Teaching Material for 1st Standard

Release 2007

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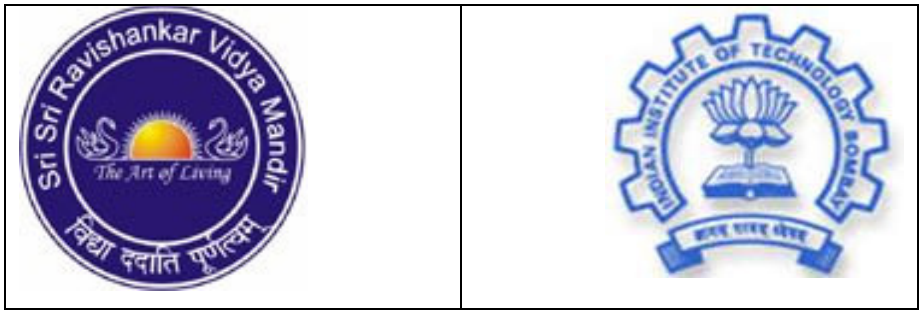

Sri Sri Ravishankar Vidya Mandir (SSRVM)
in collaboration with
Indian Institute of Technology, Bombay (IIT)

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SSRVM Curriculum, Computer Science, 2007 Edition

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Comments and other requests should be addressed to:

The Academic Council,
Sri Sri Ravishankar Vidya Mandir Trust
#1897/A, 26th Main, Southend C Cross Road
9th Block, Jayanagar
Bangalore – 560 069, INDIA
email: info@ssrvm.org

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Preface:

This teaching material is based upon the model computer science syllabus defined by the SSRVM Academic Council, which gives a week-wise schedule for the topics to be taught for computer science at the 1st Std level. This teaching material gives a brief introduction to each topic, some suggested lesson plans for the teacher and worksheets for the students. The syllabus and this teaching material are available freely for download and distribution from www.ssrvm.org, under the **Creative Commons license** as described on the previous page.

Coordinator: Sridhar Iyer (IIT Bombay & SSRVM Academic Council); sri@iitb.ac.in

Lesson Material Contributors:

Meera Hirani (IIT-B)	Neela Srinivasan (IT Professional)
Usha Vishwanathan (IIT-B)	Semeena Kader (IIT-B)
Srinath Perur (IIT-B)	Smita Satam (IIT-B)
Malati Baru (IIT-B)	Kaumudi Sahasrabuddhe (IIT-B)

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Introduction (Extracts from the Model Curriculum Document):

The computer curriculum for each standard is broadly divided into three groups:

1. **Concepts**: Learning computer science concepts that are generally useful in many areas as well as some concepts that are specific to computer usage/functioning.
2. **Usage Skills**: Developing hands-on skill in the use of various hardware/software and programming packages/languages.
3. **Social Aspects:** Understanding ethical and security related issues of computer and Internet usage.

The emphasis is on understanding the concepts behind various computer-based activities, rather than just the usage skills of specific tools. It is hoped that such a concept-oriented approach will equip the children to be self-learners and enable them to cope with the inevitable advent of new tools and technologies of the future.

The design approach of this curriculum is to keep the primary section as elementary as possible, have a slight ramp up during middle school and further ramp up in secondary section to meet the syllabus prescribed for the Board exams.

For each standard, a 32-week schedule is given. Week Nos. 1, 2 and 3 are reserved for revision of the previous Standard. Week Nos. 8, 15, 24 and 31 are for revision of the current Standard. Week Nos. 16 and 32 are reserved for evaluation and assessment. Assuming 10-weeks of vacation, there is still a 10-week buffer for the teacher. This can be used for giving more time to difficult topics, for additional revisions/evaluations and for **project work.**

The teaching material attempts to be vendor-neutral (independent of software platforms). Lesson outlines are to be provided for both Windows XP and Linux Systems (Ubuntu). Hardware specifications and software installation and maintenance guidelines are provided in Annex C, D and E (of the main curriculum document).

A *creative commons* approach is used for generating the lessons and worksheets. All are welcome to participate in this effort. For each topic, detailed subtopics are listed; using which anyone interested can write the lesson outline. The lesson is then reviewed and after approval, may be incorporated into the curriculum. The author retains the rights over his/her work while at the same time allows others to use/modify it freely (without copyright issues).

1ST STANDARD SYLLABUS

What: At the end of 1st Std, a child should know:

- *Concepts*: Regard the computer as a machine with various parts and associated functions (that can be controlled/directed).
- *Usage Skills*: Identify all the parts of a computer; use keyboard (arrow enter/return keys) and mouse (single/double click) as input devices; open applications, such as Music, Paint, or Games and their rudimentary use.
- *Social Aspects*: Maintaining cleanliness; dust-free area; not spilling food etc; orderliness in handling peripherals and sharing resources.

Why: At the end of 1st Std, it is enough for a child to be able to relate to a computer as an interesting entity with various parts and functions (Existence Awareness). More topics are not required because the goal is to simply introduce the computer as a tool for doing other tasks. Since it can be a highly distracting toy, the content is deliberately low-key. However, fewer topics are not desirable because the child should not get left behind in terms of his/her peers or get overwhelmed at a later age.

How: There should be one class per week, roughly as per the following schedule:

Week	Topic
1-1	Demo of few interesting uses and applications. *Such as: listening to music, drawing pictures.*
1-2	Demo of some more applications of interest. *Such as: watching videos, simple games.*
1-3	Worksheets related to uses of a computer.
1-4	Names of only basic parts of a computer.
1-5	Worksheets related to parts of a computer. *Such as: analogy with the human body.*
1-6	General carefulness, including power switch on/off. *Such as: no banging on keyboard, no touching any wires, no direct switch off.*
1-7	Worksheets related to above social aspects.
1-8	**Revision worksheets and lab exercises.** *Objective up to this point: attract them to learn about computers.*
1-9	Notion of a cursor and positioning the mouse pointer. *Such as: Pointing to photographs in a photos folder; G-Compris suite of games.*
1-10	Operating a Mouse: Single and Double click of the left button. *Such as: First attempts to position pointer; open any file/folder; G-Compris game.*
1-11	Operating a Keyboard: Letters and Enter key. *Such as: First attempts to write their names; K-lettres game.*
1-12	Worksheets and lab exercises related to mouse and keyboard.
1-13	Open a game and play it.

	Such as: A simple game that needs minimal navigation; G-Compris maze.
1-14	Social aspects: Further Do's and Don'ts. *Such as: Keep the computer and surroundings clean.*
1-15	**Revision worksheets and lab exercises.** *Objective up to this point: minimal familiarity with mouse/keyboard.*
1-16	**Evaluation and Assessment.**
1-17	Introduction to Desktop. *Such as: icons, background and windows.*
1-18	Opening and closing some files seen on the Desktop. *Such as: double clicking on some music files or videos.*
1-19	Open a Music player and then play a music file. *Such as: Click on the music player icon on Desktop, and then open a file.*
1-20	Elements of a Window: Top bar. *Such as: Minimize, Maximize and Close an open music file.*
1-21	Open a game and play it. *Such as: A slightly more complex game that needs some navigation; G-compris.*
1-22	Open another game and play it. *Such as: A game that needs navigation; G-compris suite of games.*
1-23	Open a Paint application and scribble something. *Such as: opening a file on desktop and just have some fun.*
1-24	**Revision worksheets and lab exercises.** *Objective up to this point: simple actions with mouse.*
1-25	Continue with a Paint application and scribble something. *Such as: opening a file on desktop and just have some fun.*
1-26	Notion of a dialog box. *Such as: While closing a Paint application after scribbling in it.*
1-27	Open an existing Paint application, Edit and Save. *Such as: Further scribbling in a previously saved file.*
1-28	Worksheet on Open, Edit, Save and Close.
1-29	Operating a mouse: Right click. *Such as: Auto-arrange icons on the desktop; Childsplay suite of games.*
1-30	Change Desktop background and screen savers. *Such as: Right click, properties and just play. Children find this interesting.*
1-31	**Revision worksheets and lab exercises.**
1-32	**Evaluation and Assessment.**

Comments: It is important to keep in mind that there may be significant variance in physical and mental development among the children. It is acceptable (and expected) if some children are not able to do all the activities completely. There is time for them to catch up in the 2nd Std.

Title:	**Demo of a few interesting uses and applications of the computer**		
Date :	May 2007	**REF No:**	1.1, 1.2, 1.3
Contributors:	Smita Satam Usha Viswanathan	**Std:**	1
		Reviewers:	Srinath Perur
Brief Description:	This topic gives an overview of some uses of the computer.		
Goal:	To make the students understand some simple uses of computer for work and entertainment. At the end of the lesson, the student understands that computers can be used for various applications such as doing homework, playing games, drawing pictures, etc.		
Pre-requisites:	None		
Duration:	Three classes of 40 minutes.		

Detailed Description:

The computer is a smart and useful machine that can do many things. It can make our work easier and faster, and can also be used for entertainment. Since computers can store a lot of information, and can do tasks very quickly, they are used in banks, hospitals, shops, offices, airports, railway stations, cinemas and many other places. Some of the things we can do with a computer are:

- We can quickly do mathematical operations.
- We can create essays and reports.
- We can draw and colour pictures.
- We can listen to music or watch films.

Lesson Plan:

This lesson is spread over three classes of 40 minutes each, and the teacher is required to divide the material suitably with the emphasis being on letting the children enjoy themselves.

Introduce the computer as being a smart machine that can be used for many things. Here, involve the children in a discussion about the places where they have seen a computer (home, airport, railway station, bank, school, movie theatre) and how it can help people perform various tasks in those places. You can mention other interesting uses that children can identify with – for example, computers are used in the making of cartoon films, they

are used in designing various things such as toys, books, buildings, etc.

- Take the computer to class or vice versa, whichever is applicable.

