Relationships, Reproduction and Health Education Policy

Code: S21

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Agreed by Whitchurch Primary School Governing Body	Name
Chair of Governing Body	Peter Tenconi
Headteacher	Caroline Rowley

Version	Date	
1	May 2020	New Policy
2	February 2023	Review and update: - Added reference to inclusivity - Use of resources - Use of external organisations and materials - Identified which staff teach RRHE - Updated science curriculum map

Introduction

The teaching of Relationships, Reproduction and Health Education (RRHE) at Whitchurch Primary School & Nursery, using an integrated and consistent approach, is an important aspect of our pupils' education. RRHE includes supporting young people in developing self-confidence in preparing for the physical and emotional changes from childhood into adulthood – body health and management.

We believe that the teaching of RRHE is a collaborative one that should be shared with parents so that it is mutually supportive and complementary to what is taught in the family context. RRHE promotes an understanding of the diversity that exists within families and in the wider community. Children are taught that families and others in the community, all contribute towards providing children with the care, love and support they need to grow and develop.

In this document, RRHE relates to a Programme of work which includes 'learning about physical, moral and emotional development'. It includes strands from the Science and PSHE National Curriculum. It includes understanding the importance of family life; stable and loving relationships; respect, love and care and promoting the value of tolerance. We do not use RRHE as a means of promoting any form of sexual orientation.

The policy has been developed to ensure that governors, staff, parents and carers are clear about the statutory requirements regarding RRHE so that pupils receive their educational entitlement.

Through implementation of this policy, the school will meet specific aspects of the legal and statutory requirements to ensure every child receives their entitlement at a level that is appropriate to their age and physical development. Please see Appendix A.

This Policy should be read in conjunction with the policies for:

- Assessment Policy
- Science Curriculum Map
- Safeguarding & Child Protection Policy
- Equalities and Information Objectives Statement

We are a Rights Respecting School

UNICEF RIGHTS OF THE CHILD REFERENCES

CRC Article 2: The Convention applies to all children, whatever their race, religion or abilities; whatever they think or say, whatever type of family they come from.

CRC Article 3: The best interests of children must be the primary concern in making decisions that may affect them.

CRC Article 28: All children have the right to a primary education, which should be free.

Contents

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1. Aims

The aims of relationships, reproduction and health education (RRHE) at Whitchurch Primary School and Nursery is to compliment those of the Science curriculum (EYFS,KS1 & KS2). They are to:

- Provide a framework in which sensitive discussions can take place
- ensure pupils develop the confidence, self-esteem and self-respect to value themselves and others
- ensure pupils understand the range of relationships, including the importance of family for the care and support of children
- ensure pupils understand the consequences of their actions and behave responsibly within relationships;
- teach pupils the correct vocabulary to name parts of the body and describe themselves and how their bodies work
- Prepare pupils for puberty, and give them an understanding of sexual development and the importance of health and hygiene
- Create a positive culture around issues of sexuality and relationships
- provide pupils with the skills to recognise unsafe situations and to be able to protect themselves and ask for help and support
- teach children the importance of how safe routines can reduce the spread of viruses
- teach and develop our school values of respect, responsibility, resilience, honesty, generosity and aspiration.

2. Statutory requirements

As a maintained primary school, we must provide relationships education to all pupils under section 34 of the Children and Social Work Act 2017.

We are not required to provide sex education, but we do need to teach the elements of sex education contained in the science curriculum.

In teaching RRHE, we must have regard to guidance issued by the secretary of state, as outlined in section 403 of the Education Act 1996.

We must also have regard to our legal duties set out in:

- Sections 406 and 407 of the Education Act 1996
- Part 6, chapter 1 of the Equality Act 2010
- The Public Sector Equality Duty (as set out in section 149 of the Equality Act 2010). This duty requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations between different people when carrying out their activities

At Whitchurch Primary School and Nursery, we teach RRHE as set out in this policy.

3. Policy development

This policy has been developed in consultation with governors, staff, pupils and parents. The consultation and policy development process involved the following steps:

i. Review – a member of staff and working group pulled together all relevant information including relevant national and local guidance
ii. Staff consultation – all school staff were given the opportunity to look at the policy and make contributions
iii. Parent/stakeholder consultation – governors, parents and interested parties were invited to contribute and give feedback
iv. Pupil consultation – we asked pupils what they wanted from their RRHE sessions
v. Ratification – once amendments were made, the policy was shared with governors and ratified.

4. Definition

RRHE includes the emotional, social and cultural development of pupils; it involves learning about relationships, sexual health, sexuality, healthy lifestyles, diversity and personal identity.

RRHE involves a combination of sharing information and exploring issues and values that are both personal and collective.

RRHE is not about the promotion of sexual activity.

5. Curriculum

We have developed the curriculum in consultation with parents, pupils and staff, and taking into account the age, developmental stage, needs and feelings of our pupils. If pupils ask questions outside the scope of this policy, teachers will respond in an appropriate manner so that pupils are fully informed and don't seek answers online.

Please see Appendix A detailing which topics pupils should know by the end of primary school.

