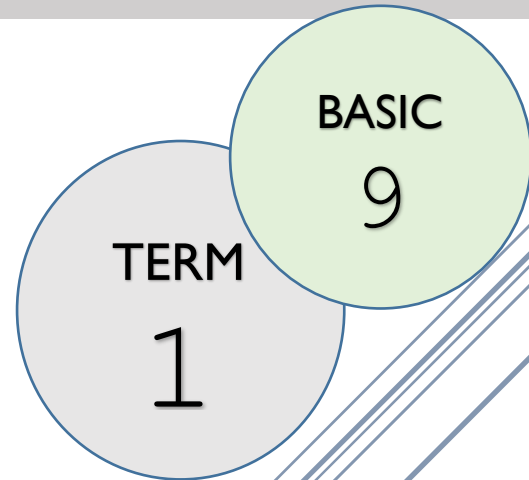


# LESSON PLANS FOR JUNIOR HIGH SCHOOLS

## COMPUTING



- Weekly forecast
- Detailed lesson plans



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# FIRST TERM COMPUTING LESSON NOTES – BASIC 9

## SCHEME OF LEARNING – TERM I

WEEKS	STRAND	SUB STRAND	INDICATORS	RESOURCES
1	Introduction To Computing	Components Of Computers	B9.1.1.1.1-2	Charts & Pictures
2	Introduction To Computing	Components Of Computers	B9.1.1.1.3-4	Charts & Pictures
3	Introduction To Computing	Technology In The Community	B9.1.2.1.1	Charts & Pictures
4	Introduction To Computing	Technology In The Community	B9.1.2.1.2	Charts & Pictures
5	Introduction To Computing	Health & Safety in the Use of ICT Tools	B9.1.3.1.1	Charts & Pictures
6	Introduction To Computing	Health & Safety in the Use of ICT Tools	B9.1.3.1.1	Charts & Pictures
7	Productivity Software	Introduction to Word Processing	B9.2.1.1.1	Charts & Pictures
8	Productivity Software	Introduction To Presentation B9.2.2.1	B9.2.2.1.1-2	Charts & Pictures
9	Productivity Software	Introduction To Desktop Publishing B9.2.3.1.	B9.2.3.1.1-2	Charts & Pictures
10	Productivity Software	Introduction To Desktop Publishing B9.2.3.1.	B9.2.3.1.1-2	Charts & Pictures
11	Productivity Software	Introduction To Electronic Spreadsheet B9.2.4.1.	B9.2.4.1.1	Charts & Pictures
12	Productivity Software	Introduction To Electronic Spreadsheet B9.2.4.1.	B9.2.4.1.1	Charts & Pictures



## WEEK 1

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Components Of Computers	
<b>Content Standard:</b> B9.1.1.1 Identify parts of a Computer and Technology Tools		<b>Indicator:</b> B91.1.1.1. Discuss the trends in the next generation of computers	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can discuss the trends in the next generation of computers		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Quantum Computing, Supercomputer, Processing Power, Sycamore		
<b>Reference:</b> Computing Curriculum P.g. 40			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Show a short montage of older computer models (from the 1980s and 1990s) to modern-day computers.</p> <p>Ask learners to discuss in pairs or small groups the visible changes and upgrades.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Initiate a discussion about the potential features and upgrades we might see in the next generation of computers.</p> <p>Ask learners to brainstorm and list down these features.</p> <p>Share some expert predictions about future computer trends (like AI integration, advanced augmented reality capabilities, or biocomputing).</p> <p>Discuss these as a class, comparing learners' predictions with expert ones.</p> <p>Introduce the concept of quantum computing, emphasizing how it differs from classical computing.</p> <ul style="list-style-type: none"> <li>• <b>Quantum Computing</b> is a super-powered computer that uses special particles called "qubits" to do many calculations at once, making it much faster at solving certain complex problems than regular computers.</li> <li>• <b>Classical Computing:</b> This is the type of computing that uses "bits" that are either in an on (1) or off (0) state to process information.</li> </ul> <p>Describe the Google quantum computer, specifically the "Sycamore" processor.</p>		Pictures and videos	Discussing the trends in the next generation of computers



<p>Compare its processing power with other supercomputers, highlighting the significant advancements.</p> <p>Using infographics or videos can make this complex subject more accessible to grade 7 learners.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. What is quantum computing, and how does it differ from classical computing?</li> <li>2. Why is Google's "Sycamore" significant in the world of computers?</li> <li>3. Name one feature you expect to see in the next generation of computers.</li> <li>4. How might the increased processing power of quantum computers impact industries like medicine or transportation?</li> </ol> <p><b>Reflection (10mins)</b></p> <p>Summarize the key points of the lesson. Emphasize the rapid advancement of computer technology and the exciting possibilities that the future holds, as well as the challenges and considerations that come with such advancements.</p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• What is quantum computing, and how does it differ from classical computing?</li> <li>• Why is Google's "Sycamore" significant in the world of computers?</li> <li>• Name one feature you expect to see in the next generation of computers.</li> <li>• How might the increased processing power of quantum computers impact industries like medicine or transportation?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Components Of Computers
<b>Content Standard:</b> B9.1.1.1 Identify parts of a Computer and Technology Tools	<b>Indicator:</b> B9.1.1.1.2. Examine the concept of Perceptual Computing	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can examine the concept of Perceptual Computing		<b>Core Competencies:</b> CC8.2: CP6.1
<b>New words</b>	Perceptual Computing, Gesture Recognition, Voice Command, Sensory Input	
<b>Reference:</b> Computing Curriculum P.g. 40		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Display a brief video clip or animation that demonstrates Perceptual Computing in action – for instance, a computer program reacting to human gestures or voice commands without the use of traditional input devices.</p> <p>Ask learners to discuss in pairs what they observed and how they think the computer is understanding user input.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Begin by explaining the overarching concept of Perceptual Computing, emphasizing how computers or devices can 'perceive' and respond to more natural, human-like inputs.</p> <p>Discuss the key features of Perceptual Computing, such as:</p> <ul style="list-style-type: none"> <li>• Gesture recognition (computers understanding hand or body movements)</li> <li>• Voice command and recognition</li> <li>• Facial recognition</li> <li>• Multi-touch interactions, etc.</li> </ul> <p>Highlight how these features differ from traditional computer interactions (keyboard, mouse).</p> <p>Break learners into small groups and assign each group a specific feature of Perceptual Computing.</p> <p>Ask them to discuss and brainstorm potential real-world applications or scenarios where their assigned feature would be useful.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What is Perceptual Computing?</li> <li>2. How does gesture recognition differ from traditional computer input methods?</li> <li>3. Name one potential application for voice command in everyday life.</li> </ol>	<p>Pictures and videos</p>	<p>Discussing the concept of Perceptual Computing</p>



<p>4. Why might facial recognition be a significant feature in Perceptual Computing?</p> <p><b>Reflection (10mins)</b> Summarize the main points of the lesson, emphasizing the evolution of human-computer interaction and the potential benefits and challenges of Perceptual Computing.</p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• What is Perceptual Computing?</li> <li>• How does gesture recognition differ from traditional computer input methods?</li> <li>• Name one potential application for voice command in everyday life.</li> <li>• Why might facial recognition be a significant feature in Perceptual Computing?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 2

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Components Of Computers	
<b>Content Standard:</b> B9.1.1.1 Identify parts of a Computer and Technology Tools		<b>Indicator:</b> B9.1.1.1.3 Discuss the uses of Output devices such as Wearable Displays, E-Paper, E-Books, Kindle	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can discuss the uses of Output devices such as Wearable Displays, E-Paper, E-Books, Kindle		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Wearable Display, E-Paper, E-Books, Kindle		
<b>Reference:</b> Computing Curriculum P.g. 40			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Display a collection of images – one of someone wearing Google Glass, one of an E-Paper display (like those in grocery store price tags), and one of someone reading on a Kindle.</p> <p>Ask learners to discuss in pairs what they think these devices do and how they might be used in daily life.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Begin with a brief overview of what an "output device" is in the realm of technology.</p> <p>Introduce the concept using Google Glass as an example. Discuss its features such as taking photos, accessing information hands-free, and its potential applications.</p> <p>Explain the basics of E-Paper, emphasizing its low energy usage and how it mimics real paper. Highlight common applications like price tags or certain types of watches.</p> <p>Describe the transition from traditional books to digital versions. Discuss the Kindle's features like adjustable text size, backlight for nighttime reading, and storage of thousands of books.</p> <p>Learners to brainstorm in small groups other potential applications or scenarios where these devices could be beneficial.</p> <p><u>Assessment</u></p> <p>1. What is a significant benefit of using Wearable Displays like Google Glass?</p>		<p>Pictures and videos</p>	<p>Discussing the uses of Output devices such as Wearable Displays, E-Paper, E-Books, Kindle</p>