- Switch on the computer.

- Discuss with children what they have seen a computer being used for at home or outside.

- Tell children about simple uses of computer such as writing an essay, sending mail, creating various documents, watching movie, etc.

- Demonstrate some of simple applications of computer such as writing a document, drawing a picture, playing games,etc.
  For example: To draw a picture, open the TuxPaint Application. Click **Applications=>Graphics=>TuxPaint.**

- Draw a simple picture and colour it. You can take ideas from children about the drawing. But don't stress on how to draw and colour the picture as it will be covered in later classes.

- Take the print out of picture and tell the students how a picture can be drawn quickly and easily.

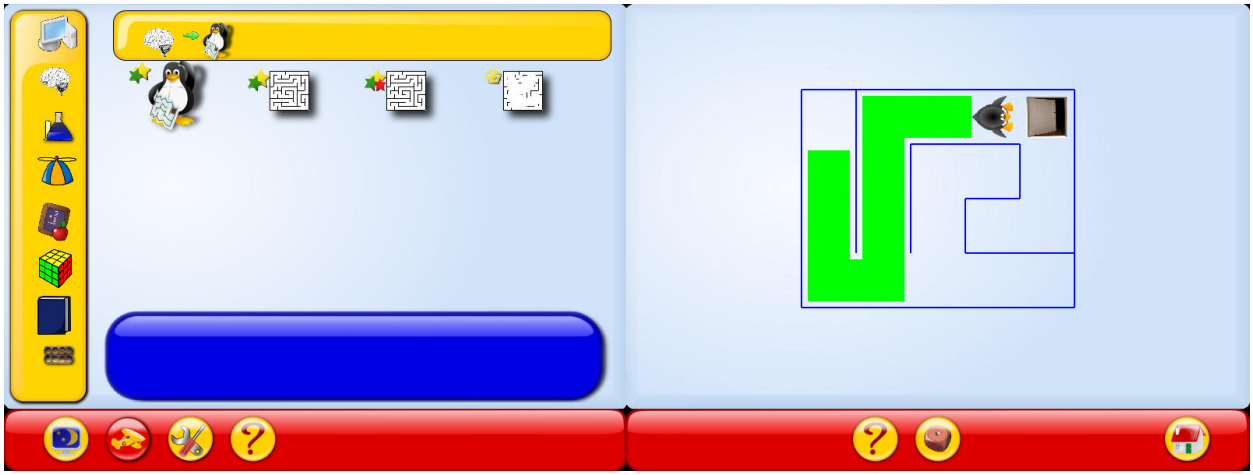
  Also show them how we can listen to music. Double-click on an audio file on the desktop and allow it to open in the default music player.

- Next, make the children do a small arithmetic sum that will take them some effort. Then,

open the calculator program on the computer (**Applications=>Accessories=>Calculator)** and show how the same answer is obtained quickly. Ask children for sums to be solved on the computer.

- To watch a movie double-click on the desktop icon of a movie file and it will open up in MoviePlayer. Allow the children to enjoy the movie for some time.

● Similarly play games on the computer. Several games can be found by following **Applications=>Games**. But a good selection of simple, colourful and easily visible games is available in the **gcompris** suite. Access it by following **Applications=>Games=>Educational suite gcompris**. The following screenshots are of selecting the maze game and playing it.



Finally let them try their hand at playing the games. There need not be any emphasis on using the mouse and keyboard here. They will be introduced in later lessons. Throughout the lesson, the emphasis is that the computer is a smart machine that can be useful and fun. The work sheet exercises that follow try to make sure that the children understand the capabilities of the computer: what it can be used for, and importantly, what it cannot be used for.

Worksheet (Ref No: 1.1, 1.2, 1.3)

1. Can the computer do the work of these devices? Write 'yes' or 'no' in the box.

a. ☐

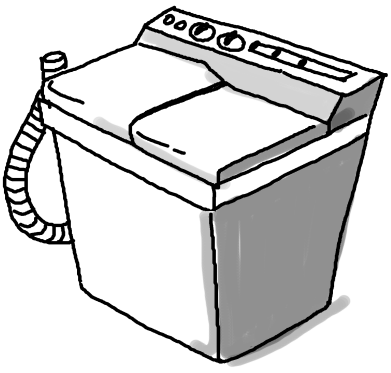
b. ☐

c. ☐

d. ☐

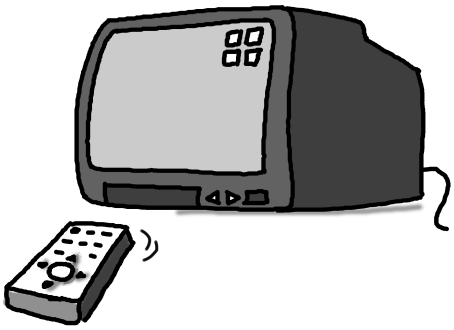
e. ☐

f. ☐



g. ☐

h. ☐



2. How is a computer different from you? Write 'Yes' or 'No' against these questions:

a. Can you move? ☐

Can a computer move? ☐

b. Can you remember things? ☐

Can a computer remember things? ☐

c. Do you forget things? ☐

Does a computer forget things? ☐

d. Can you do sums very quickly? ☐

Can a computer do sums very quickly? ☐

e. Do you get tired? ☐

Does a computer get tired? ☐

f. Do you make mistakes?

Does a computer make mistakes?

g. Can you think?

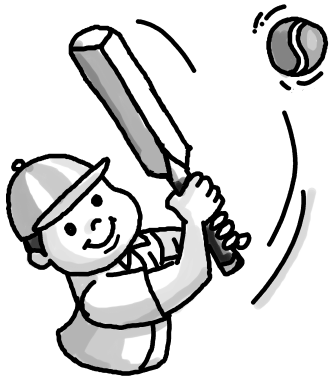
Can a computer think?

3. Tick the activities that a computer can help us in doing. Mark other activities with an X.

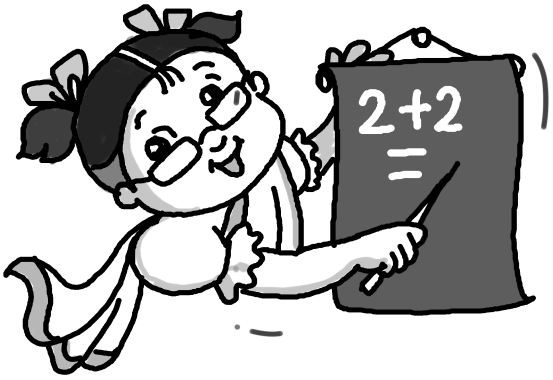
a. ☐

b. ☐

c. ☐

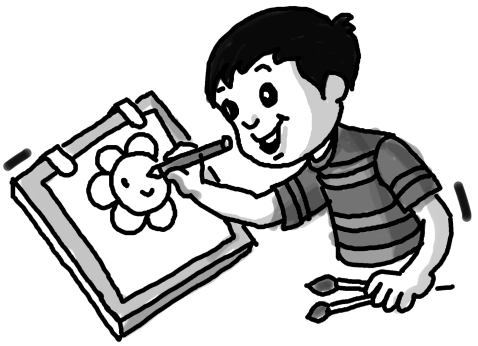


d. ☐



e. ☐

f. ☐



4. Fill in the blanks with the following words:

Tickets	Fee Records	Music	Computers	Letters	Games

a. Computers are used in schools for keeping _____ .

b. _____ help in drawing pictures.

c. We can play _____ with the help of a computer.

d. Computers are used in Railway stations for booking _____.

e. We can write _____ with the help of a computer.

f. We can listen to _____ on a computer.

5. Say whether the following statements are true or false:

a. Computers are used by the Police Department. ☐

b. A computer is a useless machine. ☐

c. Computers are not used in the Airports. ☐

d. Computers store a lot of information. ☐

e. Computers help in drawing cartoons. ☐

f. Computers make our work harder. ☐

6. Mark the pictures with a tick mark where we use computers and with a “X” mark where we do not.

7. Here are some places where computers are used. Find them all!

Hint: Bank, Hospital, School, Airport

S	*F*	*Q*	*E*	*M*	*B*	*M*	*H*
C	G	A	U	Y	I	R	O
H	N	B	A	N	K	T	S
O	M	C	B	Q	P	N	P
O	U	S	J	S	C	U	I
L	C	Z	M	W	Z	L	T
A	X	V	N	R	V	S	A
A	I	R	P	O	R	T	L

Title:	**Parts of a computer**		
Date :	May 2007	**REF No:**	1.4, 1.5
Contributors:	Mira Hirani	**Std:**	1
		Reviewers:	Srinath Perur
Brief Description:	This unit covers different parts of computers: CPU, keyboard, mouse and monitor. It details the uses and functions of each part.		
Goal:	The child should be able to identify parts of a computer and have a basic familiarity with their functions.		
Pre-requisites:	None. But a basic demonstration of a computer's capabilities such as listening to music, playing a game, performing simple arithmetic, and entering text would be useful.		
Duration:	Two sessions of 40 minutes		
Resources:	Parts of a computer: www.kckps.org/courses/intro_comp.html Click on a part of the computer to know more about it: http://www.kids-online.net/learn/clickjr/clickjr.html		

Detailed Description:

What is a computer?
A computer is a device with many functions. It can be used for performing calculations, writing letters, playing games, listening to music, watching films and so on.

Parts of a computer:

The main parts of a computer as seen externally are:
- The CPU
- Monitor
- Keyboard

- Mouse

The following parts may also be present:
- Speakers
- Printer
- Scanner

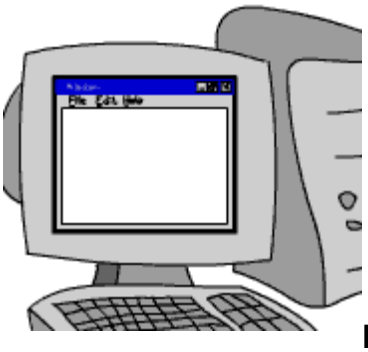
CPU:

The CPU (Central Processing Unit) can be thought of as the brain of the computer. It controls all the other parts of the computer and makes them work together. It is also where the computer stores all its information.

