

# Year 5 – Sharing Information

## Unit introduction

In this unit, learners will develop their understanding of computer systems and how information is transferred between systems and devices. Learners will consider small-scale systems as well as large-scale systems. They will explain the input, output, and process aspects of a variety of different real-world systems. Learners will also take part in a collaborative online project with other class members and develop their skills in working together online.

Lesson	Brief overview	Learning objectives and Success Criteria
1 Systems	<p>This lesson introduces learners to the concept of a system. Learners will develop their understanding of components working together to make a whole. They will outline how digital systems might work and the physical and electronic connections that exist.</p> <p><a href="#">Lesson 1 Systems (teachcomputing.org)</a></p>	<p>To explain that computers can be connected together to form systems</p> <ul style="list-style-type: none"> <li>• I can explain that systems are built using a number of parts</li> <li>• I can describe that a computer system features inputs, processes, and outputs</li> <li>• I can explain that computer systems communicate with other devices</li> </ul>
2 Computer systems and us	<p>In this lesson, learners will consider how larger computer systems work. Learners will consider how devices and processes are connected. They will also reflect on how computer systems can help us.</p> <p><a href="#">Lesson 2 Computer systems and us (teachcomputing.org)</a></p>	<p>To recognise the role of computer systems in our lives</p> <ul style="list-style-type: none"> <li>• I can identify tasks that are managed by computer systems</li> <li>• I can identify the human elements of a computer system</li> <li>• I can explain the benefits of a given computer system</li> </ul>
3 Transferring information	<p>This lesson introduces the idea that parts of a computer system are not always in the same place or country. Instead, those parts of a system must transfer information using the internet. This lesson builds on the introduction to the internet in the Year 4 'What is the internet?' unit, adding awareness of IP addresses and the rules (protocols) that computers have for communicating with one another.</p> <p><a href="#">Lesson 3 Transferring information (teachcomputing.org)</a></p>	<p>To recognise how information is transferred over the internet</p> <ul style="list-style-type: none"> <li>• I can recognise that data is transferred using agreed methods</li> <li>• I can explain that networked digital devices have unique addresses</li> <li>• I can explain that data is transferred over networks in packets</li> </ul>
4 Working together	<p>In this lesson, learners will consider how people can work together when they are not in the same location. They will discuss ways of working and start 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.</p> <p><a href="#">Lesson 4 Working together (teachcomputing.org)</a></p>	<p>To explain how sharing information online lets people in different places work together</p> <ul style="list-style-type: none"> <li>• I can recognise that connected digital devices can allow us to access shared files stored online</li> <li>• I can send information over the internet in different ways</li> <li>• I can explain that the internet allows different media to be shared</li> </ul>
5 Better working together	<p>In this lesson, learners will reflect on how they worked together in the previous lesson and how their working together might be improved. Learners will work together on an unplugged activity and use that experience to develop their own ideas of good collective working practices.</p> <p><a href="#">Lesson 5 Better working together (teachcomputing.org)</a></p>	<p>To contribute to a shared project online</p> <ul style="list-style-type: none"> <li>• I can suggest strategies to ensure successful group work</li> <li>• I can make thoughtful suggestions on my group's work</li> <li>• I can compare working online with working offline</li> </ul>
6 Shared working	<p>In the previous two lessons, learners worked together online on a shared project. This lesson introduces another approach to online working: reusing and modifying work done by someone else. (Using someone else's work needs to be done within the bounds of copyright and with the relevant permissions.) This lesson uses the Scratch programming tool, which allows learners to use other people's work.</p> <p><a href="#">Lesson 6 Shared working (teachcomputing.org)</a></p>	<p>To evaluate different ways of working together online</p> <ul style="list-style-type: none"> <li>• I can identify different ways of working together online</li> <li>• I can recognise that working together on the internet can be public or private</li> <li>• I can explain how the internet enables effective collaboration</li> </ul>