Primary reproduction education will focus on:

- Preparing boys and girls for the changes that adolescence brings
- How a baby is conceived, developed and born

6. Delivery of RSE

RRHE is taught within the Personal, Social, Health and Economic (PSHE) education curriculum using a Scheme of Work by an organisation called Jigsaw. **Please see Appendix B for Jigsaw Curriculum Overview.**

Biological aspects of RRHE are taught within the science curriculum and are compulsory; **please see Appendix C**.

Other aspects are included in religious education (RE), physical education (PE) and Computing.

Relationships education focuses on teaching the fundamental building blocks and characteristics of positive relationships including:

Being Me in My World – includes understanding my place in the class, school and global community as well as devising learning charters.

Celebrating Differences – includes anti bullying (cyber and homophobic and transphobic bullying) diversity work.

Dreams and Goals – includes goal setting, aspirations for yourself and the world working together.

Healthy Me – includes drugs and alcohol education, self-esteem and confidence as well as healthy lifestyle choices

Relationships - Includes understanding friendship, family and other relationships, conflict resolution and communication skills.

Changing Me - This unit includes relationships and health education in the context of coping positively with change. (Includes age-appropriate reproduction education):

- FGM Awareness Lessons (KS2)
- NSPCC PANTS/My Body My Rules Learning (EYFS, KS1 & KS2)

These areas of learning are taught within the context of family life, taking care to make sure that there is no stigmatisation of children based on their home circumstances (families can include single parent families, LGBT parents, families headed by grandparents, adoptive parents and foster parents/carers, amongst other structures), along with reflecting sensitively that some children may have a different structure of support around them (for example, looked-after children or young carers).

We will also be mindful of the law and legal requirements, taking care not to condone or encourage illegal political activity, such as violent action against people, criminal damage to property, hate crime, terrorism or the illegal use of drugs.

6.1 Inclusivity

We will teach about these topics in a manner that:

- Considers how a diverse range of pupils will relate to them
- Is sensitive to all pupils' experiences
- During lessons, makes pupils feel:
    - Safe and supported
    - Able to engage with the key messages

We will also:

- Make sure that pupils learn about these topics in an environment that's appropriate for them, for example in:
    - A whole-class setting
    - Small groups or targeted sessions
    - 1-to-1 discussions
    - Digital formats
- Give careful consideration to the level of differentiation needed

6.2 Use of resources

We **will** consider whether any resources we plan to use:

- Are aligned with the teaching requirements set out in the statutory RRHE guidance
- Would support pupils in applying their knowledge in different contexts and settings
- Are age-appropriate, given the age, developmental stage and background of our pupils
- Are evidence-based and contain robust facts and statistics
- Fit into our curriculum plan
- Are from credible sources
- Are compatible with effective teaching approaches
- Are sensitive to pupils' experiences and won't provoke distress

7. Use of external organisations and materials

We will make sure that an agency and any materials used are appropriate and in line with our legal duties around political impartiality.

The school remains responsible for what is said to pupils. This includes making sure that any speakers, tools and resources used don't undermine the fundamental British values of democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with different faiths and beliefs.

We **will**:

- Make appropriate checks and engage with external agencies to make sure that their approach to teaching about RRHE is balanced, and it and the resources they intend to use:
  - Are age-appropriate
  - Are in line with pupils' developmental stage
  - Comply with:
    - This policy
    - The Teachers' Standards
    - The Equality Act 2010
    - The Human Rights Act 1998
    - The Education Act 1996
- Only work with external agencies where we have full confidence in the agency, its approach and the resources it uses
- Make sure that any speakers and resources meet the intended outcome of the relevant part of the curriculum
- Review any case study materials and look for feedback from other people the agency has worked with
- Be clear on:
  - What they're going to say
  - Their position on the issues to be discussed
- Ask to see in advance any materials that the agency may use
- Know the named individuals who will be there, and follow our usual safeguarding procedures for these people
- Conduct a basic online search and address anything that may be of concern to us, or to parents and carers
- Check the agency's protocol for taking pictures or using any personal data they might get from a session
- Remind teachers that they can say "no" or, in extreme cases, stop a session

- Make sure that the teacher is in the room during any sessions with external speakers

We **won't**, under any circumstances:

- Work with external agencies that take or promote extreme political positions
- Use materials produced by such agencies, even if the material itself is not extreme

8. Roles and responsibilities

8.1 The governing board

The governing board will approve the RRHE policy, and hold the headteacher to account for its implementation.

8.2 The headteacher

The headteacher is responsible for ensuring that RRHE is taught consistently across the school, and for managing requests to withdraw pupils from [non-statutory/non-science] components of RRHE.

8.3 Staff

Staff are responsible for:

- Delivering RRHE in a sensitive way
- Modelling positive attitudes to RRHE
- Monitoring progress
- Responding to the needs of individual pupils
- Responding appropriately to pupils whose parents wish them to be withdrawn from the [non-statutory/non-science] components of RRHE

All class teachers and additional adults (Early Year's Practitioners, Higher Level Teaching Assistants and Learning Support Assistants) are responsible for teaching RRHE at Whitchurch Primary School and Nursery.

Staff do not have the right to opt out of teaching RRHE. Staff who have concerns about teaching RRHE are encouraged to discuss this with the headteacher.