The CPU is also where the On/Off switch for the computer is located. It also has openings to insert storage devices such as CDs and floppy disks.

Monitor:

A monitor is an interface between the computer and the operator. It shows the activities that are being carried out on the computer. It is connected to the CPU, which tells the monitor what to display. The monitor has an On/Off button at the front, usually with a light to indicate whether it is on or off. Turning the monitor off does not turn off the computer. There may also be other buttons to be used for adjusting the image. The glass surface of the monitor is called the *screen,* whereas the *monitor* is the entire box with the screen, case, stand and buttons.



Keyboard:

The keyboard is made of several small buttons called 'keys'. Each key corresponds to a number or a letter or some special function. We can use a keyboard to type in text or instructions to the computer. It is also used for controlling different functions of the computer. For example, arrow keys can sometimes be used as a volume control while listening to music, or they can be used in a game to tell the computer which direction we want to take. Usually what is typed on the keyboard appears on the monitor.

Mouse:

A mouse is a pointing device that controls the movement of a *pointer* on the screen. Its name is derived from its shape, the connecting wire that can be imagined to be a tail, and the fact that it is used by making it scurry along a surface. :o)

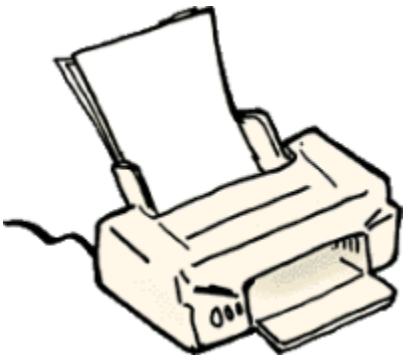
A mouse can have one to three buttons which can be *clicked* to perform actions on the computer. Clicking the mouse once is called a *single click* while clicking it twice in quick succession is called a *double click*. Depending on which side the clicked button of a mouse is, it may be called a *right click* or a *left click*. Many mice also have a wheel between the buttons called a *scroll wheel* which can be turned for scrolling through long documents.

Speakers:

Sounds produced by the computer or songs played on it are heard through the speakers.

Printer:

It is a device attached to the computer where text entered into a document, or a sketch can be printed onto paper.



Lesson Plan:

1. Begin with a brief discussion about computers. Some children may have computers at home. Ask children to share what they know about computers. What kinds of things do they do with computers? If possible, demonstrate some simple and entertaining applications such as playing a song or a game on a computer. Explain that the computer is like a friend who works for you but it will not do anything until you tell it what to do. Explain that a computer is a machine made of several parts that work together just like our human body and the main part of the computer is the CPU which behaves just like our brain. Tell children that they are going to learn the names for the parts of a computer and how the parts go together.

2. If a computer is available, show the various parts and explain their function. Otherwise, draw or distribute a computer diagram (one is available from http://www.eduplace.com/rdg/gen_act/g_start/graphics/comp1.html) and point out each computer part as children label their diagrams.
   - **Monitor**: This shows you what work you and the computer have done.
   - **CPU**: This is the most important part and makes all the parts of the computer work together. It does most of the work and follows your directions to solve

problems or to create new work.

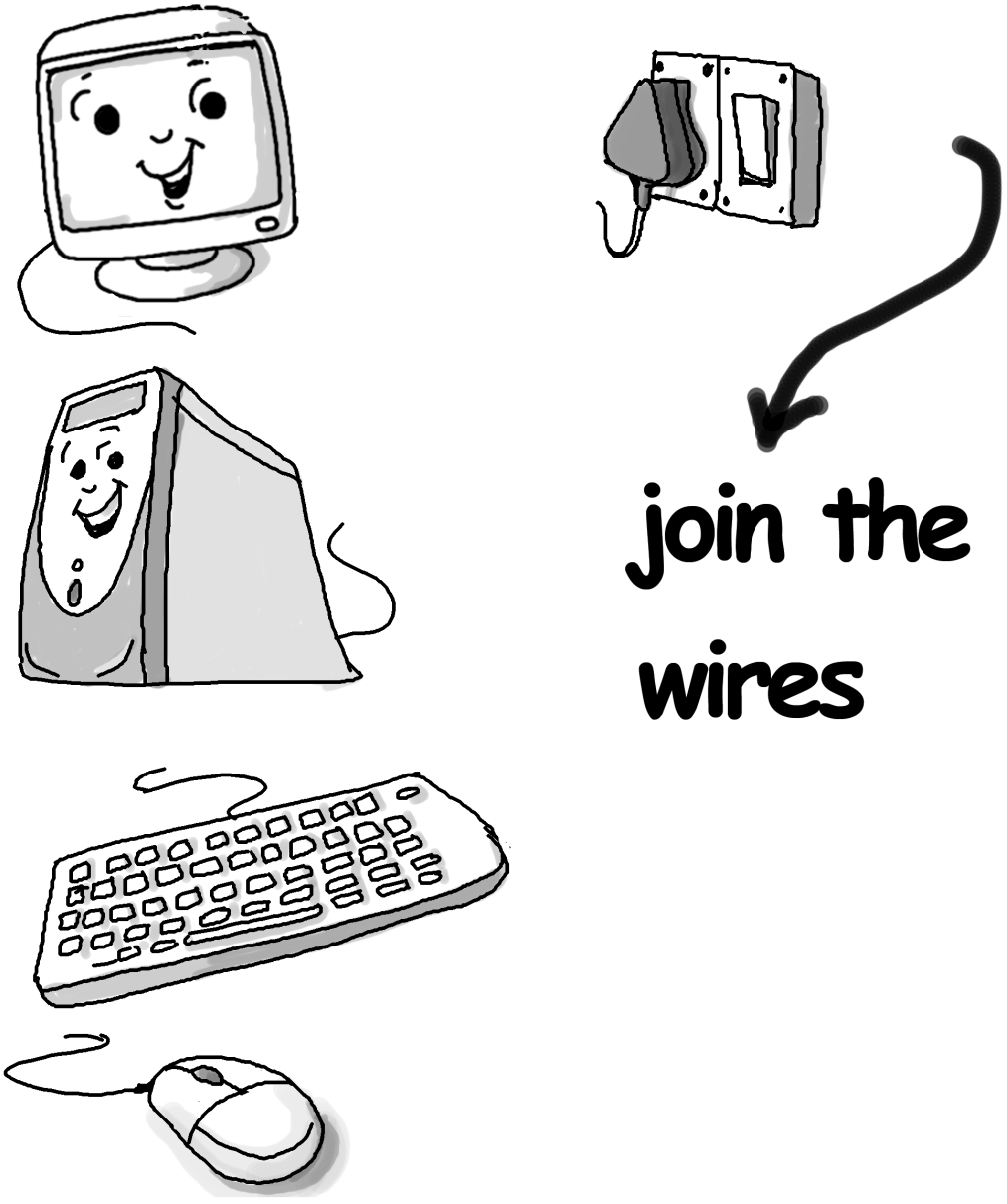
- **Keyboard**: You use the keyboard to tell the computer what to do.
- **Mouse**: The mouse is another tool to tell the computer what to do.
- Other parts such as printer, speakers, CD-ROM, etc., can be covered depending on existing familiarity and the pace at which the children learn.

3. If required, cutouts of a computer can be used to make the children assemble a computer model.
   (Cutouts are available from:
   http://www.eduplace.com/rdg/gen_act/g_start/graphics/comp2.html). Have each child cut out the pieces of the computer and paste them onto a piece of light-coloured construction paper. Children can refer to their diagrams to make sure they assemble the computer correctly. Encourage children to draw a picture around the computer. They may want to draw a picture on the computer screen, as well. Let them do it. Remind them to draw wires to connect the keyboard to the computer and the mouse to the keyboard. This will help them to learn later as to how input and output devices are connected to the computer.

4. You may want to play a game where children act out being a computer. Individuals or groups can take turns being different parts of a computer. One person can be the keyboard and can give the computer a job to do or a problem to solve. Another person can solve the problem and can tell the answer to the person pretending to be the screen. That person can display the answer. To include more students some children could act out as the wires that connect and send the information from the CPU to the Monitor.

