North Ealing Primary School
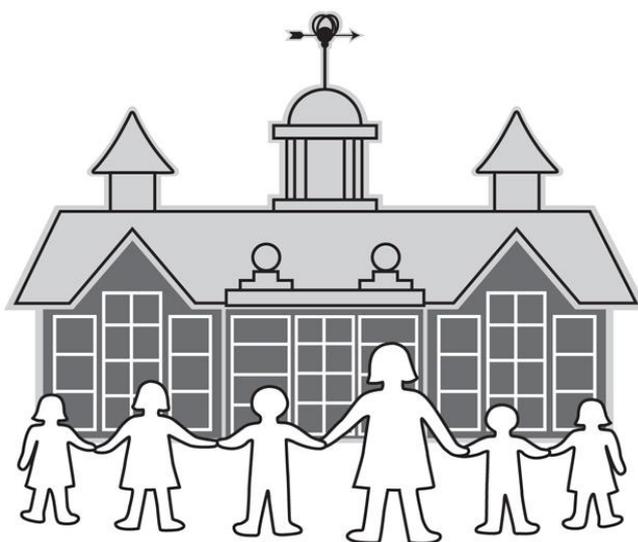
ICT & Computing Policy

Committee with oversight for this policy – Curriculum & Standards	
Policy to be approved by the Curriculum & Standards Committee	
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Policy last ratified and adopted by Full Governing Body	N/A
Policy / Document due for review	06/2019

North Ealing Primary School
ICT and Computing Policy

Purpose:

This policy promotes and reflects the school's learning values and philosophy in relation to the teaching and learning of and with ICT. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

The policy should be read in conjunction with the scheme of work for ICT which sets out in detail what pupils in different classes and year groups will be taught and how ICT can facilitate or enhance work in other curriculum areas.

The ICT curriculum was overhauled in 2014 creating new horizons much higher expectations.

This document is intended for the guidance and support of:

- The Headteacher and senior leadership team;

- All teachers;

- All staff with classroom responsibilities;

- School governors;

- Parents;

- Inspection teams.

Copies are of this policy are kept centrally on Central Resources under Staff Shared New Curriculum and are available from the senior leadership team and the subject coordinator.

Vision:

Information and Communications Technology prepares pupils and their adults to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. It is also an integral part of their day-to-day lives outside of school (pupil understanding often exceeds that of their parent/carers!)

We recognise that Information and Communications Technology is an important tool both in the society in which we live and in the process of teaching and learning. Pupils will need to use ICT tools to find, explore, analyse, exchange and present information responsibly, creatively and with discrimination. They need to learn how to employ ICT to enable rapid access to ideas and experiences from a wide range of sources.

Our vision is for all teachers and learners in our school to become confident users of ICT so that they can develop the skills, knowledge and understanding which enable them to use appropriate ICT resources effectively as powerful tools for learning/teaching and living in the digital age.

Aims

This policy has the following intentions:

- To enable children to become autonomous, independent users of ICT, gaining confidence and enjoyment from their ICT activities within a co-operative/sharing environment;

- To develop a whole school approach to ICT ensuring that continuity and progression in all strands of the Computing Curriculum 2014 is facilitated;

- To use ICT as a tool to support teaching, learning and management across the curriculum;

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- To provide children with opportunities to develop their ICT capabilities in all areas specified by the Curriculum 2014;

- To ensure ICT is used, when appropriate, to facilitate and improve access to learning for pupils with a diverse range of individual needs, including those with SEN and disabilities as well as those with a particular aptitude for the subject;

- To maximise the use of ICT in developing and maintaining links between other schools, the local community including parents and other agencies;

- To ensure that pupils leave us equipped with the fundamental requirements of digital-literacy that will aid their ability to 'work, rest and play' in their day-to-day living.