8.4 Pupils

Pupils are expected to engage fully in RRHE and, when discussing issues related to RRHE, treat others with respect and sensitivity.

9. Parents' right to withdraw

Parents do not have the right to withdraw their children from relationships education.

Parents have the right to withdraw their children from the non-science components of human reproduction within RRHE.

Requests for withdrawal should be put in writing using the form found in **Appendix D** of this policy and addressed to the Headteacher.

Alternative work will be given to pupils who are given permission by the Headteacher to be withdrawn from those non-statutory aspects of human reproduction. Parents/carers must assure the School that they will cover these aspects of the curriculum at home with their child.

10. Training

Staff are trained on the delivery of RRHE as part of their induction and it is included in our continuing professional development calendar.

Staff members also have access to the school's PSHE Association membership for resources and teaching support. The school works closely with other Harrow schools and follows guidance recommended by the London Borough of Harrow.

11. Monitoring arrangements

The headteacher and Senior Leadership team, including the PSHE Leader, monitors delivery of RRHE through:

- Long-term, medium-term and short term planning;
- Work scrutinies
- Deep Dives and Learning walks;
- Pupil discussions.

Assessment of pupils' development and progress in RRHE is monitored by class teachers as part of our internal assessment systems.

This policy will be reviewed annually by the Standards and Achievement Committee of the Governing Board.

Appendix A: By the end of primary school pupils should know

TOPIC	PUPILS SHOULD KNOW
Families and people who care about me	• That families are important for children growing up because they can give love, security and stability • The characteristics of healthy family life, commitment to each other, including in times of difficulty, protection and care for children and other family members, the importance of spending time together and sharing each other's lives • That others' families, either in school or in the wider world, sometimes look different from their family, but that they should respect those differences and know that other children's families are also characterised by love and care • That stable, caring relationships, which may be of different types, are at the heart of happy families, and are important for children's security as they grow up • That marriage represents a formal and legally recognised commitment of two people to each other which is intended to be lifelong • How to recognise if family relationships are making them feel unhappy or unsafe, and how to seek help or advice from others if needed
Caring friendships	• How important friendships are in making us feel happy and secure, and how people choose and make friends • The characteristics of friendships, including mutual respect, truthfulness, trustworthiness, loyalty, kindness, generosity, trust, sharing interests and experiences and support with problems and difficulties • That healthy friendships are positive and welcoming towards others, and do not make others feel lonely or excluded • That most friendships have ups and downs, and that these can often be worked through so that the friendship is repaired or even strengthened, and that resorting to violence is never right • How to recognise who to trust and who not to trust, how to judge when a friendship is making them feel unhappy or uncomfortable, managing conflict, how to manage these situations and how to seek help or advice from others, if needed

TOPIC	PUPILS SHOULD KNOW
Respectful relationships	• The importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs • Practical steps they can take in a range of different contexts to improve or support respectful relationships • The conventions of courtesy and manners • The importance of self-respect and how this links to their own happiness • That in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority • About different types of bullying (including cyberbullying), the impact of bullying, responsibilities of bystanders (primarily reporting bullying to an adult) and how to get help • What a stereotype is, and how stereotypes can be unfair, negative or destructive • The importance of permission-seeking and giving in relationships with friends, peers and adults
Online relationships	• That people sometimes behave differently online, including by pretending to be someone they are not • That the same principles apply to online relationships as to face-to face relationships, including the importance of respect for others online including when we are anonymous • The rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them • How to critically consider their online friendships and sources of information including awareness of the risks associated with people they have never met • How information and data is shared and used online

TOPIC	PUPILS SHOULD KNOW
Being safe	• What sorts of boundaries are appropriate in friendships with peers and others (including in a digital context) • About the concept of privacy and the implications of it for both children and adults; including that it is not always right to keep secrets if they relate to being safe • That each person's body belongs to them, and the differences between appropriate and inappropriate or unsafe physical, and other, contact • How to respond safely and appropriately to adults they may encounter (in all contexts, including online) whom they do not know • How to recognise and report feelings of being unsafe or feeling bad about any adult • How to ask for advice or help for themselves or others, and to keep trying until they are heard • How to report concerns or abuse, and the vocabulary and confidence needed to do so • Where to get advice e.g. family, school and/or other sources

Physical Health and Mental Well Being (Statutory Topics)	
Topic	Pupils should know
Mental wellbeing	• That mental wellbeing is a normal part of daily life, in the same way as physical health. • That there is a normal range of emotions (e.g. happiness, sadness, anger, fear, surprise, nervousness) and scale of emotions that all humans experience in relation to different experiences and situations. • How to recognise and talk about their emotions, including having a varied vocabulary of words to use when talking about their own and others' feelings. • How to judge whether what they are feeling and how they are behaving is appropriate and proportionate. • The benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness. • Simple self-care techniques, including the importance of rest, time spent with friends and family and the benefits of hobbies and interests. • Isolation and loneliness can affect children and that it is very important for children to discuss their feelings with an adult and seek support. • That bullying (including cyberbullying) has a negative and often lasting impact on mental wellbeing. • Where and how to seek support (including recognising the triggers for seeking support), including whom in school they should speak to if they are worried about their own or someone else's mental wellbeing or ability to control their emotions (including issues arising online). • It is common for people to experience mental ill health. For many people who do, the problems can be resolved if the right support is made available, especially if accessed early enough.
Internet safety and harms	• That for most people the internet is an integral part of life and has many benefits. • About the benefits of rationing time spent online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing. • How to consider the effect of their online actions on others and know how to recognise and display respectful behaviour online and the importance of keeping personal information private. • Why social media, some computer games and online gaming, for example, are age restricted. • That the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health. • How to be a discerning consumer of information online including understanding that information, including that from search engines, is ranked, selected and targeted. • Where and how to report concerns and get support with issues online.