Worksheet (Ref No: 1.4, 1.5)

1. Join the wires to the correct place

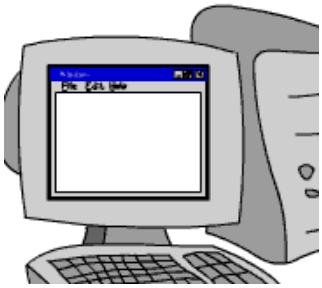


2. **Fill in the blanks from the choices**

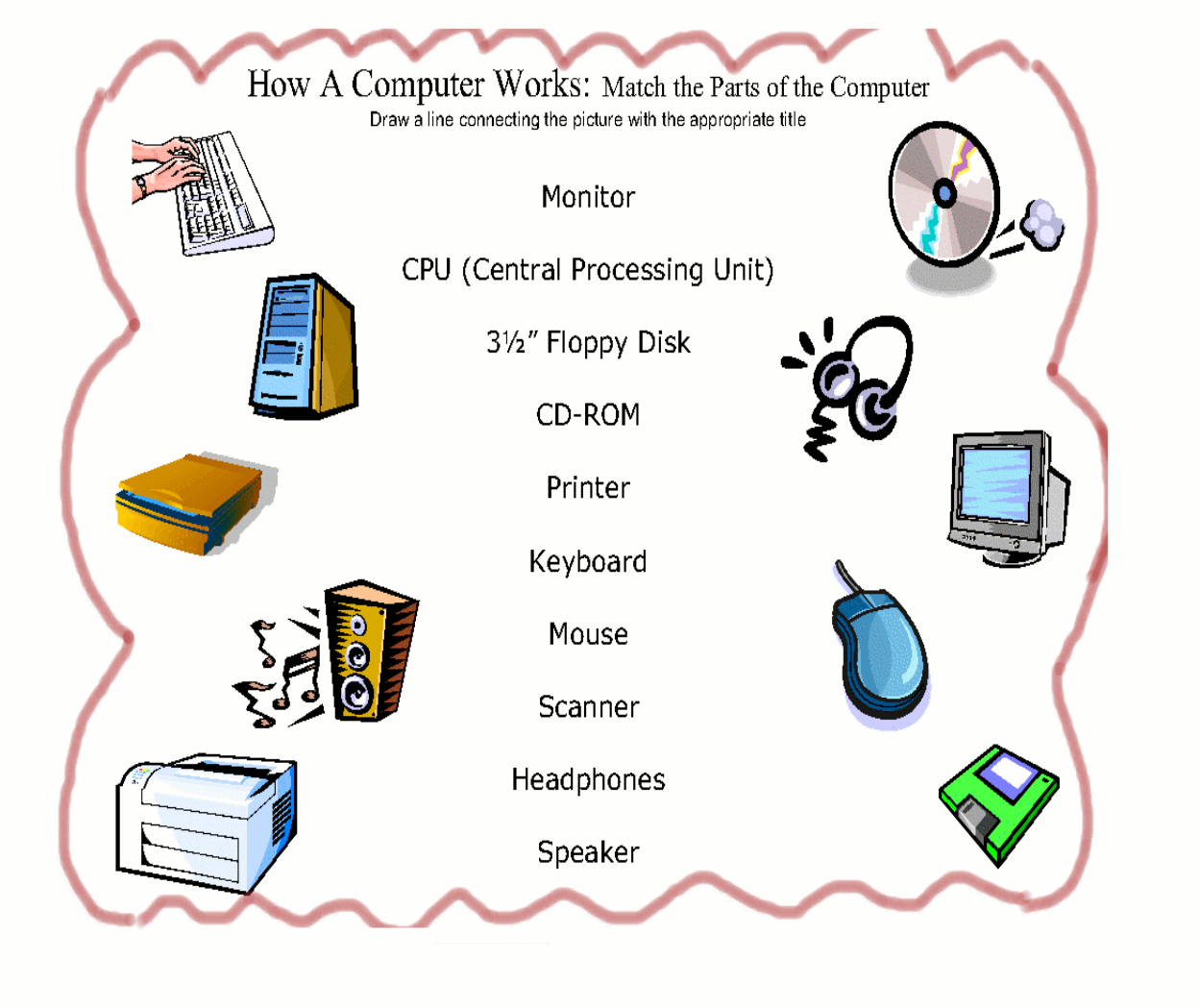
speakers, CPU, keyboard, mouse, monitor

1. The _____ controls the computer.
2. The _____ shows what is being done on the computer.
3. A computer plays music through _____.
4. We can move the pointer on the screen () using the _____.
5. We can enter letters and numbers into the computer using the _____.

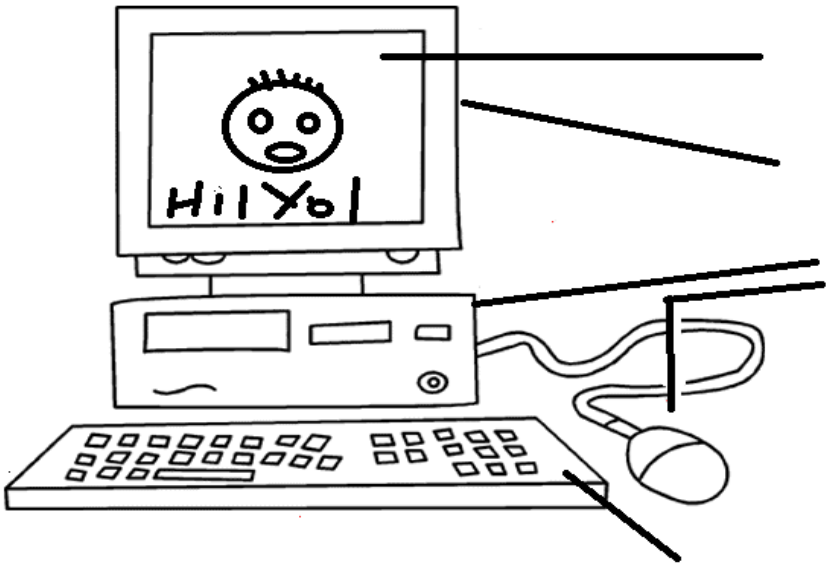
3. Which parts of the computer are similar to you?

Computer parts	Human parts
	
CPU	Voice
	
Monitor	Brain
	
Speakers	Face

4. Match the parts of the computer:



5. Name the parts of the Computer



Title:	**Dos and Don'ts with the computer**		
Date :	May 2007	**REF No:**	1.6, 1.7
Contributors:	Neela Srinivasan	**Std:**	**1**
		Reviewers:	Srinath Perur
Brief Description:	This lesson teaches the students what they should do with the computer, what they should avoid doing and what they absolutely must not do.		
Goal:	The students will learn to use a computer in a responsible and courteous way. The student will learn how to: 1) share a common resource, 2) have correct posture while using the computer, and 3) be safe while using the computer.		
Pre-requisites:	Knowledge of parts of a computer		
Duration:	1 – 2 classes. However, we expect these issues will be revisited as and when the teacher notices that a student's behaviour is not appropriate.		
Resources:	http://www.cybersmartcurriculum.org		

Detailed Description:

In this lesson we will deal with:

- Safety aspect
    - Do not touch power cords.
    - Make sure that the power cords are well insulated. If you see any tear, report to teacher.
    - Do not put any objects in the CD drive, or any outlet meant for external devices.
    - Do not eat or drink near a computer since liquids can cause shorts.
    - Make sure that wires and cords are not easily accessible by students.

- Social aspect
    - Take turns when using keyboard or mouse.
    - Do not eat or drink at the computer.
    - Use headphones whenever possible when playing music, video or games that have sounds. Or, keep the sound low.

- Health aspect
    - Keep your eyes at least a foot from the monitor.
    - Make sure you are not looking up or down at the monitor. Keep your neck as straight as possible.
    - After 10 min. of using the computer, move your eyes and neck. Stretch your hands and fingers if you are using the keyboard or mouse.
    - Keep the loudness of the speakers at a comfortable level.

- When typing on the keyboard or using the mouse, make sure your wrist is in a comfortable position.

- Technical aspect
    - Turn on or off a computer only when asked to.
    - When turning off a computer, make sure all CDs are taken out and no games, music or movie is running.
    - Only use the programs the teacher has approved of.
    - Do not move any icon on the desktop to the trash.

We recommend making a poster with the dos and don'ts and putting it up in a prominent place near the computers.

Lesson Plan:

It is best to teach this lesson as an active, student centered, discussion. You can conduct the discussion such that the points mentioned in the lesson content come from the students themselves. You can add any other pertinent points brought out during the discussion.

When you have the list, write it down on a large poster sheet and pin it up near the computer(s). (You can use some of the illustrations from worksheet exercise number 1.)

Materials:

Poster 1: These are things **not to do**.

Picture of a live unplugged power cord (i.e., power cord connected to wall socket and left dangling)
Picture of a torn power cord
Picture of food and drink near computer
Picture of a child tripping on a wire or power cord

Poster 2: These are things **to do**.

Picture of correct posture when using a computer.

Review: 5 – 10 min.

- Revise parts of a computer with the students, if necessary.

Activity:

- *Safety:* 10 min.
    - Lead the students to the items in the Safety aspect.
        - Ask students "what makes the computer run?" If they answer that it needs to be plugged in, you can proceed to the next step. If not, ask them to think of other things that need power to run, e.g., TVs.
        - Ask if the students know what dangers are associated with power cords and power outlets.
        - Show them the picture of a dangling power cord.
        - Show them the picture of a frayed or torn power cord.

    - Write down the summary on the black board.

- *Social:* 10 min.

- Lead a discussion on appropriate team behaviour – sharing, giving space, taking turns, not crowding, pushing, pulling, etc.
- Write down the summary of discussion on the black board.

- *Health:* 20 min.
  - Show students the proper way to position the neck when viewing the monitor. Or, demonstrate with a student.
  - Show students the proper way to position wrist when using the keyboard and mouse.
  - Show students simple eye and neck rotations and stretching.
  - Talk about how loud sounds can damage our ears.
    - Start an audio or video program on the computer and show them the appropriate sound level on the computer.
    - Show them how to use head phones, if you have them.
  - Pin up Poster 2 as a reminder.

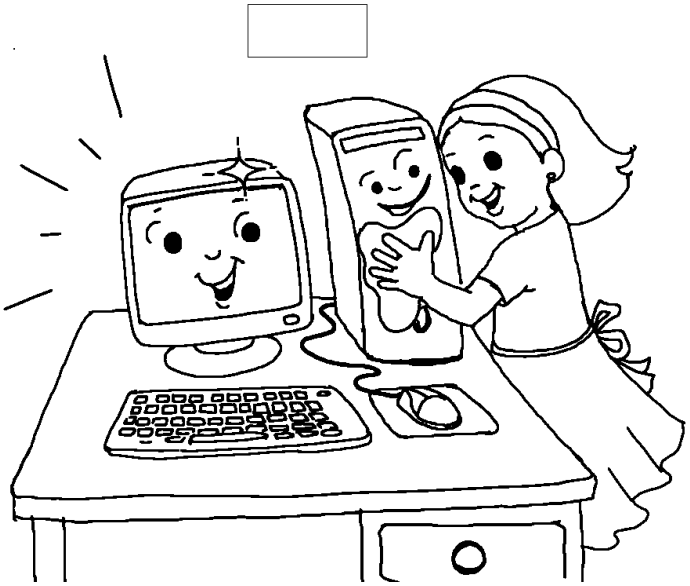
- *Technical:* 10 min.
  - Discuss with them why the icons are arranged as they are – so it is convenient for everyone to use.
  - Ask them what would happen if they moved it – make it disappear into the trash. Ask if they can still use the game or video associated with the icons.
  - Show them how to turn off the computer, and also, how to turn it on. Emphasise that the teacher must be told every time the computer is to be turned on or off.

