construction (scale drawing)
Handling data	<ul style="list-style-type: none"> • Interpret data and predict obvious trends such as increasing, decreasing, constant and fluctuating • Identify distortion of data presented graphically such as misleading scales and incorrect use of pictograms • Comment on how representation of data affects its interpretation and use • Interpret features of data and make decisions as well as predictions in terms of personal implications and social consequences • Draw tables and graphs such as simple bar/column chart, pie chart using computer software (e.g., Excel). • Present and interpret trends in data
Working with unknown quantities	<ul style="list-style-type: none"> • Solve simple linear equations • Subject of formula

Understanding Nature - Year 4

Electricity	<ul style="list-style-type: none"> • Identify components of domestic wiring system • Describe the basics of domestic wiring system • State the steps taken to ensure safe use of electricity at home • Web link 33 • Investigate the conservation of electrical energy • Describe the use of a lightning conductor • Web link 34 • Web link 35 • The information needed to understand basic ideas in electricity and safe use of electricity are explained in these websites
Earth and space	<ul style="list-style-type: none"> • Explain the occurrence of day and night on Earth • Describe our solar system • Identify other celestial bodies

	<ul style="list-style-type: none"> • Web link 36 • Web link 37 • Encyclopaedia Encarta can also provide appropriate information to supplement the explanation of teachers • This website takes learners through a voyage to the edge of universe, teachers should engage learners on these issues and clear misconceptions
Materials	<ul style="list-style-type: none"> • Good and bad conductors of electricity and their uses • Good and bad conductors of heat and their uses • Web link 38 • Web link 39
Energy	<ul style="list-style-type: none"> • Renewable and non-renewable sources of energy • Web link 40

Environment

Environmental Impact Assessment	<ul style="list-style-type: none"> • Understanding the multi-dimensional nature of environment • Our rights and responsibilities towards the environment
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Use of ICT in the teaching, learning and assessment of the concepts in the curriculum of PVE

All the concepts involved in the Curriculum of PVE can be taught using ICT facilities such as:

- PowerPoint Presentations (self prepared, from peers or downloaded from Internet),
- Interactive whiteboards, data loggers and electronic sensors available in many schools used to measure temperature, speed, force, light intensity, pressure, voltage, current, ...
- Simulations downloaded from the Internet or from Multimedia files (e.g. <http://phet.colorado.edu/>, using simulations from the PHET website we can teach concept of electricity, connections, parallel and series connections and so on. Even short circuit can be taught/studied.
- notes from specific websites,
http://free.ed.gov/resource.cfm?resource_id=1646&subject_id=58&toplvl=56
http://en.wikipedia.org/wiki/Learning_sciences
- interactive gif files e.g., from crocodilephysics.org/
- Google Images (google.org.mu),
- Google Earth for World Atlas and having possibility of zoom in zoom out to view all parts of the world along with its spin
- images from fotosearch to illustrate concepts in a more interactive way,
- Online encyclopaedia such as the Encarta which has text notes, video files, sound files, simulations, pictures, photographs.
- Using ICT there can also be appropriate assessment of learning e.g., use of online worksheets, questionnaires, self assessment checklists and so on.

This is a list of websites where specific notes, animations and images can be obtained by students as well as teachers for better understanding/teaching of the topics in science and in this syllabus.

1. Web link 1 <http://www.air-conditioner-selection.com/air-properties-and-air-conditioners.html>
2. Web link 2 http://weather.about.com/od/lessonplanellementary/ht/air_volume.htm
3. Web link 3 <http://www.physicalgeography.net/fundamentals/8a.html>
4. Web link 4 <http://www.youtube.com/watch?v=CT4pURpXkbY>
5. Web link 5 http://www.ehow.com/how_2106625_teach-children-air-pollution.html
6. Web link 6 http://www.ehow.com/how_2123844_teach-children-water-pollution.html
7. Web link 7 <http://www.mbgnet.net/fresh/pollute.htm>
8. Web link 8 <http://www.google.mu/images?hl=en&q=water+pollution&um=1&ie=UTF-8&source=univ&sa=X&ei=oeOUTbOuGoaxhAe-wPDrCA&ved=0CEgQsAQ>