Physical health and fitness	• The characteristics and mental and physical benefits of an active lifestyle. • The importance of building regular exercise into daily and weekly routines and how to achieve this; for example walking or cycling to school, a daily active mile or other forms of regular, vigorous exercise. • The risks associated with an inactive lifestyle (including obesity). • How and when to seek support including which adults to speak to in school if they are • worried about their health.
Healthy eating	• What constitutes a healthy diet (including understanding calories and other nutritional content). • The principles of planning and preparing a range of healthy meals. • The characteristics of a poor diet and risks associated with unhealthy eating (including, • for example, obesity and tooth decay) and other behaviours (e.g. the impact of alcohol on diet or health).
Drugs, alcohol and tobacco	• The facts about legal and illegal harmful substances and associated risks, including • smoking, alcohol use and drug-taking.
Health and prevention	• How to recognise early signs of physical illness, such as weight loss, or unexplained changes to the body. • About safe and unsafe exposure to the sun, and how to reduce the risk of sun damage, • including skin cancer. • The importance of sufficient good quality sleep for good health and that a lack of sleep can affect weight, mood and ability to learn. • About dental health and the benefits of good oral hygiene and dental flossing, including regular check-ups at the dentist. • About personal hygiene and germs including bacteria, viruses, how they are spread and treated, and the importance of handwashing. • The facts and science relating to allergies, immunisation and vaccination.
Basic first aid	• How to make a clear and efficient call to emergency services if necessary. • Concepts of basic first-aid, for example dealing with common injuries, including head • injuries.
Changing adolescent body	• Key facts about puberty and the changing adolescent body, particularly from age 9 through to age 11, including physical and emotional changes. • About menstrual wellbeing including the key facts about the menstrual cycle.

Appendix B: Jigsaw Curriculum Overview

Jigsaw PSHE 3 -11/12 Content Overview

Age Group	Being Me In My World	Celebrating Difference	Dreams and Goals	Healthy Me	Relationships	Changing Me
Ages 3-5 (F1-F2)	Self-identity Understanding feelings Being in a classroom Being gentle Rights and responsibilities	Identifying talents Being special Families Where we live Making friends Standing up for yourself	Challenges Perseverance Goal-setting Overcoming obstacles Seeking help Jobs Achieving goals	Exercising bodies Physical activity Healthy food Sleep Keeping clean Safety	Family life Friendships Breaking friendships Falling out Dealing with bullying Being a good friend	Bodies Respecting my body Growing up Growth and change Fun and fears Celebrations
Ages 5-6	Feeling special and safe Being part of a class Rights and responsibilities Rewards and feeling proud Consequences Owning the Learning Charter	Similarities and differences Understanding bullying and knowing how to deal with it Making new friends Celebrating the differences in everyone	Setting goals Identifying successes and achievements Learning styles Working well and celebrating achievement with a partner Tackling new challenges Identifying and overcoming obstacles Feelings of success	Keeping myself healthy Healthier lifestyle choices Keeping clean Being safe Medicine safety/safety with household items Road safety Linking health and happiness	Belonging to a family Making friends/being a good friend Physical contact preferences People who help us Qualities as a friend and person Self-acknowledgement Being a good friend to myself Celebrating special relationships	Life cycles – animal and human Changes in me Changes since being a baby Differences between female and male bodies (correct terminology) Linking growing and learning Coping with change Transition
Ages 6-7	Hopes and fears for the year Rights and responsibilities Rewards and consequences Safe and fair learning environment Valuing contributions Choices Recognising feelings	Assumptions and stereotypes about gender Understanding bullying Standing up for self and others Making new friends Gender diversity Celebrating difference and remaining friends	Achieving realistic goals Perseverance Learning strengths Learning with others Group co-operation Contributing to and sharing success	Motivation Healthier choices Relaxation Healthy eating and nutrition Healthier snacks and sharing food	Different types of family Physical contact boundaries Friendship and conflict Secrets Trust and appreciation Expressing appreciation for special relationships	Life cycles in nature Growing from young to old Increasing independence Differences in female and male bodies (correct terminology) Assertiveness Preparing for transition
Ages 7-8	Setting personal goals Self-identity and worth Positivity in challenges Rules, rights and responsibilities Rewards and consequences Responsible choices Seeing things from others' perspectives	Families and their differences Family conflict and how to manage it (child-centred) Witnessing bullying and how to solve it Recognising how words can be hurtful Giving and receiving compliments	Difficult challenges and achieving success Dreams and ambitions New challenges Motivation and enthusiasm Recognising and trying to overcome obstacles Evaluating learning processes Managing feelings Simple budgeting	Exercise Fitness challenges Food labelling and healthy swaps Attitudes towards drugs Keeping safe and why it's important online and off line scenarios Respect for myself and others Healthy and safe choices	Family roles and responsibilities Friendship and negotiation Keeping safe online and who to go to for help Being a global citizen Being aware of how my choices affect others Awareness of how other children have different lives Expressing appreciation for family and friends	How babies grow Understanding a baby's needs Outside body changes Inside body changes Family stereotypes Challenging my ideas Preparing for transition