Evaluation: *Use parts of the work sheet to evaluate if students have understood. Teacher needs to watch students use the computer and correct any errors or misbehaviour.*

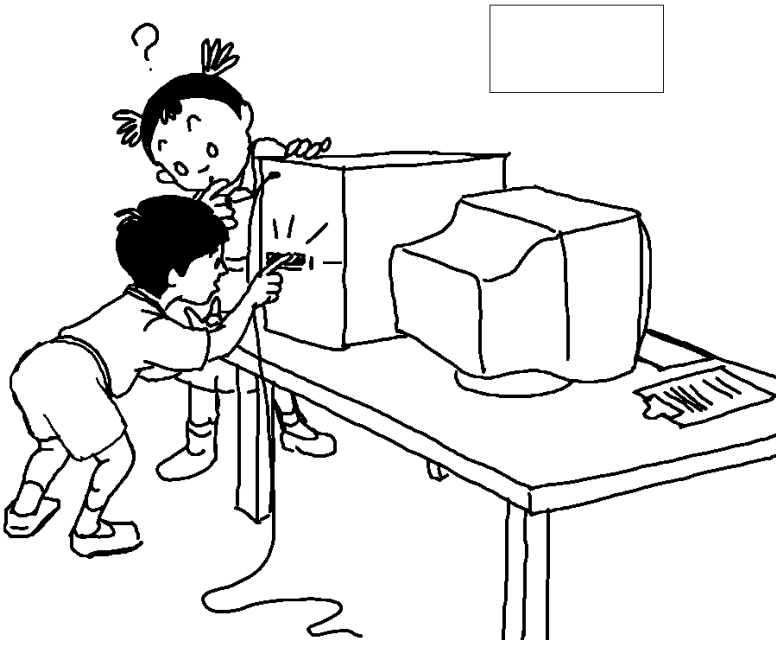
Worksheet (Ref No: 1.6, 1.7)

1. Discuss what you see in the pictures below. If it shows the correct way to use a computer, enter a tick mark in the box. If it shows the wrong way to use a computer, mark it with an X.

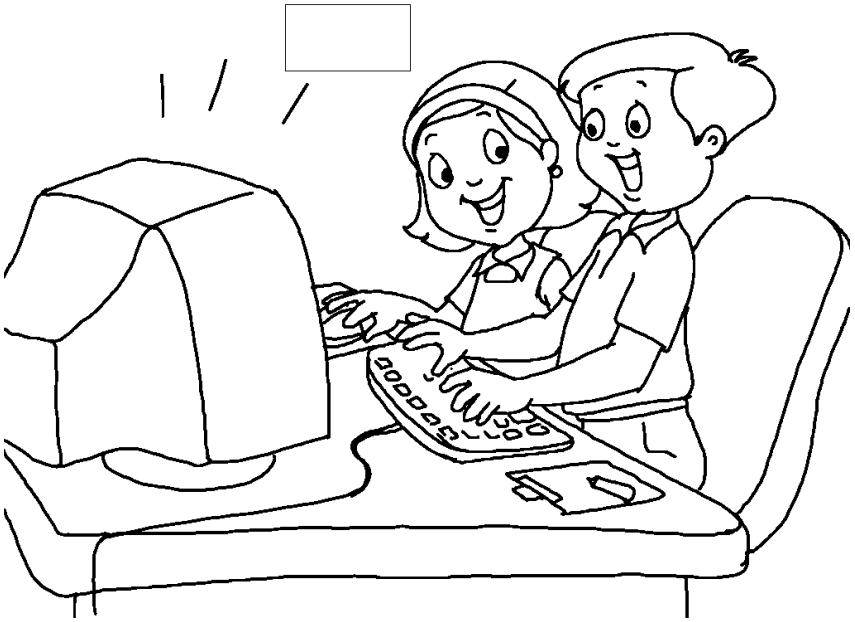
a.The student is cleaning the computer with a cloth. If this activity is necessary to keep the computer clean , enter a tick mark in the box, else mark a X .



b. The students are putting their fingers in the slots meant for cables. Is this right or wrong? If it is Ok to put their fingers in slots put a tick mark in the box, if it is not right , enter a X



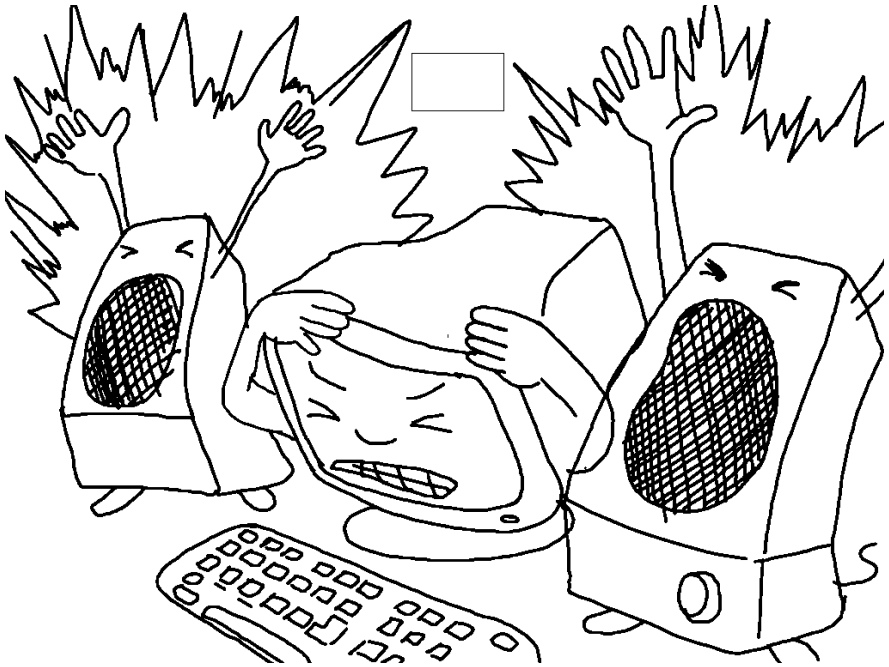
c. The students are sharing the computer. Is sharing a good habit ? If yes , enter a tick mark or enter a X .



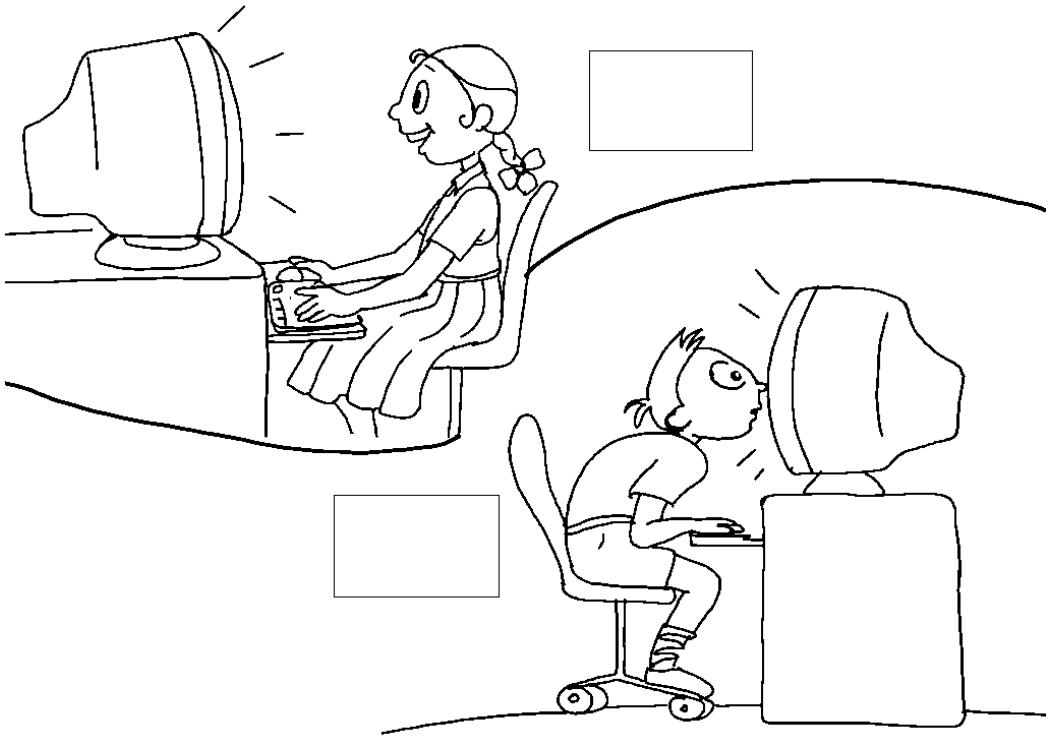
d. The student is banging very hard on the Keyboard. Is this the right way to handle the computer? If yes enter a tick mark, else enter a X.

e. The students are pulling out all the wires from their slots. Is it Ok for them to do so? If yes enter a tick mark else enter a cross X .

f. The music is being played very loudly. Is playing music so loudly correct ? If yes, enter a tick mark, else enter a X .



g. The girl is sitting with a straight back while using the computer , whereas the boy is bending and is very close to the monitor . Put a tick mark on which position is right and a X on which position is wrong.



