

# Lesson Plan

**Teacher** [AA]     **Date** 00/00/00     **Period** 0     **Class** 9AA  
**No. pupils** 00     **SEN** 0     **G&T** 0

**Project title** Cryptography

**Context of project** During this unit, pupils will learn about the use and purpose of cryptography and encryption of data. They will learn about the purpose and use of cryptography in everyday society and understand how the use of computers has enabled ever more secure and sophisticated methods of cryptography to be developed.

**Lesson No.** Lesson 5

**Learning Objectives** Understand the term DRM

Be able to explain how DRM makes use of encryption and authentication techniques

Be able to explain why so many people are against DRM technology

**Learning Outcomes** *All pupils will:* Know why companies make use of DRM

*Most pupils will:* Be able to explain why so many people are against the use of DRM technology

*Some pupils will:* Be able to explain how DRM makes use of encryption

**Key Terms** Digital Rights Management, DRM, encryption, authentication, piracy

<b>Starter</b>	Discussion statements starter	7.5mins
<b>Main activity</b>	<u>Teacher discussion</u> If you have access to YouTube, start the lesson off by showing this short video clip: <a href="http://www.youtube.com/watch?v=S2LIy1JXP_U&amp;feature=related">http://www.youtube.com/watch?v=S2LIy1JXP_U&amp;feature=related</a>  Ask pupils if they have heard of the term DRM. Ask them to explain what they understand by the term.  Go through slides 1-11 of DRM.ppt	15 mins
	<i>Lesson alternative 1</i> <u>DRM debate preparation</u> Show DRM_debate.ppt to pupils Explain that they will have a few minutes to prepare their arguments. Split class into groups of 4 – if possible try to pair stronger and weaker pupils Hand out a copy of DRM debate.doc to each group. They can decide which pair are FOR and which AGAINST.	7.5 mins

	<p>Give groups up to 5 minutes to prepare.</p> <p><u>DRM debate</u></p> <p>Working in groups, pupils should argue and discuss the case for DRM.</p> <p><u>Feedback to class</u></p> <p>Ask pupils to feedback the results of their debates. Which side did they come down in favour of?</p>	<p>15 mins mins</p> <p>5 mins</p>
	<p><i>Lesson alternative 2</i></p> <p>If you do not wish to do the DRM debate with your class, this is an alternative task.</p> <p><u>Teacher instructions</u></p> <p>Explain to pupils that they are going to do their own research about DRM.</p> <p>Show pupils where to access a copy of drm_task.doc</p> <p><u>Individual task</u></p> <p>Pupils should log on to the computer</p> <p>They should open a copy of 'drm_task.doc' and save it to their area</p> <p>They should begin their own research and answer the questions.</p>	<p>2.5 mins</p> <p>25 mins</p>
<b>Plenary</b>	<p>Students should work in groups of four.</p> <p>Each group should be given a sheet of A4 paper and post-it notes.</p> <p>Each student in the group should write down three things they have learned during this project.</p> <p>The group should go through the post-it notes and add as many different points as possible to the A4 paper.</p> <p>One person from the group should take the sheet of A4 paper and go to join a different group.</p> <p>The new groups should compare the points from the other group with what they originally wrote.</p>	10 mins
<b>Extension</b>	Find out how successful hackers have been at trying to break the DRM encryption	
<b>Homework</b>	<i>Lesson alternative 2:</i> To complete the DRM task sheet and bring to the lesson next week	30 mins

<b>Materials required</b>	<p>Discussion statements starter</p> <p><a href="http://www.youtube.com/watch?v=S2Lly1JXP_U&amp;feature=related">http://www.youtube.com/watch?v=S2Lly1JXP_U&amp;feature=related</a></p> <p>DRM.ppt</p> <p><i>Lesson alternative 1</i></p> <p>DRM debate.ppt</p> <p>DRM debate.doc</p> <p><i>Lesson alternative 2</i></p> <p>Drm_task.doc</p> <p>Post-it notes</p> <p>A4 paper</p>
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*You may:*

- Guide teachers or students to access this resource from the [teach-ict.com](http://teach-ict.com) site
- Print out enough copies to use during the lesson

*You may not:*

- Adapt or build on this work
- Save this resource to a school network or VLE
- Republish this resource on the internet

**A subscription will enable you to access an editable version and save it on your protected network or VLE**