9. Web link 9 <http://www.google.mu/images?um=1&hl=en&tbm=isch&sa=1&q=materials+used+in+everyday+life&aq=f&aqi=&aql=&oq>
10. Web link 10 <http://www.aip.org/history/climate/oceans.htm>
11. Web link 11 <http://www.blog4safety.com/2010/03/windy-conditions-can-be-dangerous/>
12. Web link 12 <http://www.google.mu/images?hl=en&q=water+cycle&um=1&ie=UTF-8&source=univ&sa=X&ei=mOmUTdiAOciAhQeWzMjmCA&ved=0CDIQsAQ>
13. Web link 13 http://wiki.answers.com/Q/What_are_cash_crops
14. Web link 14 <http://animals.about.com/od/zoologybasics/a/animalsenvironment.htm>
<http://www.suite101.com/content/educational--research-a212345>
15. Web link 15 <http://childparenting.about.com/od/lifeathome/a/kidsaveenergy.htm>
16. Web link 16 http://en.wikipedia.org/wiki/Natural_resource
17. Web link 17 <http://www.tradechakra.com/economy/mauritius/natural-resources-in-mauritius-327.php>
18. Web link 18 <http://www.buzzle.com/articles/different-types-of-natural-resources.html>
19. Web link 19 http://en.wikipedia.org/wiki/Natural_phenomenon
20. Web link 20 <http://www.google.mu/images?hl=en&q=natural+phenomena&um=1&ie=UTF-8&source=univ&sa=X&ei=gBKaTYTdCYi6hAfO3fnuCA&ved=0CFUQsAQ>
21. Web link 21 <http://www.google.mu/images?q=natural+calamities&hl=en&um=1&ie=UTF-8&source=univ&sa=X&ei=VhOaTeiFDtC7hAe0-DICA&ved=0CD4QsAQ>
22. Web link 22 http://en.wikipedia.org/wiki/Natural_disaster
23. Web link 23 <http://www.buzzle.com/articles/natural-disasters/>
24. Web link 24 <http://www.bing.com/images/search?q=conservation+of+water+&qpv=conservation+of+water+&FORM=IGRE>
25. Web link 25 <http://www.monolake.org/about/waterconservation>
26. Web link 26 <http://phet.colorado.edu/>
27. Web link 27 <http://www.electricityforum.com/dangers-of-electricity.html>
28. Web link 28 <http://www.childsafetyaustralia.com.au/children/electricity/electricity.htm>
29. Web link 29 http://library.unesco-iicba.org/English/SECONDARY_SCIENCE_SERIES/science_lessons/21_electricity.htm

30. Web link 30
<http://www.bing.com/images/search?q=living+things+&qpv=living+things+&FORM=IGRE>
31. Web link 31 <http://classroom.jc-schools.net/sci-units/living-things.htm>
32. Web link 32 http://www.ngfl-cymru.org.uk/vtc/plants_light_water_to_grow/eng/Introduction/MainSession.swf
33. Web link 33 <http://www.articlesbase.com/electronics-articles/learning-the-basics-of-domestic-wiring-568707.html>
34. Web link 34 <http://www.talktalk.co.uk/reference/encyclopaedia/hutchinson/m0030305.html>
35. Web link 35 http://www.1911encyclopedia.org/Lightning_Conductor
36. Web link 36
<http://www.google.mu/search?q=fantastic+trip%5B&hl=en&prmd=ivns&source=univ&tbs=vid:1&tbo=u&sa=X&ei=ZuyUTE7ZLcOxhAfNpqzICA&ved=0CCYQgwQ>
37. Web link 37 <http://www.solarviews.com/eng/solarsys.htm>
38. Web link 38
<http://www.bing.com/images/search?q=conductors+of+heat+and+electricity&qpv=conductor+of+heat+and+electricity&FORM=IGRE>
39. Web link 39 <http://www.blurtit.com/q187010.html>
40. Web link 40 <http://www.mychildhealth.net/importance-of-renewable-energy-for-kids.html>
41. Kio0jpop[
42. Lp[]

Additional notes to Educators

Integrating the four different domains

Themes chosen to integrate the various domains

- Living in a community
- Health and safety
- Consumerism/Shopping
- Household items
- Trade and Employment
- Transport and Travel
- Communication
- Leisure/entertainment/sports
- DIY (including gardening)
- Food and nutrition (Food and life style)

Example



