

Topic 1: Computer - A Machine

A Computer is a machine made by humans that carries out computations and functions according to inputs/instructions given. Computers provide the opportunity to perform different functions like playing games/music, ticket reservation etc. Children develop an awareness on the art of computing as they learn about the different types of computers like desktop, laptop, etc. and their functions

Learning Outcomes:

Children will be able to:

- ☑ relate that a machine made by humans;
- ☑ infer that a computer is a machine;
- ☑ differentiate between a desktop and a laptop;
- ☑ list objects in their surroundings;
- ☑ classify objects into natural things and man-made things.

| Computer - A Machine | | |
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| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
| <ul style="list-style-type: none"> ➤ Human made and natural objects. ➤ Computer - a machine and its characteristics ➤ Types of computers | <ul style="list-style-type: none"> ➤ Discussing the concept of machine and its characteristics. ➤ Demonstrating how a computer can perform different tasks. ➤ Demonstrating how a machine having many parts work together to perform tasks. ➤ Classifying objects into natural things and objects and those made by humans. ➤ Involving children in group discussions based on the places they have observed computers being operated. | <ul style="list-style-type: none"> ➤ Natural and human made objects ➤ Flash cards depicting objects (man-made & natural) ➤ Animated programs and videos ➤ Videos/pictures of human made machines i.e. Juicer, mixer, ➤ Projector etc. ➤ Visit to the Computer laboratory to identify and observe laptops/Desktops |

Integration: EVS, Languages



Topic 2: Uses of a Computer

Computers have multiple uses and have become an integral part of our daily lives. Computers can be used for various purposes such as- source of information, playing games, listening to music, preparing presentations and documents, storing data etc.

Learning Outcomes:

Children will be able to:

- ☑ identify places where computers are used;
- ☑ list the various uses of computers in daily life.

| Uses of a Computer | | |
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| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
| <p>Uses of computers in daily lives:</p> <ul style="list-style-type: none"> ▷ typing a document. ▷ listening to music and playing games. ▷ using the Internet. ▷ sending e-mails. ▷ chatting with friends | <ul style="list-style-type: none"> ▷ Sharing children's experiences related to computers. ▷ Encouraging children to identify / suggest places to visit where computers are used. ▷ Discussing the use of computers in their daily lives: | <ul style="list-style-type: none"> ▷ Computer/ IWB with presentation software and internet facility ▷ Interactive White Board ▷ Classroom discussion on how to identify the uses of computers. ▷ Audio and video programmes. ▷ Trips to various places from school/home. |

Integration: EVS, Languages

Life Skills: Self-awareness



Topic 3: Parts of a Computer

The main parts of a computer are the monitor, keyboard, mouse and central processing unit (CPU) that function together to perform a task. The keyboard/mouse is used for data input, CPU to process the data and monitor to display the output. Additional devices like printer, scanner, microphone, speaker etc. are used for specific purposes.

Learning Outcomes:

Children will be able to:

- ☑ recognise and identify the main parts of a computer;
- ☑ describe the functions of the main parts of a computer;
- ☑ list additional devices of the computer;
- ☑ illustrate the inter-connectivity of different parts of a computer.

| Parts of a Computer | | |
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| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
| <ul style="list-style-type: none"> ➤ Main parts of a computer-meaning and functions: (CPU keyboard, mouse, and monitor) ➤ Additional devices connected to a computer :(printer, scanner, speaker etc.). | <ul style="list-style-type: none"> ➤ Helping children to identify the main parts of a computer ➤ Demonstrating the functions of the main parts through active class participation. ➤ Explaining the need for additional devices like printer, scanner, speaker etc. ➤ Involving children in role play activities to identify and state the functions of the main parts of the computer. | <ul style="list-style-type: none"> ➤ Computer/ IWB with presentation software and internet facility ➤ Interactive class discussions. ➤ Animated programmes and videos. ➤ Projector. ➤ Flash card on parts of a computer |

Life Skills: Awareness



Topic 4: Using Computers - Do's and Don'ts

A computer operates on electricity hence it entails certain safety precautions that must be undertaken to develop an awareness among children on the Do's and Don'ts while operating computers.

Learning Outcomes:

Children will be able to:

- ☑ maintain correct posture/ distance while using a computer;
- ☑ show ways of taking care of computers;
- ☑ practice safety rules while using a computer;
- ☑ develop habits of sharing computer resources.