<p>2. How does E-Paper mimic real paper and where might you commonly see it used?</p> <p>3. What are some advantages of E-Books over traditional paper books?</p> <p>4. How might devices like the Kindle impact the environment positively?</p> <p><b>Reflection (10mins)</b> Recap the importance and versatility of modern output devices, noting their role in making our lives more convenient and potentially reducing our environmental footprint.</p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<b>Homework/Project Work/Community Engagement Suggestions</b>		
<ul style="list-style-type: none"> <li>• What is a significant benefit of using Wearable Displays like Google Glass?</li> <li>• How does E-Paper mimic real paper and where might you commonly see it used?</li> <li>• What are some advantages of E-Books over traditional paper books?</li> <li>• How might devices like the Kindle impact the environment positively?</li> </ul>		
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>		
None		
<b>Potential Misconceptions/Learner Learning Difficulties</b>		
None		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Components Of Computers
<b>Content Standard:</b> B9.1.1.1 Identify parts of a Computer and Technology Tools	<b>Indicator:</b> B9.1.1.1.4 Describe Storage Systems	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can identify the various storage systems available, their functionalities, and implications of their use in our digital world.		<b>Core Competencies:</b> CC8.2: CP6.1
<b>New words</b>	Cloud Storage, Network Storage, Holographic Storage, Smart Card	
<b>Reference:</b> Computing Curriculum P.g. 40		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b> Display an image of a floppy disk, a CD, a USB drive, and a cloud symbol. Ask learners to discuss in pairs or small groups the evolution of storage over time and how each device or symbol represents storage.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Begin with an overview of storage systems, from physical storage (like CDs, DVDs) to digital storage methods.</p> <p>Discuss network storage systems, how cloud storage fits into this, and other forms like smart cards and holographic storage.</p> <p>Divide learners into groups, assigning each group a specific storage type (e.g., one group might research Google Drive while another focuses on smart cards).</p> <p>Using classroom resources like computers or tablets, groups should explore their assigned storage system, focusing on its primary functions, benefits, and drawbacks.</p> <p>Each group will present their findings briefly. Facilitate a discussion comparing the different storage methods, especially highlighting the pros and cons of cloud storage.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What is the primary difference between cloud storage and network storage?</li> <li>2. What is a specific use of a smart card in daily life?</li> <li>3. How does holographic storage differ from traditional storage methods?</li> <li>4. Name one advantage and one disadvantage of using cloud storage.</li> </ol>	<p>Pictures and videos</p>	<p>Describing Storage Systems</p>



<p><b>Reflection (10mins)</b>  Recap the day's discussions, emphasizing the increasing importance of understanding and navigating various storage systems in our modern world.</p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• What is cloud storage, and how does it differ from local storage on your computer?</li> <li>• Name one benefit and one drawback of using cloud storage.</li> <li>• How does a smart card store information, and where might you encounter one in daily life?</li> <li>• What makes holographic storage unique compared to other storage methods?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Components Of Computers
<b>Content Standard:</b> B9.1.1.2. Demonstrate the Use of the Desktop	<b>Indicator:</b> B9.1.1.2.1 Explore personalization of the computer	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can explore personalization of the computer		<b>Core Competencies:</b> CC8.2: CP6.1
<b>New words</b>	Personalization, Desktop Icons, Mouse Pointers, Workspace	
<b>Reference:</b> Computing Curriculum P.g. 42		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Start with a quick poll, asking learners how many of them have personalized their computer at home, such as changing the wallpaper or the sounds.</p> <p>Follow up with a discussion about why they chose those specific customizations.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Discuss the concept of personalization. Ask learners why they think it's essential to make a space, digital or physical, truly theirs. Relate this to their bedrooms or personal spaces.</p> <p>Display on a projector or shared screen how to change desktop icons.</p> <p>Guide learners as they experiment with changing their desktop icons on their computers.</p> <p>Again, using a projector or shared screen, demonstrate how to alter the mouse pointer's appearance.</p> <p>Allow learners to choose and change their mouse pointers, encouraging them to explore different options available.</p> <p>In pairs or small groups, challenge learners to personalize their workspace in a way that represents a given theme (e.g., "nature," "space," "vintage").</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What does personalization mean in the context of computers?</li> <li>2. Why might someone want to change their desktop icons?</li> <li>3. How can changing mouse pointers enhance your computer experience?</li> <li>4. Name one benefit of personalizing your digital workspace.</li> </ol>	<p>Pictures and videos</p>	<p>Understand the importance of personalizing their computer workspace and will be able to change desktop icons and mouse pointers to reflect their personal tastes and preferences.</p>



<p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• What does personalization mean in the context of computers?</li> <li>• Why might someone want to change their desktop icons?</li> <li>• How can changing mouse pointers enhance your computer experience?</li> <li>• Name one benefit of personalizing your digital workspace</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Components Of Computers
<b>Content Standard:</b> B9.1.1.2. Demonstrate the Use of the Desktop	<b>Indicator:</b> B9.1.1.2.2 Identify and use file management techniques (drivers and hardware)	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can identify and use file management techniques		<b>Core Competencies:</b> CC8.2: CP6.1: CC7.5 :CC7.3
<b>Reference:</b> Computing Curriculum P.g. 42		
<b>New words:</b> Device Drivers, Plug-and-Play, Installation, Update, Delete		
<b>Activities For Learning &amp; Assessment</b>		
<b>Starter (5mins)</b>		
<p>Start the lesson by playing a muted video. Ask learners why there's no sound. Likely answers will be "The volume is down" or "The speakers are off."</p> <p>After checking those, introduce the idea: "What if the computer doesn't know how to use the speakers? How does it communicate?"</p> <p>Share performance indicators and introduce the lesson.</p>		
<b>Main (35mins)</b>		
<p>Identify and explore the use of device drivers e. g. sound drivers and video graphic drivers</p> <ol style="list-style-type: none"> <li>2. Explain plug-and-play devices.</li> <li>3. Demonstrate how to install, update or delete drivers.</li> </ol> <p>Introduce the concept of device drivers and their function. Give specific examples, emphasizing sound drivers and video graphic drivers.</p> <p>Ask learners about their experiences, e.g., when a game didn't run because a graphics driver was outdated.</p> <p>Discuss what plug-and-play means. Show examples of such devices (e.g., USB drives, some headphones) and demonstrate how the computer automatically detects and often installs necessary drivers.</p> <p>Using a projector or shared screen, walk learners through the process of checking for driver updates, installing new drivers, and deleting outdated or unnecessary ones. Encourage learners to follow along on their computers, guiding them through each step.</p>		
<b>Assessment</b>		



<ol style="list-style-type: none"> <li>1. What is the primary function of a device driver?</li> <li>2. What does "plug-and-play" mean in terms of devices and drivers?</li> <li>3. Why might you need to update a driver?</li> <li>4. What could be a potential problem if you delete a necessary driver?</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<b>Homework/Project Work/Community Engagement Suggestions</b>		
<ul style="list-style-type: none"> <li>• What is the primary function of a device driver?</li> <li>• What does "plug-and-play" mean in terms of devices and drivers?</li> <li>• Why might you need to update a driver?</li> <li>• What could be a potential problem if you delete a necessary driver?</li> </ul>		
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>		
None		
<b>Potential Misconceptions/Student Learning Difficulties</b>		
None		



## WEEK 3

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing								
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing								
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Technology In The Community								
<b>Content Standard:</b> B9.1.2.1. Demonstrate the Use of Technology in the Community		<b>Indicator:</b> B9.1.2.1.1. Evaluate problems in the community that can be solved with technology								
		<b>Lesson:</b> 1 of 2								
<b>Performance Indicator:</b> Learners can identify various portable computing devices and discuss their impact on daily life.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)								
<b>New words</b>	Portable Computing Device, Impact, Integration, Dependence									
<b>Reference:</b> Computing Curriculum Pg. 43										
<b>Activities For Learning &amp; Assessment</b>										
<b>Starter (5mins)</b>  Begin by asking: "How many of you checked a portable device this morning before coming to school? What did you check?"  Share performance indicators and introduce the lesson.		Pictures and videos								
<b>Main (35mins)</b>  Brainstorm learners to list portable computing devices they use or know about. Examples: mobile phones, smartwatches, tablets, etc.  Discuss the primary functions of these devices.  Divide learners into small groups, assigning each a specific portable device. Ask groups to brainstorm and list ways their assigned device affects daily life. Example:										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Device</th> <th>How it affects daily life.</th> </tr> </thead> <tbody> <tr> <td>Mobile Phones</td> <td>Instant Communication, Navigation Information Access, Entertainment Scheduling &amp; Reminders, Photography &amp; Videography</td> </tr> <tr> <td>Smartwatches</td> <td>Health Monitoring, Notifications, Hands-free Operations, GPS &amp; Navigation, Quick Tasks</td> </tr> <tr> <td>Tablets</td> <td>Reading &amp; Research, Education, Productivity, Entertainment, Portability</td> </tr> </tbody> </table>		Device	How it affects daily life.	Mobile Phones	Instant Communication, Navigation Information Access, Entertainment Scheduling & Reminders, Photography & Videography	Smartwatches	Health Monitoring, Notifications, Hands-free Operations, GPS & Navigation, Quick Tasks	Tablets	Reading & Research, Education, Productivity, Entertainment, Portability	Evaluating problems in the community that can be solved with technology
Device	How it affects daily life.									
Mobile Phones	Instant Communication, Navigation Information Access, Entertainment Scheduling & Reminders, Photography & Videography									
Smartwatches	Health Monitoring, Notifications, Hands-free Operations, GPS & Navigation, Quick Tasks									
Tablets	Reading & Research, Education, Productivity, Entertainment, Portability									
<p>Groups will share their findings. Discuss how life might be different without these devices, leading into a conversation about dependence on technology.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>Name two benefits of using a smartwatch.</li> <li>How has the mobile phone changed the way we communicate?</li> </ol>										



