TOPIC TITLE/SUBJECT: Computing - Communication & Collaboration **YEAR GROUP: 6** **TERM: Autumn**

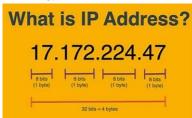| Vocabulary	Skills	What we already know
Protocols Searches IP address Web Domain Name crawlers Server (DNS) Ranking Packet Keywords Header Optimising Data payload Tinker Collaborative Search engine Worl wide web Teach Computing	-To explain the importance of internet addresses (data is transferred using agreed methods/internet devices have addresses and use these to access websites) -To recognise how data is transferred across the internet (main parts of data packet/data is transferred over networks in data packets/all data transferred on the internet is in data packets) -To explain how sharing information online can help people to work together (access shared files stored online/send information over the internet in different ways/internet allows different media to be shared). -To evaluate different ways of working together online (identify ways of working together online/working together can be public or private/the internet enables effective collaboration). -To recognise how we communicate using technology (different communication methods/choose suitable communication to suit particular purposes). -To evaluate different methods of online communication (compare/decide when I should and should not share information online/communication on the internet may not be private).	This unit progresses learners' knowledge and understanding of computing systems and online collaborative working. Connecting computers, the internet, systems and searching) **What is IP Address?** 17.172.224.47 8 bits (1 byte) 8 bits (1 byte) 8 bits (1 byte) 8 bits (1 byte) 32 bits = 4 bytes
Online Safety - Education for a Connected World links -I can describe and assess the benefits and the potential risks of sharing information online. -I can assess and justify when it is acceptable to use the work of others -I can give examples of content that is permitted to be reused	Application/ Outcomes *L1 Internet addresses:* explore effective communication and agreed protocols. IP addresses and the rules (protocols) that computers have for communicating with one another. Use a Domain Name Server (DNS) to translate web addresses into IP addresses. *L2 Data packets:* complete an activity based on transferring an image across the internet, to see that as well as messages (text), other types of data (images, video, and audio) are also transferred over the internet. Understand the key parts of a packet: the header and the data payload. *L3 Working together* consider how people can work together when they are not in the same location. They discuss ways of working and complete a collaborative online project. The online activity assumes that learners can make simple slides, including text and images. If your learners are unsure how to do this, you may wish to spend some time on the Year 3 – 'Desktop publishing' unit before this lesson. *L4 Shared working:* introduced to another approach to online working: reusing and modifying work done by someone else. Use the Scratch programming tool to use other people's work. *L5 How we communicate* deepen understanding of the term 'communication'. Explore different methods of communication, before considering internet-based communication in more detail. Evaluate which methods of communication suit particular purposes. *L6 Communicating responsibly:* use information provided in the lesson and their own prior knowledge to categorise different forms of internet communication. Choose which method(s) they would use for the scenarios discussed in the previous lesson. Explore issues around privacy and information security.
Adaptation for SEND Adapted tasks Adapted resources Additional support	Other/Cross Curricular Links PSHE • Digital footprint and influences from the internet.