



ATUL VIDYALAYA
Comprehensive Lesson plan

Subject: Computer Applications

Std: VIII

Topic : Computer Networking

Total No. of periods required to complete the topic : 6

Scope of topic :


















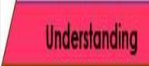


- **What are Networks?**
- **Different types of networks along with advantages & disadvantages**
- **Various topographies that are available for setting up a network**
- **Essential components & devices**
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GLOBAL GOALS





- To create awareness of importance and need for Networking as a means of sharing depleting resources.
- To create a sense of ownership and responsibility towards the judicious use of the available resources.
- To create an awareness about the importance of right type and time of communication and the problems faced due to lack of it.

LEARNING GOALS:

- To know and understand the central idea of need, importance and requirements for inter-connectivity between hardware & software.
- Learn to appreciate the resources provided by the school for expanding our learning horizons.
- To develop and enrich the students technical vocabulary.
- To discuss with them about the computer systems present in our school.
- To develop the students ability to handle software based skills.
- To develop the students skills to apply / convert theory lessons to computer based practical's.

Period	CONTENT	SPECIFIC GOALS	LEARNING OUTCOMES	LEARNING ENGAGEMENTS	TOOLS STRATEGIES RESOURCES	LEARNING PERSPECTIVE				
						MI	HATS	BLOOMS	MINDS	CONNECTI ON
1	Introduction through Defining / explaining the term 'Networking', Need, Importance, advantages, connect it to need for sharing fast depleting resources	To enable students to understand concept & need	The students will describe, relate, locate the various networks present on the campus	Students will identify the various networks they see around them, judge the requirements and relate the use of sharing resources through real life experiences. After discussing the commonalities between Physical network & computer networks, using Thinker keys students will create a chart showing Commonalities and Similarities	*LA 1 [ppt] To show students SA 1 [Q1. Worksheet] To be given before class starts to students	 Word Smart (Linguistic)  People Smart (Interpersonal)  Nature Smart (Naturalist)	 Facts  Cautions		 	TEXT TO WORLD – need for networking & sharing fast depleting resources is essential aspect of day to day life
2	Formation of a network, types based on area [LAN, WAN, MAN]	To develop knowledge of various types & criteria for formation	The students will identify, create, label networks based on specified criteria	Students will orally identify various networks they see / hear about in their daily life.	LA 1[PPT] To show students	 Word Smart (Linguistic)	 Facts	 		TEXT TO WORLD – look around & identify available n/w's
3	Networking Architecture [topography] Criteria for selection & future expansions	To enable students to acquire knowledge of actual structures / designs required to form a n/w	The students will be able to identify, examine & develop simple topographies based on given set of requirements	Students will move around the computer room & campus to identify & draw the n/w structures they see around the AV camps Using Making Learning Visual skills , students will study the given picture and identify the types of Networking available in it.	LA 1[PPT] To show students	 Word Smart (Linguistic)  Picture Smart (Spatial/Visual)	 Facts  Process	 		TEXT TO WORLD – look around & identify available n/w's

				Using Making Learning Visual skills , students will go round the school to study the various networking devices and create the route map for flow of data	SA 1 [Q 2 – ROUTE MAP] To show students					
4	Introduce the term 'Topology' Types of N/W's 1. Star 2. Bus 3. Ring	To enable students understand architectural requirements along with each one's advantages, disadvantages	The students will identify, distinguish and analyze the two main topographical types	Using Making Learning Visual skills , Students will look into the ring topography present in computer lab, identify devices & connectors Using the Fish Bone Graphic Organizer , students will evaluate the cause / effect of each of the disadvantages in their note books	LA 1[PPT] To show students LA 2 [VIDEO-STAR] LA 3 [VIDEO – BUS] LA 4 [VIDEO – RING] All videos to show students	 Word Smart (Linguistic)  Picture Smart (Spatial/Visual)	 Process	 Understanding  Applying	 SYNTHESIZING MIND	TEXT TO WORLD – look around & identify available n/w's
5	4. Tree Ethics	To enable students to understand how a tree topography is formed using concepts of above three To create & develop a sense of ownership for available resources & make students realize the need to take care of devices provided by the school	The students will select, compare, choose & create a tree topography & justify their selection The students will suggest measures they would undertake to take care of available resources in the classroom [VPS, computers, N/W devices]	Using Making Learning Visual skills , students will develop a ppt project [Homework] on network systems that can be developed for Atul Vidyalaya by linking it with other sister concerns. They will justify their selection. they will also reason out the short comings of existing structures & develop a futuristic plan Students will develop an action plan for all classes to follow in the form of a Mind Map .	LA 1[PPT] PPT to be created by students Action plan in form of a mind map Students will prepare in groups	 Word Smart (Linguistic)  Picture Smart (Spatial/Visual)  People Smart (Interpersonal)	 Creativity  Benefits	 Remembering  Analyzing  Creating  Applying	 SYNTHESIZING MIND  CREATIVITY MIND  ETHICAL MIND  DISCIPLINED MIND  RESPECTFUL MIND	TEXT TO WORLD – look around & CREATE A NEW n/w TEXT TO SELF – relate how they will take care of what's available to them

6	Recapitulate	To summarize, evaluate students understanding of the topics	The students will apply their knowledge to identify the n/w & topography type	<p>Students will respond to oral questions put forth and then solve a worksheet based on preset criteria.</p> <p>Students will create a Mind Map on types of topologies learnt.</p>	<p>MIND MAP</p> <p>Each students will prepare in their notebooks</p>	 <p>Self Smart (Intrapersonal)</p>	 <p>Facts</p>	 <p>Applying</p>	 <p>CREATIVITY MIND</p>	
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* LA – Learning Aid

*SA-Student’s Aid

BIBLIOGRAPHY:

- I. CORE BOOK AUTHOR : E – WORLD COMPUTERS [ICSE EDITION]
PUBLICATIONS : PEARSON

- II. REFERENCE BOOK/S AUTHOR : LEARNING COMPUTERS FOR STD 8 [ARYA PUBLICATIONS]

- III. WEBSITES : [HTTP://WWW.TEACH-ICT.COM/GCSE_NEW/COMPUTER%20SYSTEMS/NETWORKS](http://www.teach-ict.com/gcse_new/computer%20systems/networks)