

<b>Unit Title</b>	<b>Control Systems and Networks</b>				
<b>Subject group and discipline</b>	<b>Digital design</b>	<b>MYP year</b>	<b>1</b>	<b>Unit duration (hrs)</b>	<b>12</b>

**Inquiry: Establishing the purpose of the unit**

<b>Key concept</b>	<b>Related concept(s)</b>	<b>Global context</b>
<b>Systems</b>	<b>Adaptation</b>	<b>Scientific and technical innovation</b> How do we use systems and models to adapt our modern world and digital lives?

**Statement of inquiry**

*We can adapt communication systems to suit the needs of people around the globe.*

**Inquiry questions**

**Factual—**

What do the different flow chart symbols mean?

What is a computer network?

What is a protocol?

What hardware do I need to create a network?

What is the difference between the internet and world wide web?

**Conceptual—**

How can we communicate a design symbolically?

How is data transmitted between computers?

What is better a wired or wireless network?

How are services provided over the internet?

**Debatable—**

How might the many internet connected devices affect me?

Objectives	Summative assessment	
<p><b>Objective B: Developing ideas</b></p> <ul style="list-style-type: none"> <li>i. develop a list of success criteria for the solution</li> <li>ii. present feasible design ideas, which can be correctly interpreted by others</li> <li>iii. present the chosen design</li> <li>iv. create a planning drawing/diagram which outlines the main details for making the chosen solution.</li> </ul> <p><b>Objective C: Evaluating</b></p> <ul style="list-style-type: none"> <li>ii. outline the success of the solution against the design specification</li> <li>iii. outline how the solution could be improved</li> <li>iv. outline the impact of the solution on the client/target audience.</li> </ul>	<p><b>Goal</b> Create a decision making system to help businesses decide what kind of network they need.</p> <p><b>Role</b> You are network technician.</p> <p><b>Audience</b> Businesses that don't know if they should set up networks and what types.</p> <p><b>Situation</b> You are developing a new programme that is going to give advice to users on what type of computer network they should set up.</p> <p><b>Purpose</b> Automating a decision making process so that experts don't always have to be consulted when setting up networks.</p> <p><b>Standards and criteria</b></p> <p>B – Developing ideas</p> <p>D – Evaluating solutions.</p>	<p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>Different situations require different networks to allow communication to happen in the most effective way. Students will demonstrate that they can give advice on different types of network and setting them up as well as being able to produce a logically thought-out flowchart to automate their advice giving.</p>
<p><b>Approaches to learning (ATL) <i>These can be listed or you could offer some explanation of how they will be developed</i></b></p>		
<p><b>In order for students to clearly communicate a decision making process they must organise and depict information logically</b>            Category: Communication            Cluster: Communication skills</p> <p><b>In order for students to solve technical problems they must propose and evaluate a variety of solutions.</b>            Category: Thinking            Cluster: Critical thinking skills</p>		