Age Group	Being Me In My World	Celebrating Difference	Dreams and Goals	Healthy Me	Relationships	Changing Me
Ages 8-9	Being part of a class team Being a school citizen Rights, responsibilities and democracy (school council) Rewards and consequences Group decision-making Having a voice What motivates behaviour	Challenging assumptions Judging by appearance Accepting self and others Understanding influences Understanding bullying Problem-solving Identifying how special and unique everyone is First impressions	Hopes and dreams Overcoming disappointment Creating new, realistic dreams Achieving goals Working in a group Celebrating contributions Resilience Positive attitudes	Healthier friendships Group dynamics Smoking Alcohol Assertiveness Peer pressure Celebrating inner strength	Jealousy Love and loss Memories of loved ones Getting on and Falling Out Girlfriends and boyfriends Showing appreciation to people and animals	Being unique Having a baby Girls and puberty Confidence in change Accepting change Preparing for transition Environmental change
Ages 9-10	Planning the forthcoming year Being a citizen Rights and responsibilities Rewards and consequences How behaviour affects groups Democracy, having a voice, participating	Cultural differences and how they can cause conflict Racism Rumours and name-calling Types of bullying Material wealth and happiness Enjoying and respecting other cultures	Future dreams The importance of money Jobs and careers Dream job and how to get there Goals in different cultures Supporting others (charity) Motivation	Smoking, including vaping Alcohol Alcohol and anti-social behaviour Emergency aid Body image Relationships with food Healthy choices Motivation and behaviour	Self-recognition and self-worth Building self-esteem Safer online communities Rights and responsibilities online Online gaming and gambling Reducing screen time Dangers of online grooming SMARRT internet safety rules	Self- and body image Influence of online and media on body image Puberty for girls Puberty for boys Conception (including IVF) Growing responsibility Coping with change Preparing for transition
Ages 10-11	Identifying goals for the year Global citizenship Children's universal rights Feeling welcome and valued Choices, consequences and rewards Group dynamics Democracy, having a voice Anti-social behaviour Role-modelling	Perceptions of normality Understanding disability Power struggles Understanding bullying Inclusion/exclusion Differences as conflict, difference as celebration Empathy	Personal learning goals, in and out of school Success criteria Emotions in success Making a difference in the world Motivation Recognising achievements Compliments	Taking personal responsibility How substances affect the body Exploitation, including 'county lines' and gang culture Emotional and mental health Managing stress	Mental health Identifying mental health worries and sources of support Love and loss Managing feelings Power and control Assertiveness Technology safety Take responsibility with technology use	Self-image Body image Puberty and feelings Conception to birth Reflections about change Physical attraction Respect and consent Boyfriends/girlfriends Sexting Transition

Appendix C: Science Curriculum Overview & Curriculum Map

	Autumn 1st	Autumn 2nd	Spring 1st	Spring 2nd	Summer 1st	Summer 2nd
Nursery	**Changes - Autumn** Talk about what they see, using a wide vocabulary	**Changes - Winter** Begin to understand the need to respect and care for the natural environment and all living things Use all their senses in hands-on exploration of natural materials. Let's Pretend	**Changes - Winter** Explore the natural world around them, making observations and drawing pictures of animals and plants. Talk about what they see, using a wide vocabulary.	**Changes - Spring** **Science Week** Explore collections of materials with similar and/or different properties. Talk about the differences between materials and changes they notice.	**Changes - Summer** The World Farm animals, habitats Understand the key features of the life cycle of a plant and an animal.	**Changes - Summer** **minibeast lifecycles** Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal.
Reception	**Changes - Autumn** Know some similarities and differences between the natural world around them	**Changes - Winter** Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.	**Changes - Winter** Explore the natural world around them, making observations and drawing pictures of animals and plants.	**Changes - Spring** **Science Week** Explore the natural world around them, making observations and drawing pictures of animals and plants.	**Changes - Summer** **The World** **Animal habits, diets** Explore the natural world around them, making observations and drawing pictures of animals and plants.	**Changes - Summer** **minibeast lifecycles** Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