Objectives:

In order to fulfil the above aims, it is necessary for us to ensure:

- That there exists a continuity of experience/provision and opportunity throughout the school both within and among year groups;

- The systematic progression of skills through EYFS and key stage1 & 2;

- That the National Curriculum 2014 programmes of study and their associated strands and expectations are met via appropriate and developmental coverage;

- That all children have easy access to a range of ICT resources appropriate to their age and ability;

- That ICT experiences are focussed to promote and enhance their learning experiences;

- That cross-curricular links are developed and managed where appropriate;

- That children's experiences are monitored and evaluated through hard-copy as well as being stored digitally;

- That resources are clearly available and are being used to their full extent;

- That resources and equipment are kept up to date and in good working order as much as possible;

- That staff skills and knowledge are kept up to date and relevant to the needs of their cohort.

Curriculum Development & Organisation:

The 2014 NC shifted significantly in terms of its focus and expectations. It is brief and focussed in what it sets out as expectations - leaving considerable freedom and flexibility for the school to develop its own programme of study.

(Appendix 1: Requirements of Computing in Primary Schools)

- Once a term, KS1 and 2 will complete one or two units of work based on the Rising Stars 'Computing' Scheme .

- This has been written with the new curriculum requirements in mind. (see Appendix 2 for coverage). Additionally, use will be made of the Coding units available on LGfL and IT-based resources will be incorporated in lessons across the curriculum to be monitored by the subject-leaders.

(Note that 2014-15 is our benchmark from which future developments will progress. For the 2014-15 year cohort, Year 6 will mirror the Year 5 PoS. There is considerable catch-up necessary in order to prepare pupils for later progression (e.g. use of HTML text).

- EYFS will continue to use the Rising Stars 'Switched On ICT' scheme until a suitable replacement/provision is found. Additionally, they have full access to the key elements of Coding on LGfL (J2e) and in-house resources of Bee-Bots/Pro-Bots in both hardware and on-screen simulation.

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- Years 5/6 have access to 30 laptop units, Years 3 and 4 have access to 30 laptop units and Years 1 and 2 have access to two laptops per class. The laptops and the ICT suite (16 units) are available for booking by any class/group in advance. This scheme is integrated to ensure that delivery of ICT is linked to subjects and takes on board the statutory requirements of other national curriculum subjects. A weekly timetable is displayed within the ICT room for staff to sign up for additional time where appropriate. It is NOT necessary for every class to have an allocated slot- as some units are adaptable to classrooms/outdoor environments.

- Individual laptops in classrooms support the development of ICT capability by enabling further development of tasks from the ICT room; to encourage research, and allow for the creative use of ICT in subjects.

- We encourage the use of individual laptops in classrooms to support work in ESL and SEN. For example, the use of headphones for ESL pupils to hear stories and play appropriate teaching games (please locate under ESL provision).

- Digital projectors, for PROMETHEAN IWBs, are located in all of the classrooms as well as the ICT suite. These are used as a teaching resource across the curriculum. Additionally, classrooms are fitted with a sound-field system, visualisers and easy access to cameras/videos/data-logging kits/time-lapse cameras/headphone etc.(This provision is currently under review as part of on-going upgrading and replacement strategies).

Teaching & Learning:
Planning is differentiated to meet the range of needs in any class including those children who may need extra support, those who are in line with average expectations and those working above average expectations for children of their age. This is outlined in the 'Rising Stars' scheme but additional 'Quality First' teaching strategies are also applied.

A wide range of styles are employed to ensure that all children are sufficiently challenged:

- Children may be required to work individually, in pairs or in small groups according to the nature or activity of the task;

- Different pace/amount of work output;

- Deployment of visual/aural and kinaesthetic learning resources/input;

- Different groupings of children - groupings may be based on ability (either same ability or mixed ability);

- Different levels of input and support (including use of pre-teaching, vocabulary groups, TAs and LSAs);

- Different outcomes expected to build confidence and achievement.

A COMPUTER CLUB is run after school for those pupils with a particular interest/aptitude.

The DIGISMART CLUB is run to provide additional support for pupils with needs in Year 5 who then go on to become DIGIBUDDIES for pupils in Year 4.

