



Computing

Year 6

Term 1

Systems and Networks: Internet communication & collaborations

Key Question: How is the internet used to work together and communicate?

National Curriculum Objectives:

- 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
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
- In lesson 4 the children will use their knowledge of Scratch from all the previous programming and control units to edit an existing project.

Vocabulary

Communication, internet, protocol, data, address, Internet Protocol (IP) address, Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, public, private, one-way, two-way, one-to-one, one-to-many

Prior Learning:

- This unit continues the children's learning of Systems and Networks from Years 3-5. The children have learnt what a network and a system are. They have also learnt what the internet and world wide web are and how internet search technologies work.
- In lesson 3 the children will use the desktop publishing skills they learnt in year 3 to produce a slide deck presentation.
- In lesson 4 the children will edit an existing Scratch program. The children will be very familiar with Scratch through the programming and control units throughout Key Stage 2.

End Point:

Complete end of unit assessment task.

Safe and Responsible Use:

use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Digital Literacy Skills:

- access shared files stored online

Knowledge:

I know:

- the importance of internet addresses
- that internet devices have addresses
- that data is transferred across networks using agreed protocols (methods)
- that data is transferred in packets
- that connections between computers allow access to shared stored files
- that computers connected to the internet allow people in different places to work together
- the opportunities that technology offers for communication and collaboration
- that communicating and collaboration using the internet can be public or private

Skills:

I can:

- describe how computers use addresses to access websites
- outline methods of communicating and collaborating using the internet
- choose methods of internet communication and collaboration for given purposes
- evaluate different methods of online communication and collaboration
- send information over the internet in different ways
- decide what you should and should not share online

<ul style="list-style-type: none">• which types of media can be shared through the internet	
<p>Cross Curricular Links:</p> <ul style="list-style-type: none">• In lesson 3 the children are to create a slide deck which could be linked to any wider curriculum topic.	<p>Oracy:</p> <ul style="list-style-type: none">• Link protocols for online communication to oracy protocols/guidelines.• Lesson 4 oracy discussion prompt: It's always OK to use someone else's work.
<p>Key Questions:</p> <ol style="list-style-type: none">1. What's the difference between Internet friends and in-person friends?2. How is information transferred between systems3. How is data transferred across the internet?4. How does sharing information online help people work together?5. What different ways are there of working together online?6. How can people communicate online?7. What needs to be considered when communicating on the internet?	