Year 1	**Topic: Animals including Humans (Ourselves)** Key Learning Objectives To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Experiment: Five senses experiment (Autumn Walk) using senses to explore environment Working Scientifically Focus: Noticing patterns over time	**Topic: Seasonal changes (Wonderful Weather)** Key Learning Objectives To observe changes across the four seasons To observe and describe weather associated with the seasons and how day length varies. Experiment: Ice experiment Rainbow experiment Working Scientifically Focus: Observing changes over a period of time	**Topic: Everyday Materials (Marvellous Materials)** Key Learning Objectives To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock describe the simple physical properties of a variety of everyday materials Experiment: Building a house for the three little pigs using different types of materials Working Scientifically Focus: Grouping and classifying things	**Topic: Animals including Humans (Animals)** Key Learning Objectives To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals To identify and name a variety of common animals that are carnivores, herbivores and omnivores To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Working Scientifically Focus: Grouping and classifying things	**Topic: Plants (What's Growing in Our Gardens?)** Key Learning Objectives To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees To identify and describe the basic structure of a variety of common flowering plants, including trees. Experiment: Plant life cycles: Growing cress/plants Working Scientifically Focus: Carrying out simple comparative tests	**Topic: Everyday materials (Let's build)** Key Learning Objectives To distinguish between an object and the material from which it is made To compare and group together a variety of everyday materials on the basis of their simple physical properties. Experiment: Float or Sink Experiment Building bridges using a range of materials Working Scientifically Focus: Finding things out using secondary sources of information
Year 2	**Topic: Animals including humans (part 1)** Key Learning Objectives To notice that animals, including humans, have offspring which grow into adults	**Topic: Animals including humans (cont.)** Key Learning Objectives To describe the importance for humans of exercise, eating the right amounts of	**Topic: Materials** Key Learning Objectives To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper	**Topic: Living things and their habitats (part 1)** Key Learning Objectives To explore and compare the differences between things that are living, dead, and things that have never been alive	**Topic: Living things and their habitats (cont.)** Key Learning Objectives To identify and name a variety of plants and animals in their habitats, including microhabitats	**Topic: Plants and variation** Key Learning Objectives To observe and describe how seeds and bulbs grow into mature plants To find out and describe how plants need water, light and a suitable

	To find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Working Scientifically: Researching	different types of food, and hygiene. Experiment: Exercise – How our pulse changes during exercise Dental hygiene – egg experiment - testing the effects of different drinks on our teeth	and cardboard for particular uses To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Experiment: Bag experiment Testing- the strength of materials Absorbency experiment Fire – testing the flammability of materials – links to topic and the Great Fire of London Working Scientifically: Comparative/Fair testing	To identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Experiment: Choice chamber - to observe and explore what conditions are preferred by woodlice Working Scientifically: Grouping, classifying and organising	To describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. Working Scientifically: Grouping, classifying and organising	temperature to grow and stay healthy. Experiment: The effects of different conditions on a sunflower seed Hand span investigation Working Scientifically: Observations over time
Year 3	**Topic: Animals including humans** Key Learning Objectives: To identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food;	**Topic: Forces including magnets** Key Learning Objectives: To compare how things, move on different surfaces To notice that some forces need contact between two objects,	**Topic: Plants (part 1)** Key Learning Objectives: To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	**Topic: Plants (part 2)** Key Learning Objectives: To investigate the way in which water is transported within plants To explore the part that flowers play in the life cycle of flowering	**Topic: Rocks and Soils** Key Learning Objectives: To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	**Topic: Light** Key Learning Objectives: To recognise that they need light in order to see things and that dark is the absence of light To notice that light is reflected from surfaces

	they get nutrition from what they eat To identify that humans and some other animals have skeletons and muscles for support, protection and movement. Experiment: To identify different food groups to prepare a healthy meal for Stig to eat Working Scientifically Focus: Researching	but magnetic forces can act at a distance To observe how magnets, attract or repel each other and attract some materials and not others To compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials To describe magnets as having two poles To predict whether two magnets will attract or repel each other, depending on which poles are facing. Experiment: To investigate what different materials are magnetic around us and what do they all have in common? Working Scientifically Focus: Grouping, classifying and/or organising	To explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Experiment: How does access to nutrients effect plant germination? Working Scientifically Focus: Observations over time	plants, including pollination, seed formation and seed dispersal. Experiment: Make your own paper seed and investigate wind dispersal by testing different versions to find the best flier. Working Scientifically Focus: Observations over time	To describe in simple terms how fossils are formed when things that have lived are trapped within rock To recognise that soils are made from rocks and organic matter. Experiment: Starburst experiment – showing the way different rocks form and look when they are exposed to different things Working Scientifically Focus: Comparative/fair testing	To recognise that light from the sun can be dangerous and that there are ways to protect their eyes To recognise that shadows are formed when the light from a light source is blocked by an opaque object To find patterns in the way that the size of shadows change. Experiment: How does distance from a light source affect the size and shape of the shadow? Working Scientifically Focus: Pattern Seeking