<p>3. Are there any drawbacks to being continuously connected through these devices? 4. How might these devices evolve in the next decade?</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<b>Homework/Project Work/Community Engagement Suggestions</b>		
<ul style="list-style-type: none"> <li>• Name two benefits of using a smartwatch.</li> <li>• How has the mobile phone changed the way we communicate?</li> <li>• Are there any drawbacks to being continuously connected through these devices?</li> <li>• How might these devices evolve in the next decade?</li> </ul>		
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>		
None		
<b>Potential Misconceptions/Learner Learning Difficulties</b>		
None		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Technology In The Community	
<b>Content Standard:</b> B9.1.2.1. Demonstrate the Use of Technology in the Community		<b>Indicator:</b> B9.1.2.1.1. Evaluate problems in the community that can be solved with technology	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can brainstorm and discuss community problems that can be addressed or alleviated using technology.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Solution, Innovation, Engagement, Sustainability		
<b>Reference:</b> Computing Curriculum P.g. 43			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Start by presenting a local community problem, e.g., "There's a lot of litter in our local park." Then ask: "How might technology help address this?"</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Brainstorm learners to list problems they've noticed in their community. Write down these problems on the board for reference. Example: Lack of Safe Recreational Spaces, Improper Waste Disposal:, etc.</p> <p>Divide learners into small groups, assigning each a specific community problem from the board.</p> <p>Groups will brainstorm possible technological solutions for their problem. After brainstorming, each group will share their problem and proposed tech solution.</p> <p>Discuss the feasibility of these solutions and what it would take to implement them. Encourage critical thinking about potential challenges and how they could be overcome.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. Name one community problem and a potential tech solution discussed in class.</li> <li>2. How might technology help improve local transportation issues?</li> <li>3. What are potential challenges in implementing tech solutions in communities?</li> <li>4. How can the community be engaged in these tech-driven initiatives for better success?</li> </ol>		Pictures and videos	Evaluating problems in the community that can be solved with technology



<p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Name one community problem and a potential tech solution discussed in class.</li> <li>• How might technology help improve local transportation issues?</li> <li>• What are potential challenges in implementing tech solutions in communities?</li> <li>• How can the community be engaged in these tech-driven initiatives for better success?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 4

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Technology In The Community	
<b>Content Standard:</b> B9.1.2.1. Demonstrate the Use of Technology in the Community		<b>Indicator:</b> B9.1.2.1.1. Evaluate problems in the community that can be solved with technology	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can brainstorm and discuss community problems that can be addressed or alleviated using technology.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Solution, Innovation, Engagement, Sustainability		
<b>Reference:</b> Computing Curriculum P.g. 43			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Start by presenting a local community problem, e.g., "There's a lot of litter in our local park." Then ask: "How might technology help address this?"</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Brainstorm learners to list problems they've noticed in their community. Write down these problems on the board for reference. Example: Lack of Safe Recreational Spaces, Improper Waste Disposal:, etc.</p> <p>Divide learners into small groups, assigning each a specific community problem from the board.</p> <p>Groups will brainstorm possible technological solutions for their problem. After brainstorming, each group will share their problem and proposed tech solution.</p> <p>Discuss the feasibility of these solutions and what it would take to implement them. Encourage critical thinking about potential challenges and how they could be overcome.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. Name one community problem and a potential tech solution discussed in class.</li> <li>2. How might technology help improve local transportation issues?</li> <li>3. What are potential challenges in implementing tech solutions in communities?</li> <li>4. How can the community be engaged in these tech-driven initiatives for better success?</li> </ol>		Pictures and videos	Evaluating problems in the community that can be solved with technology



<p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Name one community problem and a potential tech solution discussed in class.</li> <li>• How might technology help improve local transportation issues?</li> <li>• What are potential challenges in implementing tech solutions in communities?</li> <li>• How can the community be engaged in these tech-driven initiatives for better success?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Technology In The Community
<b>Content Standard:</b> B9.1.2.1. Demonstrate the Use of Technology in the Community	<b>Indicator:</b> B9.1.2.1.2. Propose solutions to the problems identified	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can propose tech-based solutions to address specific community challenges.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)
<b>New words</b>	Technology, Solution, Community, Innovation	
<b>Reference:</b> Computing Curriculum Pg. 43		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Show a brief video or presentation that highlights a community problem solved with technology (e.g., a mobile app addressing waste collection).</p> <p>Ask learners: "What problem was addressed in the video? How did technology help solve it?"</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Revise with learners to brainstorm and list problems they observe in their community. Each group presents their list to the class, and common problems are noted.</p> <p>Guide learners to propose solutions to the problems identified. Using the list of common problems, groups will now brainstorm and propose technological solutions to these problems. For example, if one problem is "lack of timely public transportation," a solution could be "a real-time bus tracking app."</p> <p>Groups should consider the feasibility of their solutions, potential challenges, and the impact on the community. Each group will then present their tech-based solutions to the class.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. Name one problem in the community you discussed today.</li> <li>2. How can technology be a powerful tool in solving community challenges?</li> <li>3. Provide an example of a technological solution to a community problem you've learned about today.</li> <li>4. Why is it important to ensure that technological solutions are accessible to everyone in the</li> </ol>	<p>Pictures and videos</p>	<p>Proposing technological solutions to the problems identified in the community.</p>



<p><b>Reflection (10mins)</b>          Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p> <p>Highlight the significance of technology in modern problem-solving and the potential it holds for community betterment. Encourage learners to stay curious and consider tech-based solutions to challenges they encounter in their lives.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Ask learners to interview family members or neighbors about problems they face in the community that might be addressed with technology.</li> <li>• Learners can then draft a brief proposal on how they would tackle one of these problems using a tech solution.</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Technology In The Community
<b>Content Standard:</b> B9.1.2.1. Demonstrate the Use of Technology in the Community	<b>Indicator:</b> B9.1.2.1.2. Propose solutions to the problems identified	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can propose tech-based solutions to address specific community challenges.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)
<b>New words</b>	Technology, Solution, Community, Innovation	
<b>Reference:</b> Computing Curriculum Pg. 43		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Show a brief video or presentation that highlights a community problem solved with technology (e.g., a mobile app addressing waste collection).</p> <p>Ask learners: "What problem was addressed in the video? How did technology help solve it?"</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Revise with learners to brainstorm and list problems they observe in their community.</p> <p>Each group presents their list to the class, and common problems are noted.</p> <p>Guide learners to propose solutions to the problems identified. Using the list of common problems, groups will now brainstorm and propose technological solutions to these problems. For example, if one problem is "lack of timely public transportation," a solution could be "a real-time bus tracking app."</p> <p>Groups should consider the feasibility of their solutions, potential challenges, and the impact on the community. Each group will then present their tech-based solutions to the class.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. Name one problem in the community you discussed today.</li> <li>2. How can technology be a powerful tool in solving community challenges?</li> <li>3. Provide an example of a technological solution to a community problem you've learned about today.</li> <li>4. Why is it important to ensure that technological solutions are accessible to everyone in the</li> </ol>	<p>Pictures and videos</p>	<p>Proposing technological solutions to the problems identified in the community.</p>



<p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Ask learners to interview family members or neighbors about problems they face in the community that might be addressed with technology.</li> <li>• Learners can then draft a brief proposal on how they would tackle one of these problems using a tech solution.</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Technology In The Community
<b>Content Standard:</b> B9.1.2.1. Demonstrate the Use of Technology in the Community	<b>Indicator:</b> B9.1.2.1.3. Design the solution selected	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can design technological solutions to address problems they've identified in their community.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)
<b>New words</b>	Technology, Solution, Community, Innovation, Feasibility, Impact	
<b>Reference:</b> Computing Curriculum Pg. 43		


<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Show a short video or a news clip of a problem a community faced and the technological solution they implemented.</p> <p>Ask learners to discuss how technology was useful in addressing that problem.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>In groups, learners brainstorm and list down problems they observe in their community.</p> <p>Each group presents their list to the class. Common problems are highlighted and noted down.</p> <p>Using the common problems list, each group now brainstorms potential tech-based solutions.</p> <p>Guide the learners to think about feasibility, potential challenges, and the potential impact of their proposed solutions.</p> <p>Once solutions are brainstormed, each group chooses one solution to focus on. They'll design or outline the solution in more detail. This can include drawing a prototype, outlining how it works, or explaining the benefits.</p> <p>Each group presents their designed technological solution, explaining the problem it addresses, how it works, its feasibility, potential challenges, and its potential impact on the community.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What is one problem your group identified in the community?</li> <li>2. Describe the technological solution your group designed.</li> </ol>	<p>Pictures and videos</p>	<p>Proposing technological solutions to the problems identified in the community.</p>



<p>3. What is one potential challenge your solution might face? 4. How will your solution have a positive impact on the community?</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<b>Homework/Project Work/Community Engagement Suggestions</b>		
<ul style="list-style-type: none"> <li>• What is one problem your group identified in the community?</li> <li>• Describe the technological solution your group designed.</li> <li>• What is one potential challenge your solution might face?</li> <li>• How will your solution have a positive impact on the community?</li> </ul>		
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>		
None		
<b>Potential Misconceptions/Learner Learning Difficulties</b>		
None		



## WEEK 5

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Health & Safety in the Use of ICT Tools	
<b>Content Standard:</b> B9.1.3.1. Demonstrate How to Apply Health and Safety Measures in the Use ICT Tools		<b>Indicator:</b> B9.1.3.1.1 Evaluate health issues at workstations	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can evaluate potential health issues associated with poorly designed workstations and recognize the benefits of ergonomic tools.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Ergonomics, Workstation, Health Issues, Posture		
<b>Reference:</b> Computing Curriculum Pg. 44			
<b>Activities For Learning &amp; Assessment</b>			
<b>Starter (5mins)</b>		<b>Resources</b>  Pictures and videos	<b>Progression</b>  Evaluating health issues at workstations
<p>Show learners pictures of both a poorly set up workstation and an ergonomically designed one.</p> <p>Ask them to identify what's wrong with the poorly set up workstation and what improvements the ergonomic one offers.</p> <p>Share performance indicators and introduce the lesson.</p>			
<b>Main (35mins)</b>			
<p>Engage learners in a discussion about potential health issues that can arise from using a poorly designed workstation. This might include back pain, eye strain, repetitive strain injuries, etc.</p> <p>Ask learners if they or someone they know has ever experienced discomfort or pain due to a poor workstation setup.</p> <p>Present the ergonomic tools, such as an ergonomic keyboard and paper stand.</p> <p>Discuss their design features and how they help in preventing health issues.</p> <p>If possible, have an actual ergonomic keyboard and paper stand for learners to examine and try out.</p>			
			