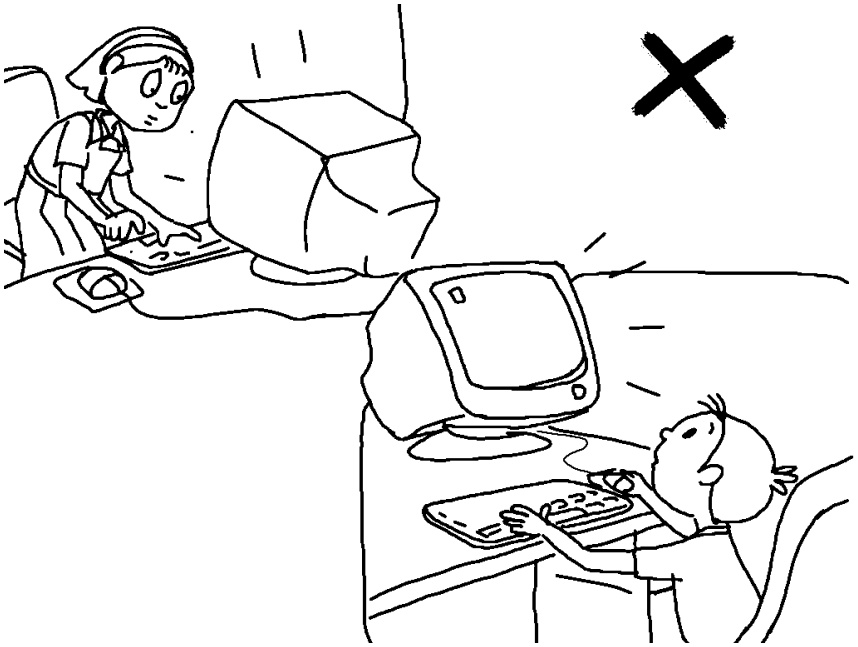
2. Do as an oral exercise with the class:

- You must not eat and drink near a computer (True or False).
- What makes the computer run?
- Pair up the students and ask them to show eye and neck exercises to each other.
- Loud sounds can damage your _____ , so we should keep the volume on the speaker _____.
- Discuss why you should not move around icons. How will this trouble others who have to use the computer?

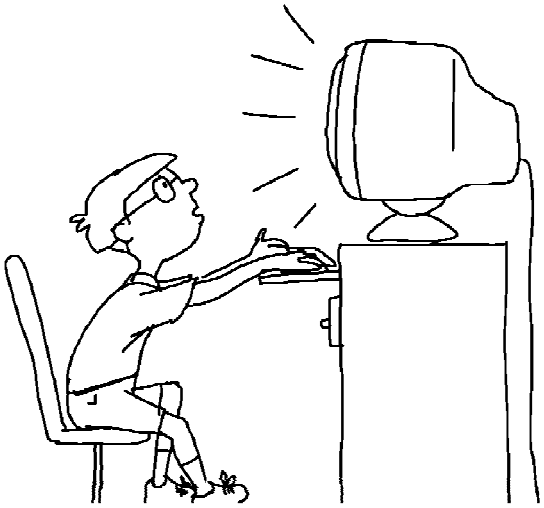
Additional illustrations: The following illustrations show the students doing certain activities .

1. The student is neatly covering the computer so that it does not gather dust**.** This is the way the students should keep their computers clean.

2. The girl's posture shown is wrong . You should not stand and work on the computer.
The boy is also sitting very low and looking up at the monitor. This is also the wrong way,

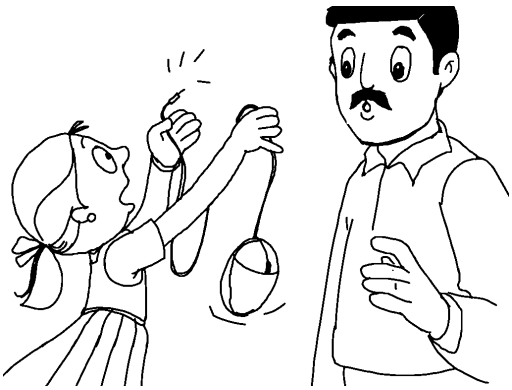


3. The illustration shows a boy who is looking up at the monitor, this is also the wrong posture while using a computer.



4. The boy and girl are sharing a computer. While the girl is handling the mouse, the boy is operating the keyboard . Sharing is always a good habit.

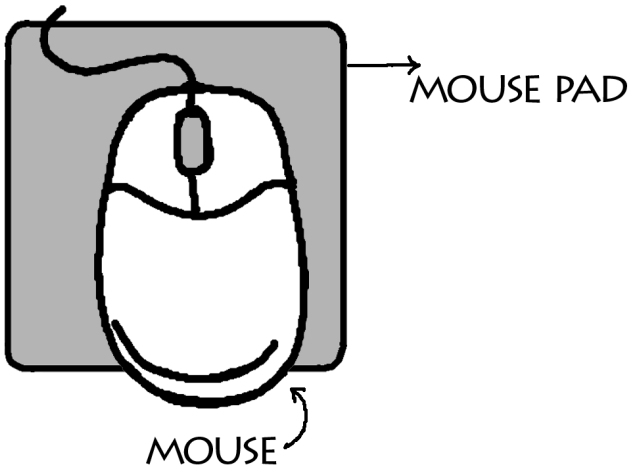
5. The girl has pulled away the mouse from the computer and is showing it to her father !. Do not pull the parts from the computer.



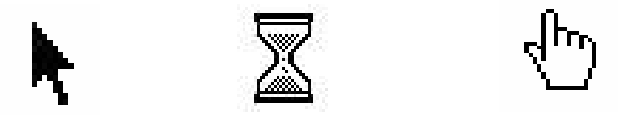
Title:	Mouse operations: pointing and single/double click of left button		
Date :	May 2007	REF No:	1.9, 1.10
Contributors:	Mira Hirani	Std:	1
		Reviewers:	Srinath Perur
Brief Description:	Children are introduced to the mouse pointer, and the operations of single and double click using the left mouse button.		
Goal:	Learning the basic use of a mouse		
Pre-requisites:	It is useful for the children to have some familiarity with the names of parts and uses of a computer.		
Duration:	Two lessons of 40 minutes duration		

Detailed Description:

A mouse is an input device that can be used to control the computer. It is a small object that can roll along a hard, flat surface. Its name is derived from its shape, which looks a bit like a mouse, its connecting wire that one can imagine to be the mouse's tail, and the fact that one must make it scurry along a surface.



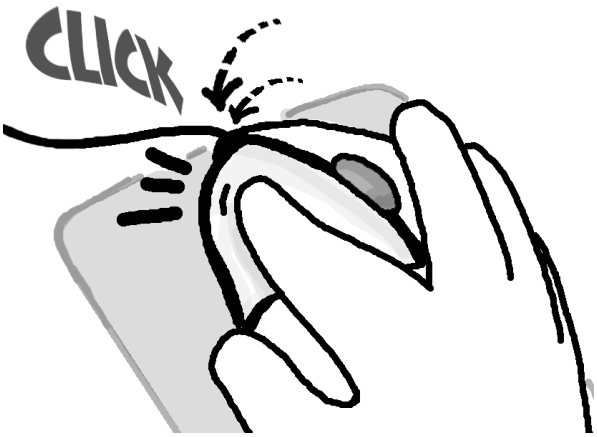
A *pointer* or a cursor indicates the current spot of activity on the screen. The mouse pointer is an indicator on the screen that moves when the mouse moves. A common way in which we communicate with the computer is by moving the mouse pointer to the required spot and clicking to perform an action. Some of the commonly seen mouse pointers are:



The first is most commonly seen while navigating the desktop or other folders. The second is used to indicate that the computer is busy with some action. The third is most frequently

seen in Internet browsers to indicate that clicking the mouse will take the user to a different page.

The user *clicks* the mouse to initiate some action. Depending on which button is pressed, we call it a right click or a left click. The figure below shows a left click. When the mouse button is clicked twice in quick succession we call it a *double click.* For example, on the desktop, double clicking the left mouse button on a file or folder usually opens it. A single right click on the desktop will open a menu with options for the desktop's settings.



The aim in this lesson is to teach the students the concepts of the mouse pointer, and the single and double click using the left button.

It is assumed that teachers do not need more than this cursory (☺) introduction to using the mouse. If required, a more detailed tutorial on using a mouse can be found at: http://www.guidebookgallery.org/tutorials/windows311forworkgroups/mouselesson .

Lesson Plan:

This lesson can easily be made a fun experience. Some options for approaching the lesson:

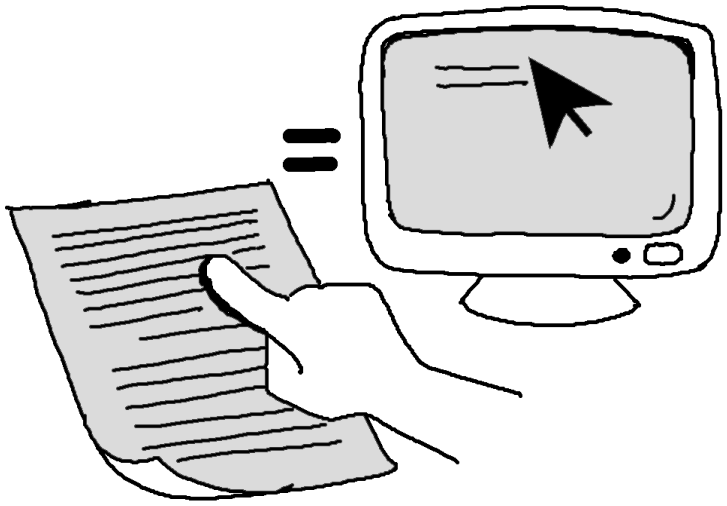
- Hold up computer mouse and elicit discussion on similarities/differences with a real mouse. (Show diagrams or photos of each. If there is a biology laboratory in the school, it might be possible to borrow an actual mouse in a cage to show to the children. They would love it! Pass the computer mouse for students to examine.
- Gauge pre-knowledge by asking if students know what a computer mouse is used for. Demonstrate mouse/cursor correspondence using monitor projection (or with students gathered around monitor).
- Let several students handle the mouse. Other students can provide directions--i.e. "Make the cursor go up, down, left, right, etc.". If time permits, let each student practice moving a mouse on the mouse pad with the computers turned off. Stress that the mouse pad is the mouse's "home," and that he never leaves his house.
- Give crayons and paper at the end of the session for them to draw a real mouse and the computer mouse and write the correct spelling of a mouse.