Full information regarding class provision and differentiation for groups is provided in the RS scheme. Self-evaluations at the end of each unit enable the teacher to assess strengths and weaknesses or areas to develop. It is the responsibility of the class teacher to ensure that Quality First teaching approaches are in place and that the needs of all individuals are met in order to maximise their learning curve. The CLASSROOM MONITOR learning objectives enable us to track progress and attainment.

Pupils are taught using a 'Code of Conduct' scheme that is included in their record files (Appendix 1).

Equal Opportunities:
The National Curriculum states that, "All pupils, regardless of race, class or gender, should have the opportunity to develop ICT capability."

It is our policy to manage this by:

- Ensuring all children follow the appropriate scheme of work for ICT;

- Keeping a record of ICT resources use that monitors equality of access, provision and relevance to need;

- Providing curriculum materials and software which are in no way class, gender or racially prejudice or biased;

- Monitoring the level of access to computers in the home environment to ensure no pupils are unduly disadvantaged;

- Providing in-school opportunities for pupils without home access to use ICT for their own interest or for access to the MLE and Mathletics.

We are currently investigating ways in which parents can be supported in developing their own knowledge of curriculum requirements for ICT and how they can support their children at home. This includes consistent provision of e-safety awareness information and access points for presenting guidance.

Internet Safety:
Every member of the school community is required to sign an Acceptable Use Agreement (AU) yearly. This is updated at least once a year in the light of new knowledge/experience/issues arising. The school community is inclusive of covered are as follows:

- Administrative staff

- Teaching Staff

- GB

- SMSAs

- Maintenance Staff

- Pupils (signed by parents)

- EYFS (signed by parents)

The AU policies can be found on the school website (under e-safety) and on Central Resources. They are collected, checked and stored by the ICT co-ordinator annually and new members of the school community are supplied with the requisite forms which are then forwarded from the school office to the collator.

- Internet access is planned to enrich and extend learning activities.

- The school acknowledges the need to ensure that all pupils are responsible and safe users of the Internet and other communication technologies. An internet access policy has thus been drawn up to protect all parties. Rules for responsible internet use are displayed prominently throughout the school.

- Although the school offers a safe online environment through filtered internet, access we recognise and implement the importance of reminding our children about online safety and their responsibilities whenever using communication technology.

- We are beginning to develop this as part of our PSHE provision in key stage 2.

- The e-safety policy is available and supplied as an appendix to the current policy.

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Management Information Systems (MIS):

- ICT facilitates efficient and effective access to, and storage of, data for the school's management team, teachers and administrative staff.

- The school complies with LEA requirements for the management of information in schools. We currently use SIMs which operates on the school's administrative network and is supported by 3BM.

- We use Classroom Monitor to track progress.

- All teaching staff have access to Classroom Monitor. This is monitored via Pupil Progress meetings led by the senior leadership team.

- The school has defined roles & responsibilities that ensure that all data is well-maintained, secure and that appropriate access is properly managed only after appropriate training has been provided.

Assessment:

ICT is assessed using the NC 2014 Guidelines. These are split into the two key stages with differentiated 'stages' in each strand - which are reflected in the end-of-year report to parents.

The Rising Stars 'Computing' scheme gives clear guidance as to attainment/progression using the framework of 'some', 'most', a few' children will....

The scheme provides each pupil with a self-evaluation sheet which is completed at the end of each unit with opportunity for the child to reflect on their learning and their next steps.

These individual folders will be passed on to successive teachers as an ongoing record of skills and experiences.

Each lesson in the scheme gives clear learning objectives, support suggestions and extension activities.

Pupil work can be included in these folders - although digital storage is preferred. Each class has a Class Folder under Student Shared on Central Resources with individual folders contained within. These folders are renamed and move on with the child. The previous year's work is to be placed in an archive folder within each individual folder.

The current priority within the school is to provide learning targets for each strand of the new curriculum in order to ensure comprehensive and consistent coverage. End-of-year reports will reflect the learning objectives and progress that is relevant to that year group (tracked via Classroom Monitor). At this point, they will reflect what the pupils have accessed through NC2014 (bearing in mind the need to 'catch up' in some areas e.g. programming).