Year 4	**Topic: States of Matter** Key Learning Objectives: To compare and group materials together, according to whether they are solids, liquids or gases To observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. Experiments: Does temperature affect melting speed?	**Topic: Sound** **Sound The study of Alexander Graham Bell** Key Learning Objectives: To identify how sounds are made, associating some of them with something vibrating To recognise that vibrations from sounds travel through a medium to the ear To find patterns between the pitch of a sound and features of the object that produced it To find patterns between the volume of a sound and the strength of the vibrations that produced it To recognise that sounds get fainter as the distance from the sound source increases. Experiments: How does distance from a source affect the volume?	**Topic: Deforestation in Madagascar.** The study of Gerard Durrell To be able to investigate and describe the dangers of deforestation in Madagascar To name some endangered animals in Madagascar and to describe Gerald Durrell and his conservation work in Madagascar Experiment: - Investigating sustainable solutions for Deforestation Working Scientifically Focus: Research and observation Raising further questions	**Topic: Electricity** Electricity The study of Thomas Edison and James Watt To identify common appliances that run on electricity To identify hazards in the home To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit To recognise some common conductors and insulators, and associate metals with being good conductors. Experiments: Creating a variety of circuits Exploring what breaks a circuit and why? Working Scientifically Focus: Using scientific	**Topic: Living things and their habitats** To recognise that living things can be grouped in a variety of ways To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment To recognise that environments can change and that this can sometimes pose dangers to living things. Experiments: Observe how environmental changes have an impact on living things Working Scientifically Focus: Observation Raising further questions	**Topic: Teeth and the digestive system** Identify different types of teeth in humans and their functions Teeth modelling Explore different ways of keeping healthy Investigate how the digestive system works Experiment: To investigate what happens to food after it is swallowed - Working Scientifically Focus: Using scientific diagrams and labels to explain a scientific process

		Working Scientifically Focus: Comparative/fair testing		equipment Setting up practical enquiry		
Year 5	**Topic: Forces 1** Children able to explain how the force of gravity acts on falling objects. Experiment: -Design their own experiment to test air resistance (different sizes and shapes) e.g. Jim Jarvis wants to escape from the workhouse. Working Scientifically Focus: Comparative/fair testing	**Topic: Forces 2** To investigate how levers work and how the position of the fulcrum affects its effectiveness. Experiment: To investigate how pulleys work and note the correlation between effort required and the number of pulleys. Working Scientifically Focus: Comparative/fair testing	**Topic: Properties and changes of Materials** Experiment: -Testing materials- in order to plan their own investigations of properties. -Soluble or insoluble materials. -Explore what happens when sugar/or salt in put into warm water. -To carry out an investigation after predicting and exploring the solubility of different materials. -Separating materials Investigation. -Investigate separation of salt- forming salt crystals. -What happens to certain things when they are put in to water? -Investigating exothermic and endothermic reactions. Working Scientifically Focus: Grouping and classifying things	**Topic: Earth and Space** Spherical Bodies - research to identify scientific evidence that has been used to support or refute ideas. Experiment: -Exploring- What size do you think the Sun, Moon and Earth are? How far do you think they are apart from each other? -Compare size and distance using models (scaled down). -Day and night/ Seasons- Exploring and pattern seeking. -Toy- top to explain spinning (rotation and revolutions differences) and investigate items that rotate. -Phases of the moon- Research and pattern seeking and completing a Moon diary. Working Scientifically Focus: Pattern seeking	**Topic: Living things and their Habitats** Experiment: -Dissecting a flowering plant. Cut up four different fruits and compare their seeds. (grow from cuttings) -Pollination: Compare different types of pollination and complete the pollination cycle. -Seed dispersal: Investigate different types of seed dispersal. -Investigate a model seed helicopter and explore the different factors affecting flight. Working Scientifically Focus: Observation over time	**Topic: Animals including Humans** Experiment: How can they help older people in their families and communities? Puberty: Complete diagrams explaining changes involved in puberty. Explore to life cycle of Humans (8 different stages) Describe the changes of the human body.

Year 6	**Topic: Animals including humans** Key Learning Objectives To identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function To describe the ways in which nutrients and water are transported within animals, including humans	**Topic: Living things and their habitats** Key Learning Objectives To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals To give reasons for classifying plants and animals based on specific characteristics Experiment Investigation on preserving bread	**Topic: Evolution and Inheritance** Key Learning Objectives To recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution Experiment How are we different investigation	**Topic: Light** Key Learning Objectives To recognise that light appears to travel in straight lines To use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye To explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes To use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them Experiment Investigating how light travels	**Topic: Electricity & Review** Key Learning Objectives To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches To use recognised symbols when representing a simple circuit in a diagram Experiment Creating a variety of circuits using various equipment. How does the distance from the source and the number of bulbs affect their brightness?

Reception	Science Overview

Understanding the World

- Ask question about why things happen and how they work
- Predict what might happen
- Talk about, question and explain what is seen and what is happening
- Look closely at similarities, differences, patterns and change
- Observe seasonal change
- Examine objects and living things to find out more about them
- Make observations of animals and plants and explain why some things occur and talk about change
- Know about similarities and differences in relation to places, objects, materials and living things
- Finding out about farm animals and pets
- Explore various environments by talking to people, examining photographs and visiting places, e.g. the school garden, parks and streams
- Begin to answer scientific questions such as "What would happen if …?" or "How could I find out if …?"
- Provide opportunities to design practical, attractive environments, for example taking care of the flower beds or organising equipment
- Use appropriate scientific vocabulary e.g. plants, green, leaf, humans etc
- Investigate objects and materials by using all of their senses as appropriate
- Find out about and identify some features of living things
- Make representations of what they see e.g. drawing, writing, making a model or photographing

Year 1	Science Overview NC Statutory Programme of Study			
Working scientifically	**Plants**	**Animals, including humans**	**Everyday material**	**Seasonal changes**
During year 1, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions.	Pupils should be taught to: • identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • identify and describe the basic structure of a variety of common flowering plants, including trees.	Pupils should be taught to: • identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • identify and name a variety of common animals that are carnivores, herbivores and omnivores	Pupils should be taught to: • distinguish between an object and the material from which it is made • identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • describe the simple physical properties of a variety of everyday materials • compare and group together a variety of everyday materials on the basis of their simple physical properties.	Pupils should be taught to: • observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies.