The concepts of a pointer and of clicking the mouse are very intuitive ones, and children should take to it naturally when actually given a mouse to handle. Of the two periods allotted for this topic, at least one should be devoted to allowing the children to use the mouse for simple tasks. In this regard, the **gcompris** education suite has enjoyable games for introducing mouse usage. The teacher is encouraged to let the children play these games one by one (they are not time-consuming) to build a familiarity with mouse usage. The mouse related games are found in Edubuntu by going through **Applications=>Games=>Educational suite gcompris .** The screen leading to these mouse games is shown below:

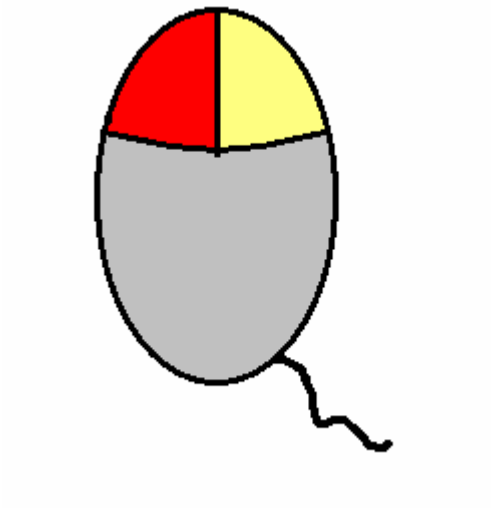
The games include clearing up large blocks on a screen by i) simply moving a cursor, ii) single clicking on each block, and iii) double clicking on each block. As the blocks are cleared, an animal's photograph becomes revealed. The cursor is large and colourful, and the blocks are simple to clear. We highly recommend using these games for this lesson. They can also be used for effective evaluation of learning.

Worksheet (Ref No: 1.9, 1.10)

1. What do we use as a pointer when we are reading a book? Which is the mouse pointer on the screen? Circle both of them!



2. In the mouse shown below, which button will you press for left-click? Which for right-click? Mark with 'L' and 'R'.



Title:	**Operating a keyboard: letters and enter key**		
Date :	**May 2007**	**REF No:**	1.11, 1.12
Contributors:	Mira Hirani	**Std:**	1
		Reviewers:	Srinath Perur
Brief Description:	Children are introduced to the keyboard as a text input device		
Goal:	The children learn how to use a keyboard for entering letters and simple words		
Pre-requisites:	It is useful for the children to have some familiarity with the names of parts and uses of a computer.		
Duration:	Two classes of 40 minutes		

Detailed Description :

The keyboard is made of several small buttons called 'keys'. Each key corresponds to a number or a letter or some special function. We can use a keyboard to type in text or instructions to the computer. It is also used for controlling different functions of the computer. For example, arrow keys can sometimes be used as a volume control while listening to music, or they can be used in a game to tell the computer which direction we want to take. Usually what is typed on the keyboard appears on the monitor.

In this lesson we only deal with the letter keys.

Lesson Plan:

The goal of this lesson is to give the children a basic familiarity with the keyboard as an input device to the computer. The teacher can follow an approach that is suitable for the

class, with the following used for ideas:

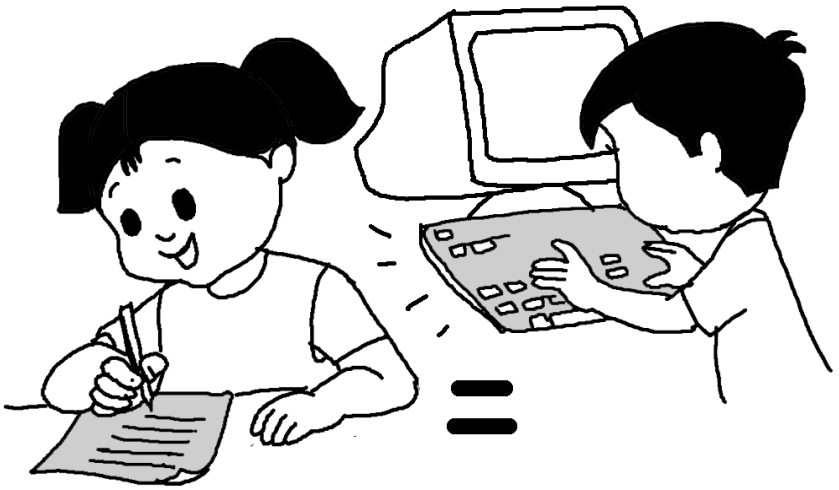
- Begin by reminding the children about the keyboard which was earlier pointed out as one of the parts of the computer.
- Engage students in a discussion about what they know about the keyboard's usage, and whether they have seen anyone use it at home or outside.
- Show a projected image of a keyboard, or a large cutout and ask if they can recognise anything on the keyboard.
- Through such a discussion convey that the keyboard has letters, numbers and other special keys.
- Now give a brief demonstration by writing letters and the kids' names in large font in a word processor. Here mention that you use the Enter key to move to the next line.
- Allow the kids to enter their own names. Then take a printout and distribute slips with the names that they have typed.

It is very important to let the children try out the keyboard for themselves. The **gcompris** suite (**Applications=>Games=>Educational suite gcompris**) has colourful, simple and engaging keyboard familiarisation games that are suitable for Class children.

The screenshot on the left shows the **gcompris** menu from where the keyboard games can be found. The game shown on the right involves letters dropping slowly from above, and these have to be entered on the keyboard before they reach the ground. A similar game is also available for simple words. These can be very exciting if done together by two or three children. Such simple games can also be used for basic evaluation.

Worksheet (Ref No: 1.11, 1.12)

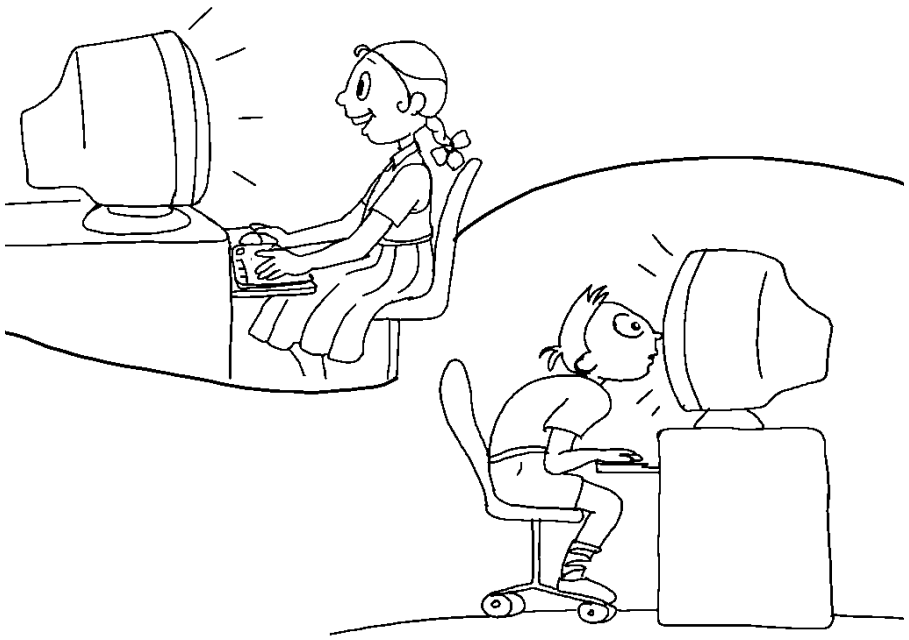
1. Observe these two children writing and fill in the blanks.



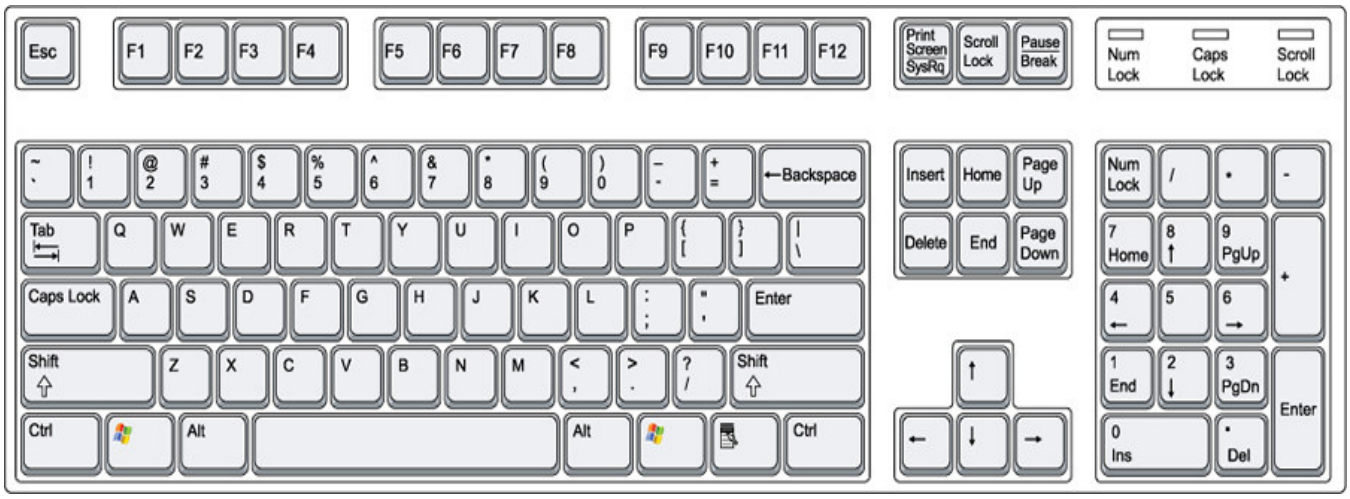
a. We can write letters and alphabets on to a page using a _____.

b. To write letters and alphabets on to a computer we use a _____.