<p>Let learners compare them to traditional tools and discuss their observations.</p> <p>Divide learners into small groups. Each group is given a scenario of a person experiencing a health issue due to their workstation.</p> <p>They should discuss and present what ergonomic changes or tools they would recommend to help alleviate the issue.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. What is ergonomics and why is it important for workstations?</li> <li>2. Name two health issues that might arise from a poorly set up workstation.</li> <li>3. How does an ergonomic keyboard differ from a regular one?</li> <li>4. Why might someone use a paper stand at their workstation?</li> </ol> <p><b>Reflection (10mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• What is ergonomics and why is it important for workstations?</li> <li>• Name two health issues that might arise from a poorly set up workstation.</li> <li>• How does an ergonomic keyboard differ from a regular one?</li> <li>• Why might someone use a paper stand at their workstation?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>		<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>		<b>Sub Strand:</b> Health & Safety in the Use of ICT Tools
<b>Content Standard:</b> B9.1.3.1. Demonstrate How to Apply Health and Safety Measures in the Use ICT Tools		<b>Indicator:</b> B9.1.3.1.1 Evaluate health issues at workstations	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can evaluate the importance of proper lighting when working with computers and learn to set up an ideal lighting system to prevent eye strain and other health issues.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Glare, Ambient Light, Eye Strain, Ergonomic Lighting		
<b>Reference:</b> Computing Curriculum Pg. 44			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin with a simple demonstration. In a dim room, turn on a bright lamp positioned directly in front of the computer screen, creating glare.</p> <p>Ask learners to observe and describe how comfortable it feels looking at the screen. This will provide a tactile understanding of bad lighting practices.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Discuss with learners the problems they observed from the starter activity. Introduce the term "eye strain" and explain other symptoms like headaches, dry eyes, etc.</p> <p>Highlight the long-term effects of working with poor lighting.</p> <p>Adjust the room's ambient light to a comfortable level. Position the computer monitor so that windows and other light sources are to the side, rather than in front or behind it.</p> <p>Introduce the concept of "task lighting." Demonstrate using a desk lamp that provides light to the workspace but doesn't create glare on the screen.</p> <p>Discuss the benefits of adjustable or dimmable lights and the advantage of using screen filters or monitor hoods in very bright environments.</p> <p>If available, set up multiple lighting scenarios in different parts of the room (e.g., a workstation near a window, one under a bright overhead light, one using only task lighting).</p>		Pictures and videos	Evaluating health issues at workstations



<p>Allow learners to rotate through these stations, observing which setup feels the most comfortable and why.</p> <p>Engage learners in a discussion on the benefits of natural light compared to artificial light. Emphasize the importance of breaks and looking away from the screen regularly, especially when working in non-ideal lighting conditions.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. Why is glare on a computer screen problematic?</li> <li>2. How should a computer monitor be positioned relative to windows or bright light sources?</li> <li>3. What is "task lighting," and why is it beneficial?</li> <li>4. Why is natural light preferable when working on a computer?</li> </ol> <p><b>Reflection (10mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Why is glare on a computer screen problematic?</li> <li>• How should a computer monitor be positioned relative to windows or bright light sources?</li> <li>• What is "task lighting," and why is it beneficial?</li> <li>• Why is natural light preferable when working on a computer?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 6

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Health & Safety in the Use of ICT Tools	
<b>Content Standard:</b> B9.1.3.1. Demonstrate How to Apply Health and Safety Measures in the Use ICT Tools		<b>Indicator:</b> B9.1.3.1.1 Evaluate health issues at workstations	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can evaluate the importance of proper lighting when working with computers and learn to set up an ideal lighting system to prevent eye strain and other health issues.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Glare, Ambient Light, Eye Strain, Ergonomic Lighting		
<b>Reference:</b> Computing Curriculum Pg. 44			
<b>Activities For Learning &amp; Assessment</b>			
<b>Starter (5mins)</b>		<b>Resources</b>	<b>Progression</b>
<p>Begin with a simple demonstration. In a dim room, turn on a bright lamp positioned directly in front of the computer screen, creating glare.</p> <p>Ask learners to observe and describe how comfortable it feels looking at the screen. This will provide a tactile understanding of bad lighting practices.</p> <p>Share performance indicators and introduce the lesson.</p>			
<b>Main (35mins)</b>		Pictures and videos	Evaluating health issues at workstations
<p>Discuss with learners the problems they observed from the starter activity. Introduce the term "eye strain" and explain other symptoms like headaches, dry eyes, etc.</p> <p>Highlight the long-term effects of working with poor lighting.</p> <p>Adjust the room's ambient light to a comfortable level. Position the computer monitor so that windows and other light sources are to the side, rather than in front or behind it.</p>			
<p>Introduce the concept of "task lighting." Demonstrate using a desk lamp that provides light to the workspace but doesn't create glare on the screen.</p> <p>Discuss the benefits of adjustable or dimmable lights and the advantage of using screen filters or monitor hoods in very bright environments.</p>			
<p>If available, set up multiple lighting scenarios in different parts of the room (e.g., a workstation near a window, one under a bright overhead light, one using only task lighting).</p>			



<p>Allow learners to rotate through these stations, observing which setup feels the most comfortable and why.</p> <p>Engage learners in a discussion on the benefits of natural light compared to artificial light. Emphasize the importance of breaks and looking away from the screen regularly, especially when working in non-ideal lighting conditions.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>5. Why is glare on a computer screen problematic?</li> <li>6. How should a computer monitor be positioned relative to windows or bright light sources?</li> <li>7. What is "task lighting," and why is it beneficial?</li> <li>8. Why is natural light preferable when working on a computer?</li> </ol> <p><b>Reflection (10mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Why is glare on a computer screen problematic?</li> <li>• How should a computer monitor be positioned relative to windows or bright light sources?</li> <li>• What is "task lighting," and why is it beneficial?</li> <li>• Why is natural light preferable when working on a computer?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Introduction To Computing	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Health & Safety in the Use of ICT Tools	
<b>Content Standard:</b> B9.1.3.1. Demonstrate How to Apply Health and Safety Measures in the Use ICT Tools		<b>Indicator:</b> B9.1.3.1.2 Evaluate Safety Risk Reduction issues at workstations	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can assess safety risk reduction issues at workstations, focusing on heat generation by machines like computers and printers, and ways to reduce excess heat.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Safety risk reduction, Workstation, Heat generation, Excess heat		
<b>Reference:</b> Computing Curriculum Pg. 44			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin with a real-world scenario: "Think about a time when you felt your computer or another electronic device was getting too hot. What did you do about it? Share your experiences."</p> <p>Encourage learners to discuss their encounters with hot electronic devices.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Explain the importance of identifying safety risk reduction issues at workstations, focusing on the potential dangers associated with excess heat generated by machines.</p> <p>Discuss the heat generated by common machines like computers, printers, and other electronic devices.</p> <p>Explain that excessive heat can not only cause discomfort but also pose risks to the machines and potentially lead to malfunctions or damage.</p> <p>Engage learners in a discussion about strategies to reduce excess heat from machines.</p> <p>Encourage them to brainstorm and share ideas like maintaining proper ventilation, avoiding overuse, and keeping machines clean and dust-free.</p> <p>Provide a practical activity where learners evaluate a workstation with electronic devices.</p>		Pictures and videos	Evaluating health issues at workstations



<p>Ask them to identify potential heat-related safety risks and suggest measures to mitigate them.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. Why is it important to address safety risk reduction issues at workstations?</li> <li>2. How does excess heat from electronic devices impact both comfort and safety?</li> <li>3. What are some strategies to reduce excess heat from machines at workstations?</li> <li>4. In the hands-on assessment, identify and describe a potential heat-related safety risk at a workstation, and propose a measure to reduce this risk.</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Why is it important to address safety risk reduction issues at workstations?</li> <li>• How does excess heat from electronic devices impact both comfort and safety?</li> <li>• What are some strategies to reduce excess heat from machines at workstations?</li> <li>• In the hands-on assessment, identify and describe a potential heat-related safety risk at a workstation, and propose a measure to reduce this risk.</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 7

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction to Word Processing	
<b>Content Standard:</b> B9.2.1.1 Demonstrate How to Use Microsoft Word (Multimedia)		<b>Indicator:</b> B9.2.1.1.1. Demonstrate how to add pictures, insert a screenshot and screen clipping and print screen	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can explore and understand the features of clip art, screenshot, and screen clipping in the Insert Ribbon of a document.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Clip Art, Screenshot, Screen Clipping		
<b>Reference:</b> Computing Curriculum Pg. 45			
<b>Activities For Learning &amp; Assessment</b>			
<b>Starter (5mins)</b>  Revise with learners on the previous lesson.  Share performance indicators and introduce the lesson.		<b>Resources</b>  Computers with Microsoft Office installed	<b>Progression</b>  Demonstrating how to add pictures, insert a screenshot and screen clipping and print screen
<b>Main (35mins)</b>  Guide learners to open Microsoft Word or PowerPoint. Navigate to the "Insert" ribbon.  Explore the Clip Art feature, searching for relevant images. Insert a clip art image into the document or slide.  Discuss the importance of capturing specific content from the screen. Explore the "Screenshot" option in the "Insert" ribbon.  Take a screenshot of a selected area on the computer screen. Insert the screenshot into the document or slide.  Discuss scenarios where capturing a specific portion of the screen is useful. Explore the "Screen Clipping" option in the "Insert" ribbon.  Take a screen clipping and insert it into the document or slide.			
<b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.  Take feedback from learners and summarize the lesson.			
<b>Homework/Project Work/Community Engagement Suggestions</b>			



- What is clip art, and how can it enhance the visual appeal of a document or presentation?
- Explain the difference between a screenshot and a screen clipping. When might you use one over the other?
- How can visual elements like clip art, screenshots, and screen clippings improve the overall communication of information in a document or presentation?
- Demonstrate how to insert a clip art image, a screenshot, and a screen clipping into a Microsoft Word document or PowerPoint slide.

