purple mash

Computing Scheme of Work

Unit 4.8 –

Hardware Investigators

Contents

Introduction

For these sessions, the children will need to have their own individual logins to Purple Mash.

If you are currently using a single login per class or group and would like to set up individual logins yourself, then please see our guide to doing so at Create and Manage Users. Alternatively, please contact support at support@2simple.com or 0208 203 1781.

Medium-Term Plan

Lesson	Title	Success Criteria
1	Hardware	• Children can name the different parts of a desktop computer. • Children know what the function of the different parts of a computer is.
2	Parts of a Computer	• Children have created a leaflet to show the function of computer parts.

Lesson 1 – Hardware

Aims

- To understand the different parts that make up a desktop computer.

Success Criteria

- Children can name the different parts of a desktop computer.
- Children know what the function of the different parts of the computer is.

Resources

Unless otherwise stated, all resources can be found on the main unit 4.8 page. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you don't lose this page.

- Parts of a Computer pairs game. This should be set as a 2Do for the class.
- If you have a school technician who can supply any parts from computers for children to examine or even demonstrate dismantling a computer for the class, this will add to the experience.
- If you have computers such as Raspberry Pis or Microbits in school, you can compare these to the desktop computer while talking about their features.

Activities

Introduction	Display **slide 2** and outline the lesson aims. Display **slide 3** and outline the success criteria
Hardware and Software	Display **slide 4.** Have children heard the words 'hardware' and 'software' and do they know what they mean or the difference between them. Show the definition.
Parts of a Computer	Display **slide 5.** Click the icon to open 2Connect and begin a mind map to see what children already know. Use the next slides to add to this knowledge and return to the mind map at the end to complete it. Click on the button to reveal some suggested answers but do not do this before looking at slides 6-15.

	Display **slides 6 - 15** and look at the different parts that make up a computer. Add to the 2Connect file.
Activity 1: Pairs Game	Display **slide 16.** Ask the children to complete the [Parts of a Computer pairs game](). This is a pairs game where the children match the image to the description.
Extension: Other Inputs and Outputs	Save the completed 2Connect map and set this as a 2Do for the class *or* save in a shared folder for children to refer to or use collaboratively. Display **slide 17** to explain the task.
Review Success Criteria	Display **slide 18.** Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

Lesson 2 – Parts of a Computer

Aims

- To recall the different parts that make up a computer.

Success Criteria

- Children have created a leaflet to show the function of computer parts.

Resources

Unless otherwise stated, all resources can be found on the main unit 4.8 page. From here, click on the icon to set a resource as a 2Do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you don't lose this page.

- Set Computer Hardware leaflet as a 2Do for the class.

Activities

Introduction	Display **slide 2** and outline the lesson aims. Display **slide 3** and outline the success criteria
Parts of a Computer Presentation	Display **slides 4 - 13.** Show the images to the children and then see if they can recall what the different parts of a computer do. Ask the children to make notes as they will need them for the main activity.
Activity 1: Designing a Leaflet	Display **slide 14.** Show the children the file Computer Hardware Leaflet. Draw their attention to the following features: • How to turn the pages and turn the leaflet over. • How to add text boxes and pictures. • If you click on the green cross on a picture box, it takes you to the photo gallery • There is a checklist to help them remember the different parts of the computer. Children should produce a leaflet about parts of the computer.

Extension: Quiz	Display **slide 15.** Complete the quiz from last week. Save in a shared folder and then answers their classmates' quizzes.
Review Success Criteria	Display **slide 16.** Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

Assessment Guidance

The unit overview for year 4 contains details of national curricula mapped to the Purple Mash Units. The following information is an exemplar of what a child at an expected level would be able to demonstrate when completing this unit with additional exemplars to demonstrate how this would vary for a child with emerging or exceeding achievements.

Assessment Guidance	
Emerging	Children understand what hardware is and that specific components allow computers to join and form a network. Children can recognise some hardware parts that relate to networking (Unit 4.8 Lesson 1). With some support, children can create their own hardware leaflet.
Expected	Children recognise the main component parts of hardware which allow computers to join and form a network (Unit 4.8 Lesson 1). Children can create their own leaflet to share their understanding of Computer Hardware (Unit 4.8 Lesson 2).
Exceeding	Children recognise the components parts of hardware which allow computers to join and form a network (Unit 4.8 Lesson 1). They are also able to explain that there are different types of network and how they are connected. Children can create their own leaflet to share their understanding of Computer Hardware and can compare physical network connections with wireless connections. (Unit 4.8 Lesson 2).