

# Telecommunications Basics

– Teacher Notes

*Directions:*

Fill in the blanks.

## 1. Telecommunications

- Is communication (transmission or reception) of voice, data and other signals across a **distance**
- Can occur between an **unlimited** number of people in an unlimited number of locations

## 2. Phone Systems

- Are singular-user or multi-line systems
- Transmit voice, data and other signals through the **telephone** line
- Make it easy to talk with people anywhere in the **world**
- For businesses usually use multi-line systems in order to handle large call volume and a large number of employees

## 3. Voice Mail

- Is an electronic system which stores and transfers voice messages
- Can be accessed from **any** telephone in the world with appropriate **passwords**

## 4. Cellular Phones

- Are **wireless** telephones allowing voice and data to be exchanged using radio frequencies or telephone signals
- Are acquiring more special features
  - **preprogrammed** numbers
  - voice mail and text messaging
  - ability to send and receive email and instant messages
  - internet browsing capabilities

## 5. Fax Machines

- Are specialty telephones which can scan and **transmit** images (photos or documents) electronically through telephone lines
- Aid in communication when transferring **paper copies**

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## 6. Fax Machines

- Allow various types of communication to take place without having to mail documents through a postal service
  - companies can **receive** orders from customers
  - employees can **send** documents to other offices
  - businesses can **relay** important documents to other businesses

## 7. Email

- Enables people to send electronic messages with the **click** of a button
- Delivers messages via the internet in **seconds** rather than days
- Communicates faster than traditional postal delivery
- Has various types of accounts available (can be combined with a personal organization system such as Microsoft® Outlook®, ACT®, etc.)

## 8. Email

- Aids in productivity and efficiency in a business environment by allowing employees to communicate with one another **regardless** of location; also allows clients to communicate with the company during business dealings

## 9. Email

- Allows documents, pictures, video clips and other files to be transported as **attachments** via the internet
- Allows users to store, organize and archive information contained in emails or attachments

## 10. Instant Messaging & Chatting

- Allows two (with instant messaging) or more (with chatting) parties to communicate **instantly** via a central server (i.e., the internet)
- Allows users to track when another user logs on or off

## 11. Instant Messaging & Chatting

- Requires a “**screen name**” or email address
- Is being used more and more in **office** environments to connect employees to one another without having to use the phone or email

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## 12. Text Messaging

- Allows for increased productivity and efficiency when an employee has a quick question or request, such as:
  - **confirming** an appointment or meeting
  - obtaining a phone number
  - receiving an answer from a partner company in another **state** (without having to incur long distance phone charges)

## 13. Intranet

- Is a **private** Local Area Network (LAN) for use by everyone within an organization or company
- Cannot usually be accessed from the **public** internet, although, extranets (extensions to an intranet) can open holes in this protection to allow controlled and monitored access
- Keeps employees informed about new policies, products, benefits and positions available

## 14. Intranet

- Comes in a variety of formats, from simple to complex
  - **internal** email capabilities
  - message boards for employees
  - website portals accessible only to employees including:
    - forms
    - company **news**
    - personnel information such as vacation time remaining and records

## 15. E-Commerce

- Is electronic commerce (business or commercial transactions occurring over the internet)
  - businesses use the **internet** to communicate with customers or clients
- Examples:
  - email for customer service requests
  - web-based **catalogs**
  - selling products online

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## 16. Audio Conferencing

- Is also known as a conference **call**
- Is a meeting between different locations occurring by way of special telephone connections
- Is most successful for **short** discussions and when participants are notified ahead of time
  - should be scheduled like a regular meeting with an agenda
- Allows a short meeting to occur without requiring travel time

## 17. Video Conferencing

- Is a conference call involving two or more sites or meeting areas
- Is the ability to communicate via video and audio with video conferencing equipment and the necessary phone lines or broadband (internet) connections
- Consists of three types:
  - **point-to-point** - involving two sites
  - multipoint - involving three or more sites
  - webcast - **broadcasting** through the internet

## 18. Video Conferencing

- Includes these benefits:
  - is almost like being in the same room
  - enhances understanding and helps participants feel connected to each other through visual communication and interaction among participants
  - supports **collaboration** among traditionally isolated organizations
  - heightens and improves communication and presentation
  - **increases** depth of understanding

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## 19. Teleconferencing

- Is interactive communication between several people at **different** locations
- Is used by large companies on national or global sites
- Allows employees from various long distance sites to participate in the same phone call at the same time
- Includes these benefits:
  - **decreasing** travel costs
  - increasing interaction between sites
  - increasing efficiency

## 20. Telecommuting

- Allows employees to work full- or part-time **outside** the traditional workplace
- Benefits include:
  - balancing work and family
  - improving employee morale and productivity
  - decreasing **overhead** costs

## 21. Telecommuting

- Factors continuing to affect the future include:
  - availability of bandwidth and fast internet connections in a given country
  - social attitudes for **balancing** work control and work freedom
  - perceived values and economics in telecommuting
  - opportunities and need for working collaboratively across large distances and **globally**

## 22. Telecommunications Ethics

- Requires people to not use a computer in the workplace to:
  - harm other people
  - bear false witness
  - steal ideas or tangible items
  - **copy** software not paid for
  - conduct personal communication
- Uses various forms of **telecommunications** to demonstrate consideration and respect

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## 23. Telecommunications Etiquette

- Requires people to:
  - **identify** themselves in all forms of telecommunication
  - send an email rather than call if the message is not time sensitive
  - **silence** cell phone during meetings and other important events
  - return all calls promptly
  - get to the point quickly

## 24. Telecommunications Etiquette

- Requires people do not:
  - **eat** while talking on the phone
  - send faxes of more than **ten** pages without asking permission from the receiver
  - type emails in all caps
  - interrupt a face-to-face conversation to talk on the phone
  - forget to check incoming voice mail or email

## 25. Telecommunications Etiquette

- When answering phones at a place of business requires:
  - providing a professional sounding first impression
  - identifying **yourself**
  - identifying the caller and their needs
    - if the caller does not introduce themselves, simply ask, “may I ask who is calling”

Example Phone Answering Scripts:

“Hi, you have reached Cal’s Kitchen, I’m Amanda. How may I help you?”

“Hello, this is Mark at Pet Palace. How can I direct your call?”

## 26. Telecommunication Scenarios

- Which form of telecommunications would you use?
  - You are a customer service representative at a retail store, and you need to ask your supervisor an important question. The answer is highly **time-sensitive**.
  - A problem has just arisen affecting your sales departments in **Tokyo** and the United States. You need to notify both sales managers immediately, but you do not want to repeat the message.

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## 27. Telecommunication Scenarios

- Which form of telecommunications would you use?
  - An important document needs to be mailed today, but your manager is at another location. It is imperative for your manager to look at the documents and check for errors before they are mailed, but she will not be back in the office today.