**Cross-Curriculum Links/Cross-Cutting Issues**

None

**Potential Misconceptions/Learner Learning Difficulties**

None



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction to Word Processing	
<b>Content Standard:</b> B9.2.1.1 Demonstrate How to Use Microsoft Word (Multimedia)		<b>Indicator:</b> B9.2.1.1.1. Demonstrate how to add pictures, insert a screenshot and screen clipping and print screen	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can explore and understand the features of clip art, screenshot, and screen clipping in the Insert Ribbon of a document.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Print Screen Key, Screen Capture, Insert, Crop		
<b>Reference:</b> Computing Curriculum Pg. 45			

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Revise with learners on the previous lesson.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Explain the location and function of the Print Screen key on the keyboard. Discuss the difference between capturing the entire screen and capturing an active window.</p> <p>Show a brief demonstration of using the Print Screen key.</p> <p>Have learners open Microsoft Word. Instruct them to use the Print Screen key to capture the entire screen and an active window.</p> <p>Guide them in pasting the captured images into the Word document.</p> <p>Teach learners how to use the cropping tool in Microsoft Word. Allow learners to crop and format their captured images.</p> <p>Facilitate a class discussion on the benefits of using screen captures in documents and presentations.</p> <p>Encourage learners to share their experiences and insights.</p> <p><b>Reflection (10mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	Computers with Microsoft Office installed	Demonstrating how to add pictures, insert a screenshot and screen clipping and print screen



**Homework/Project Work/Community Engagement Suggestions**

- What is the primary function of the Print Screen key?
- Explain the difference between capturing the entire screen and capturing an active window using the Print Screen key.
- How can the cropping tool in Microsoft Word enhance the appearance of a captured image?
- In what situations might using the Print Screen key be beneficial for creating school projects or presentations?

**Cross-Curriculum Links/Cross-Cutting Issues**

None

**Potential Misconceptions/Learner Learning Difficulties**

None



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction to Word Processing	
<b>Content Standard:</b> B9.2.1.1 Demonstrate How to Use Microsoft Word (Multimedia)		<b>Indicator:</b> B9.2.1.1.1. Demonstrate how to add pictures, insert a screenshot and screen clipping and print screen	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can explore and understand the features of clip art, screenshot, and screen clipping in the Insert Ribbon of a document.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Clip Art, Screenshot, Screen Clipping		
<b>Reference:</b> Computing Curriculum Pg. 45			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Revise with learners on the previous lesson.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Guide learners to open Microsoft Word or PowerPoint. Navigate to the "Insert" ribbon.</p> <p>Explore the Clip Art feature, searching for relevant images. Insert a clip art image into the document or slide.</p> <p>Discuss the importance of capturing specific content from the screen. Explore the "Screenshot" option in the "Insert" ribbon.</p> <p>Take a screenshot of a selected area on the computer screen. Insert the screenshot into the document or slide.</p> <p>Discuss scenarios where capturing a specific portion of the screen is useful. Explore the "Screen Clipping" option in the "Insert" ribbon.</p> <p>Take a screen clipping and insert it into the document or slide.</p> <p><b>Reflection (10mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		Computers with Microsoft Office installed	Demonstrating how to add pictures, insert a screenshot and screen clipping and print screen



<b>Homework/Project Work/Community Engagement Suggestions</b>
<ul style="list-style-type: none"><li>• What is clip art, and how can it enhance the visual appeal of a document or presentation?</li><li>• Explain the difference between a screenshot and a screen clipping. When might you use one over the other?</li><li>• How can visual elements like clip art, screenshots, and screen clippings improve the overall communication of information in a document or presentation?</li><li>• Demonstrate how to insert a clip art image, a screenshot, and a screen clipping into a Microsoft Word document or PowerPoint slide.</li></ul>
<b>Cross-Curriculum Links/Cross-Cutting Issues</b>
None
<b>Potential Misconceptions/Learner Learning Difficulties</b>
None



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction to Word Processing	
<b>Content Standard:</b> B9.2.1.1 Demonstrate How to Use Microsoft Word (Multimedia)		<b>Indicator:</b> B9.2.1.1.1. Demonstrate how to add pictures, insert a screenshot and screen clipping and print screen	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can explore and understand the features of clip art, screenshot, and screen clipping in the Insert Ribbon of a document.		<b>Core Competencies:</b> Communication and Collaboration (CC), Digital Literacy (DL)	
<b>New words</b>	Print Screen Key, Screen Capture, Insert, Crop		
<b>Reference:</b> Computing Curriculum Pg. 45			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Revise with learners on the previous lesson.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Explain the location and function of the Print Screen key on the keyboard. Discuss the difference between capturing the entire screen and capturing an active window.</p> <p>Show a brief demonstration of using the Print Screen key.</p> <p>Have learners open Microsoft Word. Instruct them to use the Print Screen key to capture the entire screen and an active window.</p> <p>Guide them in pasting the captured images into the Word document.</p> <p>Teach learners how to use the cropping tool in Microsoft Word. Allow learners to crop and format their captured images.</p> <p>Facilitate a class discussion on the benefits of using screen captures in documents and presentations.</p> <p>Encourage learners to share their experiences and insights.</p>		Computers with Microsoft Office installed	Demonstrating how to add pictures, insert a screenshot and screen clipping and print screen



<p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• What is the primary function of the Print Screen key?</li> <li>• Explain the difference between capturing the entire screen and capturing an active window using the Print Screen key.</li> <li>• How can the cropping tool in Microsoft Word enhance the appearance of a captured image?</li> <li>• In what situations might using the Print Screen key be beneficial for creating school projects or presentations?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Learner Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 8

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Presentation	
<b>Content Standard:</b> B9.2.2.1 Demonstrate How to use Microsoft PowerPoint (Multimedia)		<b>Indicator:</b> B9.2.2.1.1 Demonstrate how to add pictures and insert screenshots	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can add pictures and insert screenshots using the Insert Ribbon in Microsoft Word for effective document creation		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Insert Ribbon, Clip Art, Screenshot, Layout		
<b>Reference:</b> Computing Curriculum Pg. 46			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson with a short activity to engage learners. Display a visually appealing document on the screen that includes pictures and screenshots.</p> <p>Ask learners to discuss with a partner or in small groups how these visuals enhance the document.</p> <p>After a brief discussion, facilitate a class conversation by asking volunteers to share their observations</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Demonstrate how to access the Insert Ribbon in Microsoft Word.</p> <p>Show how to use the Clip Art feature to search for and insert images into a document.</p> <p>Guide learners through the process of capturing and inserting screenshots.</p> <p>Discuss the importance of layout and positioning of visuals for better document design.</p> <p>Encourage learners to ask questions and provide real-world examples.</p> <p>Assign a task where learners need to create a one-page document that includes at least two clip art images and two screenshots.</p> <p>Encourage creativity and exploration, allowing learners to choose the topic or theme for their document.</p>		<p>Pictures and videos.</p> <p>Computers with Microsoft Word installed</p>	<p>Demonstrating how to add pictures and insert screenshots</p>



<p><b>Assessment</b></p> <p>In your own words, explain why visuals like clip art and screenshots are important in making a document more engaging and informative.</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>In your own words, explain why visuals like clip art and screenshots are important in making a document more engaging and informative</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Presentation
<b>Content Standard:</b> B9.2.2.1 Demonstrate How to use Microsoft PowerPoint (Multimedia)	<b>Indicator:</b> B9.2.2.1.2 Demonstrate how to animate slides in a presentation	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can effectively use transitions and animations in a presentation		<b>Core Competencies:</b> CC8.2: CP6.1
<b>New words</b>	Transitions, Animations, Presentation Software, Sequence	
<b>Reference:</b> Computing Curriculum Pg. 46		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson with a brief discussion on the importance of engaging presentations.</p> <p>Ask learners to share their thoughts on what makes a presentation interesting or memorable.</p> <p>Encourage them to consider both content and visual elements in their responses.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Demonstrate how to access the transitions and animations features in the chosen presentation software.</p> <p>Show how to apply transitions between slides to create a smooth and visually appealing flow.</p> <p>Guide learners through the process of animating individual elements within a slide for emphasis or storytelling.</p> <p>Discuss the importance of choosing appropriate transitions and animations based on the content and purpose of the presentation.</p> <p>Allow learners to ask questions and provide examples.</p> <p>Distribute a handout with step-by-step instructions for creating a seven-slide presentation with animations and transitions.</p> <p>Assign a topic or allow learners to choose their own. Encourage creativity and exploration, reminding learners to consider the flow and engagement of their presentations</p>	<p>Pictures and videos.</p> <p>Computers with presentation software installed (e.g., Microsoft PowerPoint)</p>	<p>Demonstrating how to animate slides in a presentation</p>