Using Computers - Do's and Don'ts

| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
|---|---|--|
| <ul style="list-style-type: none"> ▷ Guidelines while working on the computer: ▷ Do's <ul style="list-style-type: none"> ☛ <i>Keeping it neat and clean</i> ☛ <i>Using it gently.</i> ☛ <i>Maintaining the correct posture</i> ☛ <i>Being sensitive towards others.</i> ☛ <i>Taking turns while sharing the computer</i> ▷ Don'ts <ul style="list-style-type: none"> ☛ <i>Touch connecting cords/wires.</i> ☛ <i>bang the computer or its parts.</i> ☛ <i>Keep the volume high</i> ☛ <i>snatch the mouse/ keyboard from classmates.</i> | <ul style="list-style-type: none"> ▷ Emphasising the need of Do's and Don'ts while working on a computer ▷ Sensitising children towards good practices of taking care of the computer and strictly following the Do's and Don'ts. ▷ Providing Hands-on experience by assigning the responsibility of ensuring proper closure of computers to children (turn by turn). ▷ Active discussion on the Do's and Don'ts. | <ul style="list-style-type: none"> ▷ Computer/ IWB with presentation software and internet facility ▷ Flash cards on Do's and Don'ts. ▷ Interactive class resources ▷ Animated programs and videos ▷ Projector etc. |

Life Skills: General Awareness, Collaborative learning



Topic 5: Computer Mouse

A computer mouse is a pointing device used to input data. There are two buttons namely the left and right buttons and a scroll wheel. A mouse pad must be used for a smooth functioning of a mouse.

Learning Outcomes:

Children will be able to:

- ☑ identify the buttons and the scroll wheel on a mouse;
- ☑ perform appropriate actions using the left/right buttons and scroll wheel;
- ☑ recognise the need for a mouse pad while using a mouse.

| Computer Mouse | | |
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| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
| <ul style="list-style-type: none"> ➤ Mouse buttons ➤ Scroll wheel ➤ Skills to be practiced while using a mouse | <ul style="list-style-type: none"> ➤ Showing children how to identify the left and right buttons along with the scroll wheel on the mouse. ➤ Demonstrating the use of the scroll wheel, left and right click actions on a mouse. ➤ Inculcating the habit to use the mouse pad while using a mouse. ➤ Providing Hands- on experience through group activity of children using the different parts of the computer– mouse buttons, scroll wheel. | <ul style="list-style-type: none"> ➤ Computers/ IWB with presentation software and internet facility ➤ Animated programs and videos, projector etc. ➤ Flash cards |

Skills: Fine motor skills



Topic 6: Computer Keyboard

A computer keyboard is an input device that consists of alphanumeric, numbers and special keys. It is primarily used to enter text.

Learning Outcomes:

Children will be able to:

- ☑ identify and locate alphanumeric and arrow keys on a keyboard;
- ☑ demonstrate the uses of different keys.

| Computer Keyboard | | |
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| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
| <ul style="list-style-type: none">▶ Alphanumeric keys: alphabet (a-z), number (0-9)▶ Arrow keys | <ul style="list-style-type: none">▶ Helping children to identify and locate keys i.e. alphabet (a-z), number (0-9) and arrow keys.▶ Providing hands on experience (individual/in groups of 4/6) through computer games to use keys on a keyboard | <ul style="list-style-type: none">▶ Computer/ IWB with presentation software and internet facility▶ Animated programmes and videos, projector etc.▶ Keyboard |



Topic 7: Storage Devices

A storage device is a hardware that is used to store data and other information either temporarily or permanently.

Learning Outcomes:

Children will be able to:

- ☑ describe data in simple terms;
- ☑ identify storage devices and their usage.

| Storage Devices | | |
|-------------------|--|--|
| Key Concepts | Suggested Transactional Processes | Suggested Learning Resources |
| ▶ Storage devices | <ul style="list-style-type: none">▶ Showing devices for storing data - pen drive, data card etc.▶ Organising activities to identify storage devices through visuals | <ul style="list-style-type: none">▶ Computer/ IWB with presentation software and internet facility.▶ Observation of various storage devices, such as CD, DVD, Pen drive, data card etc. |