(See Appendix 2):

School liaison, transfer and transition:

The school is connected to the LGfL which enables the efficient transfer/storage of information electronically.

Email is now used to liaise with the LEA, governing body, other schools and, whenever possible, parents.
Future developments regarding our school management information system will enable the transfer electronically of data to aid transfer and transition to, between or within schools.

Inclusion:

- We recognise ICT offers particular opportunities for pupils with special educational needs and gifted and/or talented children and /or children with English as an additional language.

- ICT can cater for the variety of learning styles which a class of children may possess.

- The school provides keyboard interfaces appropriate to age and ability to access.

- Headphones/microphones are available to increase pupil participation/access/communication.

Using ICT can:

- Increase access to the curriculum;

- Raise levels of motivation and self esteem;

- Improve the accuracy and presentation of work;

- Address individual needs.

We aim to maximise the use and benefits of ICT as one of many resources that enable all pupils to achieve their full potential. If the situation arises, the school will endeavour to provide appropriate resources to suit the specific needs of individual or groups of children (for example, the use of adapted keyboards, voice-recognition).

Roles & Responsibilities:
Senior Leadership Team:
The overall responsibility for the use of ICT rests with the senior leadership of a school. The Head, in consultation with staff:

- Determines the ways ICT should support, enrich and extend the curriculum;

- Decides the provision and allocation of resources ;

- Decides ways in which developments can be assessed, and records maintained ;

- Ensures that ICT is used in a way to achieve the aims and objectives of the school;

- Ensures that there is an ICT/Computing policy, and identifies an ICT co-ordinator.

ICT Coordinator:
There is a designated ICT Co-ordinator to oversee the planning and delivery of ICT within the school.

The ICT coordinator will be responsible for the following:

- Raising standards in ICT as a national curriculum subject;

- Facilitating the use of ICT across the curriculum in collaboration with all subject coordinators;

- Providing or organising training to keep staff skills and knowledge up to date;

- Advising colleagues about effective teaching strategies, managing equipment and purchasing resources;

- Monitoring the delivery of the ICT curriculum and reporting to the head-teacher on the current status of the subject.

The Subject Coordinator:
There is a clear distinction between teaching and learning in ICT and teaching and learning with ICT. Subject coordinators should identify where ICT should be used in their subject schemes of work. This might involve the use of short dedicated programmes that support specific learning objectives or involve children using a specific application which they have been taught how to use as part of their ICT study and are applying those skills within the context of another curriculum subject.

Subject coordinators must work in partnership with the ICT coordinator to ensure that all National Curriculum statutory requirements are being met with regard to the use of ICT within curriculum subjects.

The Classroom Teacher:
Even though whole school co-ordination and support is essential to the development of ICT capability, it remains the responsibility of each teacher to plan and teach appropriate ICT activities and assist the co-ordinator in the monitoring and recording of pupil progress in ICT both directly (through the use of the RS Computing Scheme and attendant evidence stored in folders and on Central Resources) and indirectly (through the use of ICT across the curriculum as monitored by subject coordinators).

Monitoring:
Monitoring ICT will enable the ICT coordinator to gain an overview of ICT teaching and learning throughout the school. This will assist the school in the self-evaluation process by identifying areas of strength as well as those for development.

In monitoring of the quality of ICT teaching and learning the ICT coordinator will:

- Ensure full coverage of the ICT curriculum requirements through use of the RS scheme and supplementary provision eg LGfL coding Units and perusal of the sign-out book for ICT resources;

- Periodically undertake a cross-sampling of ICT folders and Student Shared individual folders;

- Ensure that he/she is part of the monitoring/observation cycle and that ALL staff charged with this responsibility make reference to the use of IT in lessons;

- Lead staff-meetings and out-of-hours training in order to keep staff informed of developments and opportunities;

- Update the annual report to parents and begin the process of bringing the requirements into line with the expectations of the new curriculum 2014.

- Review the ICT policy bi-annually (due to the rapid development of this subject and the need to incorporate new technology, access and provision).