<p><b>ASSESSMENT</b>          Discuss how the effective use of animations and transitions can impact the audience's understanding and retention of information in a presentation.</p> <p><b>Reflection (10mins)</b>          Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Discuss how the effective use of animations and transitions can impact the audience's understanding and retention of information in a presentation</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Presentation
<b>Content Standard:</b> B9.2.2.1 Demonstrate How to use Microsoft PowerPoint (Multimedia)	<b>Indicator:</b> B9.2.2.1.3 Demonstrate how to add Multimedia (audios, videos etc.), tables and charts	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can use the Insert Ribbon tab to add multimedia elements (audio, video, etc.) in presentations.		<b>Core Competencies:</b> CC8.2: CP6.1
<b>New words</b>	Multimedia, elements, tables, charts	
<b>Reference:</b> Computing Curriculum Pg. 46		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin with a brief discussion about the importance of visuals and multimedia in presentations.</p> <p>Show a slide with only text and then another with a mix of text, images, and possibly audio.</p> <p>Ask learners to discuss in pairs or small groups how the second slide is more engaging.</p> <p>Ask questions like:</p> <ul style="list-style-type: none"> <li>• What impact do visuals have on understanding?</li> <li>• How does multimedia enhance presentations?</li> <li>• Share performance indicators and introduce the lesson.</li> </ul> <p><b>Main (35mins)</b></p> <p>Provide an overview of the Insert Ribbon tab in presentation software (e.g., PowerPoint). Explain its purpose in enhancing presentations with multimedia.</p> <p>Live demonstration on how to access the Insert Ribbon tab, emphasizing the different multimedia options available (audio, video, pictures, etc.).</p> <p>Allow learners to follow along on their devices or computers, attempting to insert a picture or clip art onto a blank slide.</p> <p>Discuss the significance of audio and video in presentations, sharing examples of when they might be most effective.</p> <p>Show how to insert audio and video using the Insert Ribbon tab. Explain the importance of file formats and compatibility.</p>	<p>Pictures and videos.</p> <p>Computers with presentation software installed (e.g., Microsoft PowerPoint)</p> <p>Sample multimedia files, tables, and charts for demonstration</p>	<p>Incorporating multimedia elements, tables, and charts.</p>



<p>Provide a short audio or video file for learners to insert into their presentations. Encourage them to adjust settings like volume and playback options.</p> <p><b>ASSESSMENT</b> Explain the process you followed to choose and insert a particular type of chart in your presentation. How does this chart enhance the visual appeal and comprehension of your data?</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Explain the process you followed to choose and insert a particular type of chart in your presentation. How does this chart enhance the visual appeal and comprehension of your data?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Presentation
<b>Content Standard:</b> B9.2.2.1 Demonstrate How to use Microsoft PowerPoint (Multimedia)	<b>Indicator:</b> B9.2.2.1.3 Demonstrate how to add Multimedia (audios, videos etc.), tables and charts	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can demonstrate the use of tables and charts in PowerPoint presentations.		<b>Core Competencies:</b> CC8.2: CP6.1
<b>New words</b>	Multimedia, elements, tables, charts	
<b>Reference:</b> Computing Curriculum Pg. 46		

<b>Activities For Learning &amp; Assessment</b>	<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson by asking learners about their familiarity with PowerPoint presentations.</p> <p>Discuss if they have used tables or charts in presentations before.</p> <p>Share a brief real-life example where tables or charts could enhance a presentation, creating engagement and visual appeal.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Define the purpose of using tables and charts in presentations: to present data visually, enhance understanding, and engage the audience.</p> <p>Discuss the types of information that are better presented through tables (organized data) and charts (visual representation of trends or comparisons).</p> <p>Introduce key terms: data, rows, columns, bar chart, pie chart, etc.</p> <p>Provide a brief demonstration on creating a table in PowerPoint. Show how to input data, format cells, and customize the appearance.</p> <p>Demonstrate the process of inserting different types of charts (bar chart, pie chart) into a presentation. Explain how to input data for charts and customize their appearance.</p> <p>Break the class into small groups and provide each group with a sample data set.</p> <p>Instruct each group to create a PowerPoint slide with either a table or a chart based on the provided data.</p>	<p>Pictures and videos.</p> <p>Computers with presentation software installed (e.g., Microsoft PowerPoint)</p> <p>Sample multimedia files, tables, and charts for demonstration</p>	<p>Exploring and master the use of the Insert Ribbon tab in presentation</p>



<p>Each group presents their slides to the class, explaining the rationale behind their design choices.</p> <p><b>ASSESSMENT</b> Discuss with a partner how you approached organizing data in your table to make it visually appealing and easy to understand.</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Discuss with a partner how you approached organizing data in your table to make it visually appealing and easy to understand</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 9

<b>Week Ending:</b>		<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins			<b>Strand:</b> Productivity Software	
<b>Class:</b> B9		<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Desktop Publishing	
<b>Content Standard:</b> B9.2.3.1. Critique a Desktop Published Document		<b>Indicator:</b> B9.2.3.1.1 Create and present a desktop published document (flyer, advertisement, invitation cards, business cards)		<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can describe the basics of desktop publishing by creating and presenting a four-page document			<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Desktop Publishing, flyer, advertisement, invitation cards, Overflow Text			
<b>Reference:</b> Computing Curriculum Pg. 47				
<b>Activities For Learning &amp; Assessment</b>			<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Engage learners by displaying different types of printed materials, such as flyers, advertisements, or storybooks.</p> <p>Ask them to discuss with a partner what makes these documents visually appealing and effective in conveying information.</p> <p>Encourage them to consider layout, colors, images, and text.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Demonstrate how to use the selected desktop publishing software. Highlight basic tools, text boxes, image insertion, and linking text boxes for overflow text.</p> <p>Discuss key design principles, including balance, contrast, alignment, and proximity.</p> <p>Show examples of effective and ineffective designs, explaining the impact of each principle.</p> <p>Distribute a handout with step-by-step instructions for creating a four-page document.</p> <p>Assign a task where learners can choose to create a flyer, advertisement, or storybook.</p> <p>Encourage creativity and exploration, reminding learners to apply the design principles discussed</p>			<p>Pictures and videos.</p> <p>Computers with desktop publishing software (e.g., Microsoft Publisher)</p>	<p>Describing the basics of desktop publishing by creating and presenting a four-page document</p>



<p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. What are the three main things you can do with desktop publishing software?</li> <li>2. What are two important design principles that help create pleasing layouts?</li> </ol> <p><b>Reflection (10mins)</b></p> <p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Besides print materials, what are three types of digital content you can create with DTP skills?</li> <li>• What is one important tip you learned about using color in desktop publishing?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Desktop Publishing	
<b>Content Standard:</b> B9.2.3.1. Critique a Desktop Published Document		<b>Indicator:</b> B9.2.3.1.2 Describe a desktop published document	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can explore and understand the key elements of desktop published documents, focusing on layout, color usage, mechanics, and content		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Desktop Publishing, flyer, advertisement, invitation cards, Overflow Text		
<b>Reference:</b> Computing Curriculum Pg. 47			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson by displaying a well-designed desktop published document on the screen.</p> <p>Ask learners to observe and discuss with a partner what makes the document visually appealing and effective.</p> <p>Prompt them to identify specific elements such as layout, color usage, and how text and images are positioned.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Provide handouts with guidelines on how to examine a desktop published document, focusing on layout, color usage, mechanics (grammar, spelling), and content accuracy.</p> <p>Discuss each guideline and provide examples to illustrate.</p> <p>Assign each student a partner and instruct them to exchange their documents.</p> <p>Ask learners to examine the received document based on the provided guidelines.</p> <p>Learners will individually write feedback for their peer's document, focusing on strengths and areas for improvement.</p> <p>Encourage constructive and specific feedback related to layout, color usage, mechanics, and content accuracy.</p> <p><u>Assessment</u></p> <p>1. Discuss with your partner how the arrangement of text and images in the document you received contributes to the overall visual appeal.</p>		<p>Pictures and videos.</p> <p>Computers with desktop publishing software</p>	<p>Exploring and understand the key elements of desktop published documents, focusing on layout, color usage, mechanics, and content</p>



<p>2. Can you identify specific examples where the layout enhances or detracts from the document's effectiveness?</p> <p>3. Examine the use of color in the document you reviewed. How does the choice of colors contribute to the document's message and overall design?</p> <p>4. Can you suggest alternative color schemes that might improve the document?</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Evaluate the mechanics of the document, including grammar and spelling. Identify instances where improvements could be made for clarity and professionalism. How do these language elements impact the document's overall quality?</li> <li>• Consider the accuracy of the content in the document you received. Are there any inaccuracies or areas where additional information would enhance the document's effectiveness? How does the accuracy of the content impact the document's credibility?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 10

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Desktop Publishing	
<b>Content Standard:</b> B9.2.3.1. Critique a Desktop Published Document		<b>Indicator:</b> B9.2.3.1.3 Evaluate a desktop published document	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can evaluate a desktop published document		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Appropriateness, Mechanics, layout, Design		
<b>Reference:</b> Computing Curriculum Pg. 48			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson by displaying two contrasting desktop published documents on the screen—one that is well-designed and another with clear room for improvement.</p> <p>Ask learners to discuss with a partner what stands out to them in terms of layout, color usage, mechanics, and overall effectiveness.</p> <p>Encourage them to use specific examples.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Provide handouts with specific criteria for evaluating desktop published documents, including the position of text and images, general layout, use of color, mechanics, and appropriateness for the intended purpose.</p> <p>Discuss each criterion, providing examples to illustrate.</p> <p>Choose one document for a guided evaluation as a class.</p> <p>Discuss each criterion collectively, allowing learners to share their observations and insights.</p> <p>Assign each student a different document for evaluation.</p> <p>Provide a handout with evaluation questions based on the criteria. Instruct learners to assess the assigned document independently.</p> <p><b>Assessment</b></p> <p>1. Considering the document you evaluated, discuss with your partner how the position of text and images contributes to the overall flow and</p>		<p>Pictures and videos</p> <p>Computers with desktop publishing software</p> <p>Sample desktop published documents</p>	<p>Evaluating a desktop published document</p>



