Cyber Centurion: Users and Groups lesson plan

TOPIC: Users and Groups
OUTCOME: Recognise authorised users and authorised groups and how to remedy unauthorised users and incorrect group members.

LEARNING OBJECTIVES:
1. Understand the fundamental concepts of systems administration and the differences in configuring this in Windows and Ubuntu environments
2. Understand and define a user
3. Understand and define a group, as well as how groups can be used effectively
4. Understand the risks of unauthorised users
5. Identify and remove unauthorised users and identify missing authorised users

	Teacher Activity	Pupil Activity
Starter activity 1 (5 mins) [individual/ paired or group] Get them thinking... Resources: Pen / Activity sheet	Teacher to discuss student responses to the images of authorised users. Mention that the guest account has been disabled in the answer Leads on to lead activity.	Pupils look at images of authorised users and identify unauthorised users
Lead activity 1 (5 -10 mins) [individual/ paired or group]	What is a user? What is a group? Why would you use groups? What risks do unauthorised users present? What are the risks of a user with elevated privileges?	Students to discuss... (individual/paired or group) Answer open questions Answer directed questions Discuss experiences with users – are students Administrators or Users on home devices?
Main activity (15 Mins) Resources: Paper & Pen	Put students into small teams. 10 minutes to organise user setup 5 minutes to explain their choices	Students discuss the different roles of the users and why they need specific rights. Students discuss which users need

Presentation Model answer	**Rules of the game:**	accounts.
	Students should be reminded that there is not necessarily a perfect answer, but should aim to make the most secure choice.	Students discuss if the existing default groups are acceptable or if they need to
	After the exercise there is a model answer, although others may be acceptable. An example of this would be giving the 2 managing directors administrator privileges as well as the IT manager. This is acceptable, but could be improved further by creating a group for the managers and only giving the IT manager administrator rights.	create extra groups.
		Students must keep a check on the time and complete the task.
	If students were not aware of the ability to create groups, suggest they read up on the "Users and Groups" training materials.	
Extension activity (5 Mins)	What other groups exist other than sudo/Administrator?	
	What do these allow users to do?	