Learning - Out of School Hours:
A computer club operates after school on a weekly basis. Opportunities for all year groups are planned and these include a designated Computer Club, the Digismart Club for Year 5 and the Mathletics club for all ages. The access point for Mathletics is provided weekly (although individual staff members must all endeavour to maximise learning/hands-on opportunities for all pupils under their care). The vision is that such opportunities continue to develop and reflect the interest and potential of all pupils in the school of whatever age.

We believe this access to ICT out of school hours:

- Increases the time our children spend learning productively and positively;

- Increases access to ICT (especially for those children without a computer at home);

- Enables some children to develop and extend personal hobbies and interests/aptitudes;

- Develops ICT capability - potentially raising self-esteem, motivation and standards of achievement.

Health & Safety:
- We operate all ICT equipment in compliance with Health & Safety requirements.

- Children are made aware of the correct way to sit when using the computer and of the need to take regular breaks if they are to spend any length of time on computers.

- NO water bottles/open containers are to occupy the same space as a computer.

- Adequate ventilation and access to 'breaks' is expected.

- Computer Room Rules are also on display within the ICT room for reference along with specific rules for the use of Internet and E-mail. The Health and Safety at Work Act (1 January 1993), European Directive deals with requirements for computer positioning and quality of screen. This directive is followed for all administration staff. Whilst this legislation only applies to people at work, we seek to provide conditions for all children which meet these requirements.

- The files and network system are backed up regularly. The virus checker is updated regularly.

- 'Hector the Protector' is used throughout the school as a quick-fix to any issues on screen.

- Laptop trolleys are stored in a room with no child-access.

- Pupils do NOT have free access to laptops/classroom-based computers when no staff member is present.

- The trolleys must NOT be moved by children or recharged. The teacher must ensure that the units are unplugged before use and recharged after use.

- The need for careful supervision of the unloading/loading of each laptop unit by pupils is stressed and any faults are to be recorded in the laptop trolley log sheets..

- When using stand-alone units in classrooms, all wiring is to be carefully stored out of reach of feet/hands etc.

Home school links:

- Children are given the option to complete some homework tasks, when appropriate, using ICT out of school. For example, the use of Mathletics and Fronter. Teachers are sensitive to the fact that children may not have access to ICT or may not wish to use it to complete tasks out of school. The use of data keys for homework is discouraged as they are a potential danger regarding viral contagion.

- The school email address is given on the school website (admin@northealing.ealing.sch.uk).

- The school use SCHOOLCOMMS in order to facilitate payments for trips and other events.

- The school uses a text/e-mail system (SCHOOLCOMMS) to keep parents informed about urgent issues eg school closures/ reminders as well as for newsletters.

- Our school website (re-launched September 2014) **northealingprimary.org**   provides a comprehensive guide to the school (Governing Body/Curriculum/Staff/SEN/E-Safety) as well as direct links to my.uso.im for curriculum guidance and to CEOP.

Appropriate legislation, including copyright and data protection:

- Any software loaded onto school computer systems must have been agreed with the designated person in the school.

- All our software is used in strict accordance with the relevant licence agreement.
  We do NOT allow personal software/apps to be loaded onto school computer/tablets.

- The use of personal devices to record images/data is NOT ACCEPTABLE. Please refer to the e-safety policy and AU agreements.

NB: PLEASE SEE SCHOOL DATA PROTECTION POLICY.

Effective and efficient deployment of ICT resources (see Appendix 3)

- ICT resources are deployed throughout the school to maximise access, to enhance teaching & learning and to raise attainment/aspiration.

- To enable regular and whole class teaching of ICT, the school has an ICT suite which all classes in key stages 1 & 2 can use as needed via a clear booking system. Class slots are not allocated in order to maximise flexibility – not every unit of work requires class access but some units benefit from extended bookings eg an afternoon to finalise/present a project.

- To support the cross curricular nature of ICT, at least one computer is also located in each class. This is also used for additional tasks which require the use of ICT as well as presenting teaching materials for those classes with a digital projector. Additional laptops are available for use with specific groups (ESL/SEN) or groups (for a project).