<p>visual appeal. Can you identify specific examples where adjustments could enhance the document's layout?</p> <ol style="list-style-type: none"> <li>2. Evaluate the use of color in the document. How does the choice of colors align with or detract from the intended purpose? Share your thoughts on whether alternative color schemes could improve the document's impact.</li> <li>3. Examine the mechanics of the document, focusing on elements such as punctuation, spelling, italics, and capitalization. Identify areas where improvements could be made for clarity, professionalism, and readability.</li> <li>4. Reflect on the appropriateness of the document's design for its intended purpose. Were there elements that seemed out of place or did not align with the document's goal? Discuss how a more suitable design could better convey the intended message.</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Evaluate the use of color in the document. How does the choice of colors align with or detract from the intended purpose? Share your thoughts on whether alternative color schemes could improve the document's impact.</li> <li>• Examine the mechanics of the document, focusing on elements such as punctuation, spelling, italics, and capitalization. Identify areas where improvements could be made for clarity, professionalism, and readability.</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Desktop Publishing	
<b>Content Standard:</b> B9.2.3.1. Critique a Desktop Published Document		<b>Indicator:</b> B9.2.3.1.3 Evaluate a desktop published document	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can learn to critically evaluate desktop published documents based on various criteria such as text and image positioning, layout, use of color, mechanics, and appropriateness of design for the intended purpose.		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>			
<b>Reference:</b> Computing Curriculum Pg. 48			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Provide students with a list of specific elements to find within the sample documents, such as effective use of color, clear text positioning, or appropriate design for the purpose.</p> <p>Allow students to explore the documents individually or in small groups to identify the specified elements.</p> <p>Facilitate a brief class discussion on their findings, encouraging them to share what caught their attention.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Evaluate the assigned document using, but not limited to the following criteria: position of text and images, general layout of the document, use of colour, mechanics (punctuation, spelling, italics, capitalization, etc.), and appropriateness of the design for the intended purpose.</p> <p>Discuss the importance of evaluating documents in various contexts, such as school assignments, professional reports, or informational brochures.</p> <p>Introduce the key criteria for evaluation: text and image positioning, layout, use of color, mechanics, and appropriateness of design for the intended purpose.</p> <p>Display a specific document on the board or share it digitally for the class.</p> <p>Discuss and analyze each criterion with the students, asking questions such as:</p> <ul style="list-style-type: none"> <li>• "How is the text positioned in relation to the images?"</li> <li>• "Does the layout make it easy to follow the information?"</li> </ul>		<p>Pictures and videos.</p> <p>Sample desktop published documents (ensure a variety with different layouts, designs, and purposes).</p>	<p>Evaluating desktop published documents based on various criteria such as text and image positioning, layout, use of color, mechanics, and appropriateness of design for the intended purpose</p>



- "How does the use of color contribute to the overall design?"
- "Are there any punctuation, spelling, or capitalization errors?"

Distribute the evaluation criteria checklist to each student or group.

Provide additional documents for evaluation.

Ask students to work individually or in groups to evaluate the assigned document based on the criteria.

Encourage them to discuss their assessments with peers and provide constructive feedback.

**ASSESSMENT**

1. Why is it important to consider the positioning of text and images in a desktop published document?
2. How does the use of color contribute to the overall design and effectiveness of a document?
3. What role do mechanics (punctuation, spelling, etc.) play in the professionalism of a document?
4. Why is it crucial for a document's design to align with its intended purpose?

***Reflection (10mins)***

Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.

Take feedback from learners and summarize the lesson.

**Homework/Project Work/Community Engagement Suggestions**

- Why is it important to consider the positioning of text and images in a desktop published document?
- How does the use of color contribute to the overall design and effectiveness of a document?
- What role do mechanics (punctuation, spelling, etc.) play in the professionalism of a document?
- Why is it crucial for a document's design to align with its intended purpose?

**Cross-Curriculum Links/Cross-Cutting Issues**

None

**Potential Misconceptions/Student Learning Difficulties**

None



## WEEK 11

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Electronic Spreadsheet	
<b>Content Standard:</b> B9.2.4.1. Demonstrate How to Use Spreadsheet (Advanced Operations)		<b>Indicator:</b> B9.2.4.1.1 Perform data filtering, sorting and validation	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can practice data filtering, sorting, and validation techniques using structured tables.		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Fields, Columns, Records, Rows, Tables (Structured/Unstructured)		
<b>Reference:</b> Computing Curriculum Pg. 48			
<b>Activities For Learning &amp; Assessment</b>			
<b>Starter (5mins)</b>		<b>Resources</b>	<b>Progression</b>
<p>Begin the lesson by displaying a simple, unorganized dataset on the screen.</p> <p>Ask learners to discuss with a partner what challenges they might face when working with unstructured data.</p> <p>Prompt them to think about the importance of organizing data and how it can enhance data analysis.</p> <p>Share performance indicators and introduce the lesson.</p>		<p>Pictures and videos</p> <p>Computers with spreadsheet software</p>	<p>Practicing data filtering, sorting, and validation techniques using structured tables.</p>
<b>Main (35mins)</b>			
<p>Explain the concept of fields, records, and tables using a sample dataset. Discuss how structured tables are organized and make data analysis more efficient.</p> <p>Show examples of structured and unstructured tables.</p> <p>Discuss the benefits of structured tables, such as easier data manipulation and analysis.</p> <p>Distribute a handout with instructions for constructing a structured data table of class members.</p> <p>Include fields such as Surname, First name, Date of Birth, Sex, Home Town, Region, etc.</p> <p>Encourage learners to work collaboratively and share their tables with peers.</p> <p>Instruct learners to apply validation rules to check for errors in their data tables.</p>			



<p>Provide examples of validation rules, such as ensuring valid dates or restricting text length in a field.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. In constructing the structured data table, discuss with your partner how the organization of fields and records contributes to the overall efficiency of data analysis. Can you identify specific examples where the structure of the table makes information retrieval easier?</li> <li>2. Choose one validation rule you applied to your data table. How did this rule help identify and prevent potential errors in the data? Share with a partner how validation rules contribute to data accuracy and reliability.</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Examine a peer's structured data table and identify an innovative way they organized their information. How did they creatively structure their table, and what benefits does this organization bring to data analysis?</li> <li>• Reflect on the process of applying validation rules to your data table. Discuss with a partner how this step influenced your approach to entering data. What challenges did you encounter, and how did you address them to ensure data accuracy?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Electronic Spreadsheet	
<b>Content Standard:</b> B9.2.4.1. Demonstrate How to Use Spreadsheet (Advanced Operations)		<b>Indicator:</b> B9.2.4.1.1 Perform data filtering, sorting and validation	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can convert data tables to lists in MS Excel, enter data into a list, use validation lists for efficient data entry, and apply sorting and filtering techniques.		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Data List, Validation List, Sorting, Filtering		
<b>Reference:</b> Computing Curriculum Pg. 48			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson by displaying a simple dataset on the screen.</p> <p>Ask learners to discuss with a partner the challenges they might face when working with data that is not organized.</p> <p>Prompt them to consider how sorting and filtering could make the data more manageable.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Demonstrate how to convert a data table to a list in Excel.</p> <p>Discuss the benefits of using lists, such as easier data entry and management.</p> <p>Illustrate the process of entering data into a list. Emphasize the importance of consistency and accuracy in data entry.</p> <p>Demonstrate how to use a validation list in the "Sex" column to provide options in a drop-down during data entry.</p> <p>Discuss how validation lists enhance data accuracy and streamline entry.</p> <p>Distribute a handout with step-by-step instructions for sorting data in alphabetical order and filtering data.</p> <p>Assign a task where learners apply sorting and filtering to the dataset on their own computers.</p>		<p>Pictures and videos</p> <p>Sample datasets for demonstration</p>	<p>Converting data tables to lists in MS Excel, enter data into a list, use validation lists for efficient data entry, and apply sorting and filtering techniques.</p>



<p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. How can converting a data table to a list in Excel improve data management?</li> <li>2. What are two ways to enter data into a list in Excel efficiently?</li> <li>3. Describe how a validation list can help ensure accurate data entry in a specific cell or range.</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Explain the difference between sorting and filtering data in a list and when you might use each technique.</li> <li>• What is one helpful tip for formatting a list in Excel to make it more user-friendly?</li> <li>• If you have a list of names in Excel, how could you quickly calculate the total number of names starting with the letter "A"?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



