

# Active Revision – IT

## Assessment Point – Year 11 Mock

Research shows that students who do frequent chunks of revision across all 3 stages of revision below are more likely to reach their full potential.

- ✓ Upload – consolidate your knowledge
- ✓ Process – active retrieval practice
- ✓ Download – apply your knowledge



**upload**



**process**



**download**

TOPIC: TA1 Design Tools

- List the components of each design tool (flow charts, mind maps, visualisation diagrams, wire frames)
- Create a table with at least 1 advantage and 1 disadvantage of each design tool
- Create a mindmap summarising the purpose and components of each design tool: mind map, flow chart, visualisation diagram and wireframe
- Make flashcards with the name of a tool on one side and its components, advantages, disadvantages and example uses on the other

- Fill in a blank table of the four design tools and try to recall and complete the following: Purpose, 1 advantage and 1 disadvantage, Example software
- Quiz a partner (or yourself) on design tool definitions and uses

- Nanna K's Nursery is thinking of updating its website to include a new page about what the children do during the day. Create a wireframe to plan the design of this new page (8 marks)
- A garden centre wishes to create an app for its customers to help select the best plants based on the details the user enters. Which design tools could be used to plan out the app? Justify your answer (4 marks)

TOPIC: TA2 Human Computer Interface (HCI) in everyday life

<ul style="list-style-type: none"> <li>• Create a table showing different types of user interfaces: graphical, voice, menu-based, touch, and command line. Include: <ul style="list-style-type: none"> <li>○ Examples of where they're used</li> <li>○ Advantages</li> <li>○ Disadvantages</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Match Interface types to everyday devices (e.g smart speakers – voice, ATMS - menu</li> <li>• Recall the features of a good HCI (Consistency, feedback, error handling etc) and apply them to common devices</li> </ul>	<ul style="list-style-type: none"> <li>• Explain two reasons why a touchscreen interface is suitable for a fast- food ordering kiosk (4 marks)</li> <li>• Compare two types of interfaces that could be used in a smart home system (6 marks)</li> </ul>
<p><b>TOPIC: TA3 Data and Testing</b></p>		
<ul style="list-style-type: none"> <li>• List the types of test data and give examples (Extreme, Invalid, Valid)</li> <li>• Create a table that gives the advantages and disadvantages of both technical and user testing</li> </ul>	<ul style="list-style-type: none"> <li>• Complete a matchup activity about application of testing to a range of contexts (erevision)</li> <li>• Complete a gap fill activity about validation and verification (erevision)</li> </ul>	<ul style="list-style-type: none"> <li>• A form asks for a user's age (between 0 and 120). Give examples of Extreme, Invalid (Erroneous) and valid data that could be entered (4 marks)</li> <li>• Explain why validation and testing are important in software development (4 marks)</li> </ul>
<p><b>TOPIC: TA4 Cyber Security and legislation</b></p>		
<ul style="list-style-type: none"> <li>• Create revision cards for key cyber threats: Adware, Botnet, Ransomware etc</li> <li>• Make a table listing UK laws related to IT: Data protection act, Computer misuse act etc include what each one covers</li> </ul>	<ul style="list-style-type: none"> <li>• Use a matching activity to pair cyber threats with their definitions and examples (Erevision)</li> <li>• Complete a fill in the blank summary of the legislation (Erevision)</li> </ul>	<ul style="list-style-type: none"> <li>• Describe 2 methods an organisation could use to protect against phishing attacks (4 marks)</li> <li>• Explain how the Data Protection Act protects a customer's personal data when signing up to a website (6 marks)</li> </ul>
<p><b>TOPIC: TA5 Digital Communications</b></p>		
<ul style="list-style-type: none"> <li>• List at least 5 different types of digital communication methods. For each type provide a description and an example of the software used to create it</li> <li>• List the 4 different types of digital devices and describe how it facilitates communication</li> </ul>	<ul style="list-style-type: none"> <li>• Compare 2 of the digital communication types you listed, consider advantages, disadvantages and situations where one would be more appropriate than the other</li> <li>• Complete the multiple choice activity for Software and digital devices (Erevision)</li> </ul>	<ul style="list-style-type: none"> <li>• Describe 2 advantages of using word-processing software to create a business report (4 marks)</li> <li>• Explain why a device is needed when making a VOIP call.</li> </ul>

<ul style="list-style-type: none"> <li>• Create a table showing the different types of distribution channels and the key characteristics of each including advantages and disadvantages</li> </ul>	<ul style="list-style-type: none"> <li>• Cut up the table for distribution channels and mix up the characteristics – then try and match them with the channel type</li> </ul>	
<p>TOPIC: TA6 Internet of Everything IoE</p>		
<ul style="list-style-type: none"> <li>• Create a diagram that shows how the four pillars interact with each other</li> <li>• Identify 5 IoE applications or devices that you might encounter in your daily life. Briefly explain what each device does</li> </ul>	<ul style="list-style-type: none"> <li>• Advantages and disadvantages to your diagram</li> <li>• Categorise each of these devices into the different areas of every day life (e.g Health, Manufacturing, Emergency services, transport etc)</li> </ul>	<ul style="list-style-type: none"> <li>• Explain 2 security issues related to the use of smart devices and IOE (6 marks)</li> </ul>