- The school's digital projectors are located in classrooms and in the ICT suite. They are permanently mounted.

- A consistent interface is provided on all machines to enable familiarity and continuity with generic 'toolkit' software licensed and available on all curriculum computers in school. Subject specific titles and any specialist equipment e.g. sensors, are kept in the ICT stock cupboard and can be borrowed on a sign in/out system. All equipment is 'collected in' at the end of term and checked on the equipment & software audit.

- A comprehensive 'peer to peer' network enables internet access on all machines as well as storage and access to shared files.

- Pupils and Staff are reminded that computers do malfunction and that they should be patient / allow time to resolve issues. If you are not sure Ask for Help.

Appendix 1:
North Ealing School Computing checklist.

When I want to PRINT something, I will always ask the teacher first.	
I know that storing on a computer is better than using up paper/ink.	
I know that HECTOR is there to keep me safe and how to use him!	
I know that I should tell an adult about any problems that may come my way.	
When using a computer/laptop, I will make sure that I log off and shut down correctly to help the next user.	
I will use computers carefully and responsibly so that everyone can use them when needed.	
I understand that computers are only machines and that they follow my instructions. I will be calm and patient and not blame them for my mistakes!	
I know how to store my work on Central Resources, Student Shared under my Class name.	
I will carefully record the Learning Objectives as well as new vocabulary and use it in discussion.	
I will share my learning with others and help them to improve their work.	
I promise to stay SAFE when online.	

Appendix 2
Requirements of Computing in Primary Schools:

Purpose of study

A high-quality computing education equips pupils to understand and change the world through computational thinking. It develops and requires logical thinking and precision. It combines creativity with rigour: pupils apply underlying principles to understand real-world systems, and to create purposeful and usable artefacts. More broadly, it provides a lens through which to understand both natural and artificial systems, and has substantial links with the teaching of mathematics, science, and design and technology.

At the core of computing is the science and engineering discipline of computer science, in which pupils are taught how digital systems work, how they are designed and programmed, and the fundamental principles of information and computation. Building on this core, computing equips pupils to apply information technology to create products and solutions. A computing education also ensures that pupils become digitally literate – able to use, and express themselves through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims

The National Curriculum for computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication

- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

- Are responsible, competent, confident and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Subject content

Key Stage 1

Pupils should be taught to:

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions

- Write and test simple programs

- Use logical reasoning to predict the behaviour of simple programs

- Organise, store, manipulate and retrieve data in a range of digital formats

- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

Key Stage 2

Pupils should be taught to:

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs

- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs

- Understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration

- Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely

- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Appendix 3

RESOURCES:	Text and Multimedia	Images, Video and Animation	Sound	Electronic Communication	Digital Research	Data Handling	Datalogging	Logo and Control	Simulations and Spreadsheet Modelling
FLEXISCOPES (6)		x	x	x	x	x	x		
LOG IT Box (1)						x	x		x
LOG BOX (1)						x	x		x
EASI-SCOPE (4)		x			x				
TIME LAPSE CAMERA (2)		x			x		x		x
EGG BOX (data) (3)					x	x	x		
BEEBOT (6)							x	x	x
BEE BOT Station (1)							x	x	x
COCO CLOWN (3)							x	x	x
COCO CLOWN BOARDS (3)							x	x	x
BEE BOT Disc (Screen)							x	x	x
BEE BOT Layout Maps (1)							x	x	x
TRAFFICLIGHTS KS1 (1)								x	x
REMOTE CONTROL CARS (2)								x	x
WALKIE TALKIE PHONE (1)		x	x						
HEADLIGHT (1)		x							
WIRELESS Microsope (1)		x							
TUFF CAM (1)		x							
SOUND SONIC KIT (1)			x						
METAL DETECTOR (1)									
Powerpoint	x	x							
Excel					x	x	x		x
Crystal Rainforest						x	x		x
Scratch								x	x
NES Blogging Tool J2 Webby	X			X					
Visualisers (7)	x	x	x	x					