Computing

Introduction

This policy has been written as a response to changes in the teaching of Computing through the New Primary Curriculum 2014.

It is a statement of the aims, principles and the teaching and learning of Computing at John T. Rice Infant School. At John T. Rice Infant School we aim to develop knowledge, the skills needed in Computing and to increase awareness of the I.C.T in the world around us. We want children to work safely and to be aware themselves of safety issues.

At John T. Rice Infant School we have high expectations of children's work and celebrate children's achievements, fostering self-esteem and confidence.

Aims

The national curriculum for Computing aims to ensure that children:
- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- can analyse problems in computational terms, and have repeated practical experience of writing computer science 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 communication technology .

Objectives

In Computing the children will be taught the age appropriate objectives from the National Curriculum programme of study. Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about material on the internet
- recognise common uses of information technology beyond school.

Teaching & Learning

Our Curriculum

At John T. Rice we follow the Learning Challenge Curriculum. The ethos that underpins the Learning Challenge approach requires teachers to check on what children already know and then inspire them through an initial key question and subsequent questions to investigate. Each Learning Challenge has a 'wow' to begin each half term and its own reflection at the close. By using these there is a more complete level of challenge for the pupils.

Planning

Our long term planning is based on a two year planning cycle with a different Learning Challenge each half term and a planned in 'wow'.

Key Stage teams meet half termly to complete the medium term planning. To ensure that the Learning Challenges provide adequate coverage and progression through Years 1 & 2, the school will highlight the intended objectives on the National Curriculum document.

Class teachers have responsibility for creating their own weekly planning based on the needs of the children using assessment for learning.

Non-negotiables

Non-negotiables are a clear map of the basic skills to be taught in each year group. These are essential for children to unlock their learning and make progress. Opportunities to teach these skills are interwoven through the Computing curriculum.

Monitoring & Assessment

Children are informally assessed during lessons, through questioning and performance which will be used formatively to inform planning. Summative assessments are used at the end of each half-term through Classroom Monitor, to show progression throughout Foundation Stage and Key Stage 1.

Work scrutinies will be completed half termly (with either the SLT or teaching staff) to monitor the quality and consistency of work in Computing. Termly planning scrutinies will take place to monitor coverage and progression of Computing across the key stage. Due to the cross curricular nature of the Learning Challenge approach, Teaching & Learning observations will be conducted termly and used to monitor a range of subject areas.

Speaking & Listening

Speaking and listening activities should be encouraged within Computing whenever possible. These should be linked to the learning objectives for Spoken Language taken from the National Curriculum for English.

Equal Opportunities

At John T. Rice Infant School we are aware of the need for equality of access for all children. Our staff believe strongly in creating equal opportunities for all children and work to this aim. We introduce and build upon the children's awareness of equal opportunities including the development of respect and understanding of multi-cultural, gender and S.E.N. issues.

E-Safety

Whilst using a wide range of technologies to teach Computing, we need to ensure children are safeguarded. E-Safety encompasses Internet technologies and electronic communications such as mobile phones as well as collaboration tools and personal publishing. It highlights the need to educate pupils about the benefits and risks of using technology and provides safeguards and awareness for users to enable them to control their online experience.

E-Safety depends on effective practice at a number of levels:
- Responsible ICT use by all staff and pupils; encouraged by education.
- Sound implementation of e-safety policy in both administration and curriculum, including secure school network design and use.

This policy has been agreed by staff and the Governing Body. This policy was reviewed in Autumn 2017 will be reviewed again in Autumn 2018.