Year 2	Science Overview NC Statutory Programme of Study			
Working scientifically	**Living things and their habitats**	**Plants**	**Animals, including humans**	**Uses of everyday materials**
During year 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions.	Pupils should be taught to: • explore and compare the differences between things that are living, dead, and things that have never been alive • identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other • identify and name a variety of plants and animals in their habitats, including micro-habitats • describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	Pupils should be taught to: • observe and describe how seeds and bulbs grow into mature plants • find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Pupils should be taught to: • notice that animals, including humans, have offspring which grow into adults • find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Pupils should be taught to: • identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Year 3	Science Overview NC Statutory Programme of Study				
Working scientifically	**Plants**	**Animals, including humans**	**Rocks**	**Light**	**Forces and magnets**
During year 3, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking relevant questions and using different types of scientific enquiries to answer them • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straight forward scientific evidence to answer questions or to support their findings.	Pupils should be taught to: • identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant • investigate the way in which water is transported within plants • explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Pupils should be taught to: • identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Pupils should be taught to: • compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • describe in simple terms how fossils are formed when things that have lived are trapped within rock • recognise that soils are made from rocks and organic matter.	Pupils should be taught to: • recognise that they need light in order to see things and that dark is the absence of light • notice that light is reflected from surfaces • recognise that light from the sun can be dangerous and that there are ways to protect their eyes • recognise that shadows are formed when the light from a light source is blocked by an opaque object • find patterns in the way that the size of shadows change.	Pupils should be taught to: • compare how things move on different surfaces • notice that some forces need contact between two objects, but magnetic forces can act at a distance • observe how magnets attract or repel each other and attract some materials and not others • compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • describe magnets as having two poles • predict whether two magnets will attract or repel each other, depending on which poles are facing.

Year 4	Science Overview NC Statutory Programme of Study				
Working scientifically	**Living things and their habitats**	**Animals, including humans**	**States of matter**	**Sound**	**Electricity**
During year 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking relevant questions and using different types of scientific enquiries to answer them • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straight forward scientific evidence to answer questions or to support their findings.	Pupils should be taught to: • recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • recognise that environments can change and that this can sometimes pose dangers to living things.	Pupils should be taught to: • describe the simple functions of the basic parts of the digestive system in humans • identify the different types of teeth in humans and their simple functions • construct and interpret a variety of food chains, identifying producers, predators and prey.	Pupils should be taught to: • compare and group materials together, according to whether they are solids, liquids or gases • observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Pupils should be taught to: • identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds travel through a medium to the ear • find patterns between the pitch of a sound and features of the object that produced it • find patterns between the volume of a sound and the strength of the vibrations that produced it • recognise that sounds get fainter as the distance from the sound source increases.	Pupils should be taught to: • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors.

Year 5	Science Overview NC Statutory Programme of Study				
Working scientifically	**Living things and their habitats**	**Animals, including humans**	**Properties and changes of materials**	**Earth and Space**	**Forces**
During year 5, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments.	Pupils should be taught to: • describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • describe the life process of reproduction in some plants and animals.	Pupils should be taught to: • describe the changes as humans develop to old age.	Pupils should be taught to: • compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets • know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • demonstrate that dissolving, mixing and changes of state are reversible changes • explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	Pupils should be taught to: • describe the movement of the Earth, and other planets, relative to the Sun in the solar system • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	Pupils should be taught to: • explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • identify the effects of air resistance, water resistance and friction, that act between moving surfaces • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Year 6	Science Overview NC Statutory Programme of Study				
Working scientifically	**Living things and their habitats**	**Animals, including humans**	**Evolution and inheritance**	**Light**	**Electricity**
During year 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments.	Pupils should be taught to: • describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • give reasons for classifying plants and animals based on specific characteristics.	Pupils should be taught to: • identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • describe the ways in which nutrients and water are transported within animals, including humans.	Pupils should be taught to: • recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	Pupils should be taught to: • recognise that light appears to travel in straight lines • use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye • explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes • use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Pupils should be taught to: • associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • use recognised symbols when representing a simple circuit in a diagram.

Appendix D: Parent form to withdraw their child from the reproduction education aspect within RRHE:

TO BE COMPLETED BY PARENTS			
Name of child		Class	
Name of parent		Date	
Reason for withdrawing from reproduction education within RRHE.			
Any other information you would like the school to consider			
Parent signature			

TO BE COMPLETED BY THE SCHOOL	
Agreed actions from discussion with parents	
Headteacher Signature	