## WEEK 12

<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Electronic Spreadsheet	
<b>Content Standard:</b> B9.2.4.1. Demonstrate How to Use Spreadsheet (Advanced Operations)		<b>Indicator:</b> B9.2.4.1.2 Demonstrate how to use styles, themes, templates and macros	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can explore and apply advanced features in MS Excel, including the use of styles, themes, templates, and macros		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Styles, Themes, Templates, Macros		
<b>Reference:</b> Computing Curriculum Pg. 49			
<b>Activities For Learning &amp; Assessment</b>			
<b>Starter (5mins)</b>		<b>Resources</b>	<b>Progression</b>
<p>Begin the lesson by displaying two versions of the same spreadsheet—one with basic formatting and another with advanced styles, themes, and templates.</p> <p>Ask learners to discuss with a partner the differences they observe and how enhanced formatting might impact the usability and visual appeal of a document.</p> <p>Share performance indicators and introduce the lesson.</p>		<p>Pictures and videos</p> <p>Computers with MS Excel installed</p>	<p>Exploring and apply advanced features in MS Excel, including the use of styles, themes, templates, and macros</p>
<b>Main (35mins)</b>			
<p>Discuss the key differences between templates and macros.</p> <p>Emphasize that templates provide preformatted structures, while macros automate repetitive tasks.</p> <p>Demonstrate how to create new spreadsheet documents from predefined templates in MS Excel.</p> <p>Discuss the advantages of using templates for efficiency and consistency.</p> <p>Distribute a handout with step-by-step instructions for applying styles and themes to sample worksheets.</p> <p>Assign a task where learners apply styles and themes to enhance the visual appeal of provided worksheets.</p>			
<b>Assessment</b>			
<p>1. How can applying styles to your Excel data benefit readability and organization?</p>			



<p>2. Describe two scenarios where using a pre-designed theme could add value to your spreadsheet.</p> <p>3. Explain the difference between accessing a template and creating your own custom template in Excel.</p> <p><b>Reflection (10mins)</b>          Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• When might recording a macro be a useful way to automate tasks in your spreadsheet?</li> <li>• What is one cautionary step you should take when using macros obtained from an external source?</li> <li>• Which advanced feature, aside from macros, could help you analyze trends and patterns within a large dataset in Excel?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Electronic Spreadsheet	
<b>Content Standard:</b> B9.2.4.1. Demonstrate How to Use Spreadsheet (Advanced Operations)		<b>Indicator:</b> B9.2.4.1.2 Demonstrate how to use styles, themes, templates and macros	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can explore the basics of using macros to automate repetitive tasks.		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Styles, Themes, Templates, Macros		
<b>Reference:</b> Computing Curriculum Pg. 49			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson by displaying a well-formatted dataset on the screen.</p> <p>Ask learners to discuss with a partner how the use of styles and themes contributes to the visual appeal and readability of the data.</p> <p>Prompt them to identify specific formatting elements that stand out.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Provide a sample dataset and handouts with project instructions.</p> <p>Demonstrate how to apply styles and themes to the dataset, emphasizing the choices made in font styles, colors, and cell formatting.</p> <p>Assign the formatting project to learners, allowing them to choose a dataset or providing a specific dataset for consistency.</p> <p>Encourage creativity and exploration while applying styles and themes to enhance the dataset.</p> <p>Provide a brief overview and demonstration of macros. Introduce basic concepts, such as recording and playing back actions.</p> <p>Encourage learners to explore macros on their own using the provided sample dataset.</p> <p>Guide them through basic macro recording and playback to automate repetitive tasks.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What happens when you record a macro in Excel?</li> <li>2. Describe two tasks you could automate using a macro that would save you time in your daily spreadsheet work.</li> </ol>		Pictures and videos	Exploring the basics of using macros to automate repetitive tasks.



<p>3. Explain the difference between running a macro from the "Macros" window and using a shortcut key you assigned.</p> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Where might you find the code behind a macro stored in Excel?</li> <li>• Why is it important to be cautious when using macros obtained from sources outside your control?</li> <li>• Imagine you need to automatically format every third row in your dataset with a specific color. Would a macro be the best approach for this task? Why or why not?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>		<b>DAY:</b>	<b>Subject:</b> Computing
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>		<b>Sub Strand:</b> Introduction To Electronic Spreadsheet
<b>Content Standard:</b> B9.2.4.1. Demonstrate How to Use Spreadsheet (Advanced Operations)		<b>Indicator:</b> B9.2.4.1.3 Demonstrate the use of data tables, pivot tables, charts and pivot charts	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can learn the basics of using pivot tables and charts to analyze and visualize data effectively.		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Rows, Columns, Values, Summary, Pivot chart		
<b>Reference:</b> Computing Curriculum Pg. 49			
<b>Activities For Learning &amp; Assessment</b>			<b>Resources</b>
<b>Starter (5mins)</b>  Begin the lesson with an interactive activity to introduce the concept of data analysis.  Activity: "Data Sorting Challenge"  Provide learners with a small dataset related to a familiar topic (e.g., student grades, sports statistics, etc.).  Ask learners to manually sort and organize the data to find specific information (e.g., highest grade, most goals scored, etc.).  Discuss the challenges and time-consuming aspects of manual data analysis.  Share performance indicators and introduce the lesson.			Pictures and videos  Computers with MS Excel installed
<b>Main (35mins)</b>  Define what a pivot table is and explain its purpose in data analysis.  Demonstrate how to create a simple pivot table using a sample dataset.  Discuss the different components of a pivot table (rows, columns, values) and their significance in summarizing data.  Provide learners with a sample dataset relevant to their interests or curriculum.  Guide learners through the process of creating a pivot table on their own.  Encourage them to experiment with different fields and settings to observe how the pivot table changes.			Learning the basics of using pivot tables and charts to analyze and visualize data effectively.



<p>Explain the purpose of pivot charts and how they complement pivot tables in data visualization.</p> <p>Demonstrate how to create a pivot chart from a pivot table. Discuss the types of charts available (bar charts, pie charts, etc.) and their applications.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. Compared to simply looking at raw data, how does using a pivot table help you analyze trends and patterns in your data more effectively?</li> <li>2. Explain the main difference between dragging a field to the "Rows" area and the "Values" area of a pivot table. What information does each position provide?</li> <li>3. Imagine you have data on student exam scores and want to understand how scores differ based on subject and gender. How would you set up your pivot table and chart to analyze this information?</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• Suppose you want to focus on students who scored above a certain threshold in your pivot table. How can you use the filtering feature to achieve this?</li> <li>• In addition to scores, your data also includes teacher names. How could you use slicers in your pivot table to compare score distributions across different teachers?</li> <li>• When might using conditional formatting on your raw data be a preferred alternative to creating a pivot table and chart for visualizing data trends? Explain the advantages and limitations of this approach.</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		



<b>Week Ending:</b>	<b>DAY:</b>	<b>Subject:</b> Computing	
<b>Duration:</b> 60mins		<b>Strand:</b> Productivity Software	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Introduction To Electronic Spreadsheet	
<b>Content Standard:</b> B9.2.4.1. Demonstrate How to Use Spreadsheet (Advanced Operations)		<b>Indicator:</b> B9.2.4.1.3 Demonstrate the use of data tables, pivot tables, charts and pivot charts	<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can insert a pivot chart to display gender distribution and understand how to use the sort and filter features in a pivot table.		<b>Core Competencies:</b> CC8.2: CP6.1	
<b>New words</b>	Sort, Filter, Data analysis, Visualization, Insights		
<b>Reference:</b> Computing Curriculum Pg. 49			
<b>Activities For Learning &amp; Assessment</b>		<b>Resources</b>	<b>Progression</b>
<p><b>Starter (5mins)</b></p> <p>Begin the lesson with an engaging activity to introduce the concept of data sorting and filtering.</p> <p>Activity: "Class Survey Analysis"</p> <p>Ask learners to think about a hypothetical class survey where learners were asked about their favorite subjects.</p> <p>Provide a small dataset with columns like "Student Name," "Favorite Subject," and "Gender."</p> <p>Instruct learners to manually organize and sort the data to find insights like the most popular subject among males and females.</p> <p>Discuss the challenges and potential errors in manual sorting.</p> <p>Share performance indicators and introduce the lesson.</p> <p><b>Main (35mins)</b></p> <p>Review the basics of pivot tables from the previous lesson. Provide a dataset containing student names and genders.</p> <p>Demonstrate how to create a pivot table to summarize the number of males and females in the class.</p> <p>Show learners how to insert a pivot chart based on this pivot table to visually represent gender distribution.</p> <p>Distribute a dataset with additional information, including subjects or other relevant data.</p> <p>Guide learners in creating a pivot table from this dataset.</p>		<p>Pictures and videos</p> <p>Computers with MS Excel installed</p>	<p>Inserting a pivot chart to display gender distribution and understand how to use the sort and filter features in a pivot table.</p>



<p>Demonstrate how to use the sort and filter features to organize and analyze the data effectively.</p> <p>Discuss the importance of sorting and filtering in gaining insights from large datasets.</p> <p>Divide the class into small groups and provide each group with a different dataset.</p> <p>Instruct each group to perform specific sorting and filtering tasks using pivot tables.</p> <p>Each group will present their findings, highlighting the benefits of using these features.</p> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>1. How can creating a pivot table help you visualize the distribution of genders in your data compared to simply looking at the raw data itself?</li> <li>2. Explain the difference between dragging the "Gender" field to the "Rows" area and the "Values" area of the pivot table. What information does each position provide?</li> <li>3. Which chart type, bar chart or pie chart, would be more appropriate for displaying the gender distribution in your data and why?</li> </ol> <p><b>Reflection (10mins)</b> Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>		
<p><b>Homework/Project Work/Community Engagement Suggestions</b></p>		
<ul style="list-style-type: none"> <li>• If you wanted to see only the data for females in your pivot chart, how would you use the filtering feature?</li> <li>• Imagine you had additional columns with age and salary information in your data. How could you further analyze the gender distribution within different age groups or salary ranges using the pivot table and chart together?</li> <li>• In some cases, using conditional formatting instead of a pivot chart might be sufficient for highlighting gender distribution. When would this be the case, and what are the advantages and limitations of this approach compared to using a pivot table?</li> </ul>		
<p><b>Cross-Curriculum Links/Cross-Cutting Issues</b></p>		
<p>None</p>		
<p><b>Potential Misconceptions/Student Learning Difficulties</b></p>		
<p>None</p>		