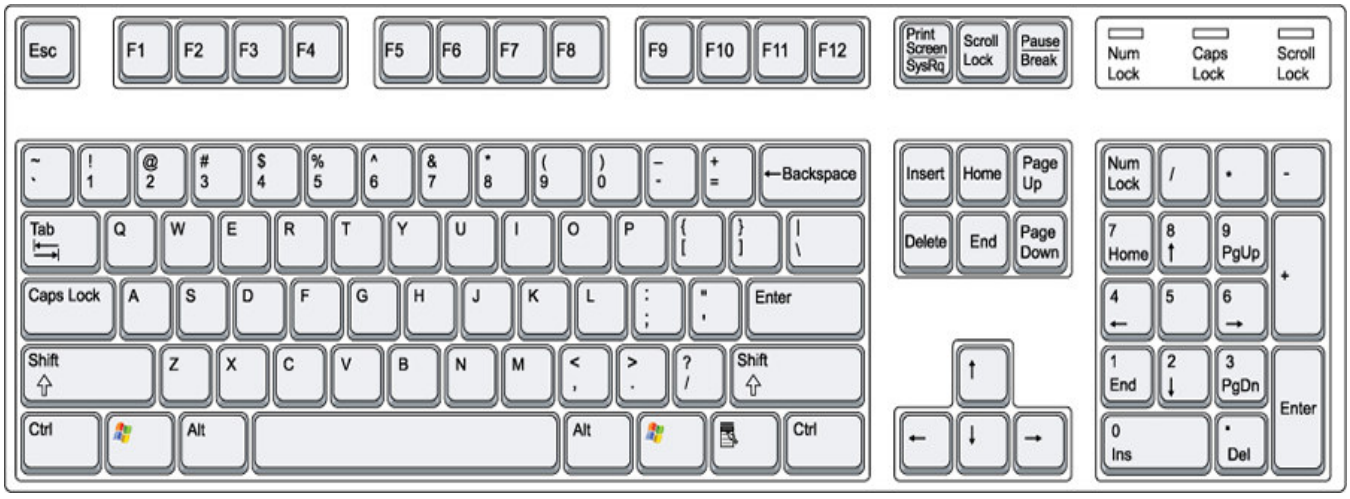
2. Tick the correct way to sit while using the keyboard!



3. a) In the picture of the keyboard below, colour or shade the letters that are in your name.



b) Now, do a longer exercise. Colour or shade the letters in the word **'UNCOPYRIGHTABLE'** □



Title:	**Open a game and play it**		
Date:	May 2007	**REF No:**	1.13
Contributors:	Srinath Perur	**Std:**	1
		Reviewers:	Malati Baru
Brief Description:	The child learns to open a game and play it.		
Goal:	To put to use what has been learnt so far		
Pre-requisites:	Basic familiarity with mouse and keyboard operations		
Duration:	One class of 40 minutes		

Lesson Content:

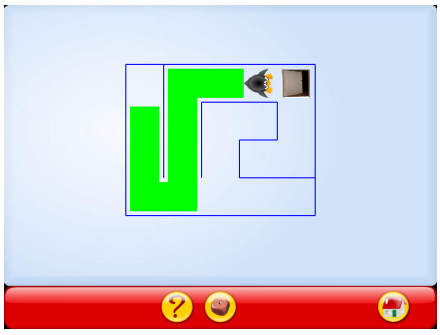
This lesson aims to consolidate what has been learnt so far to perform a small independent task: in this case, playing a game.

Lesson Plan:

The teacher can choose a simple game that is already installed. The game should not require any skills beyond the basic mouse and keyboard operations already learnt.

As an example we show the Maze game that comes with **gcompris** and can be found in **Applications=>Games=>Educational suite gcompris**.

- First, introduce the idea of a maze with a simple example on the board.
- Then, introduce the concept of using arrow keys to navigate.
- The first image below shows the initial screen where the student must start. He or she must then click on one of the icons to start a maze game as shown in the second screen shot.
- Using arrow keys, the student must help the penguin find its way through the door, after which the next level begins.
- Ask students to play only one level so that everyone can get a chance.



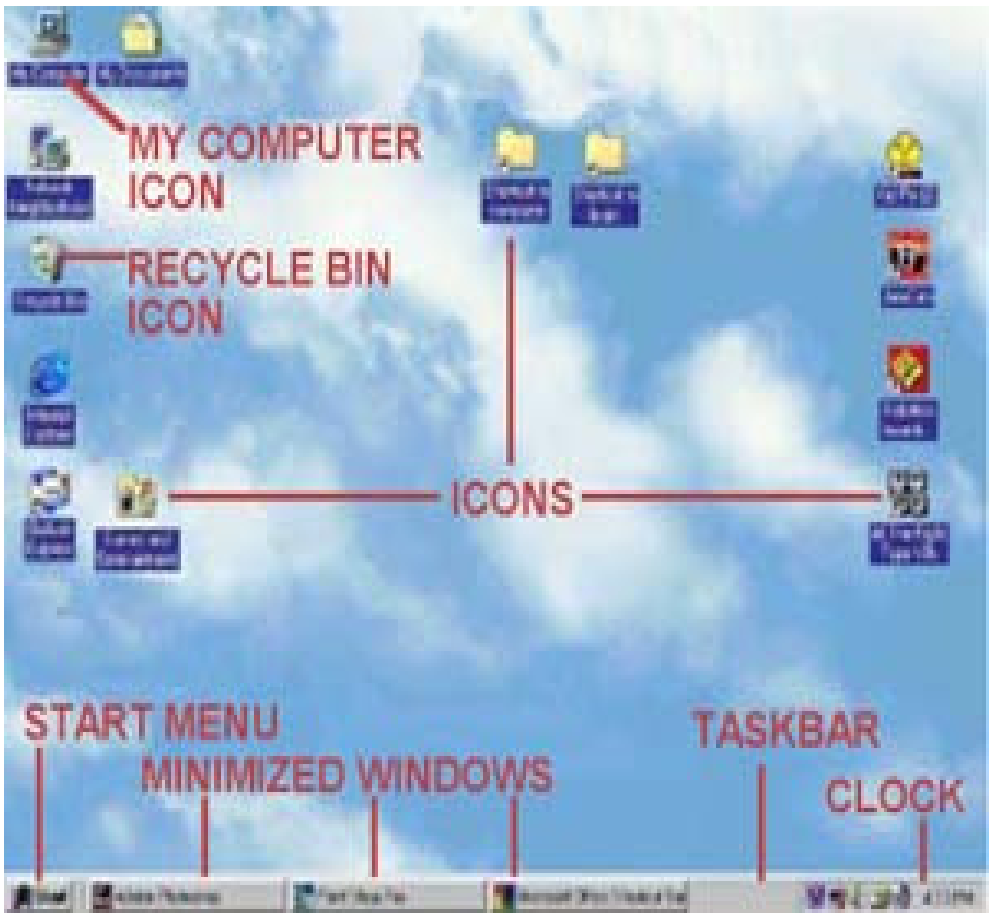
Title:	**Introduction to the Desktop**		
Date:	May 2007	**REF No:**	1.17, 1.18
Contributors:	Sridhar Iyer	**Std:**	1
		Reviewers:	Srinath Perur
Brief Description:	The child opens a game and plays it		
Goal:	To consolidate what has been learnt so far, and to have some fun!		
Pre-requisites:	Basic familiarity with mouse and keyboard operations		
Duration:	One class of 40 minutes		
References:	http://www.kidsdomain.com/brain/computer/lesson/comp_les8b.html http://www.kidsdomain.com/brain/computer/index.html		

Lesson Content:

When your computer is booted up and ready, the screen you see is called the **Desktop**. It is the background for all activities performed by a computer. It contains the commands needed for accessing those activities. (Comment: introduce the word *program* in a later lesson. Use an informal definition for now.)

The background picture on the Desktop is called **Wallpaper.** This can be changed to show any picture that you like. In a later lesson we will learn to change the Wallpaper.

As an example, two sample screenshots of a Desktop are given below. One of them is of a Windows desktop and is downloaded from the Internet. The teacher should illustrate using the computer available in the school – a similar screenshot of an Edubuntu systems is also provided. Note the similarities and differences.


MY COMPUTER ICON
RECYCLE BIN ICON
ICONS
START MENU
MINIMIZED WINDOWS
TASKBAR
CLOCK

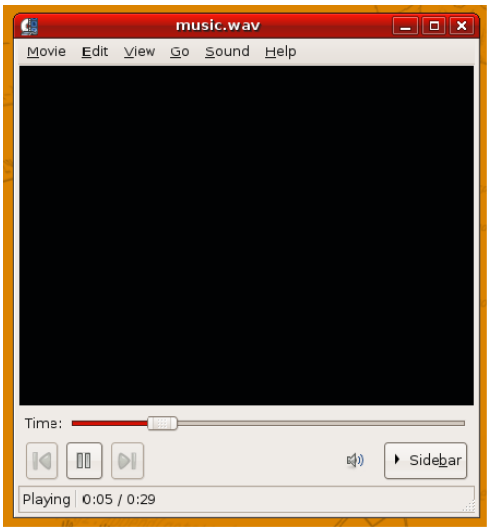
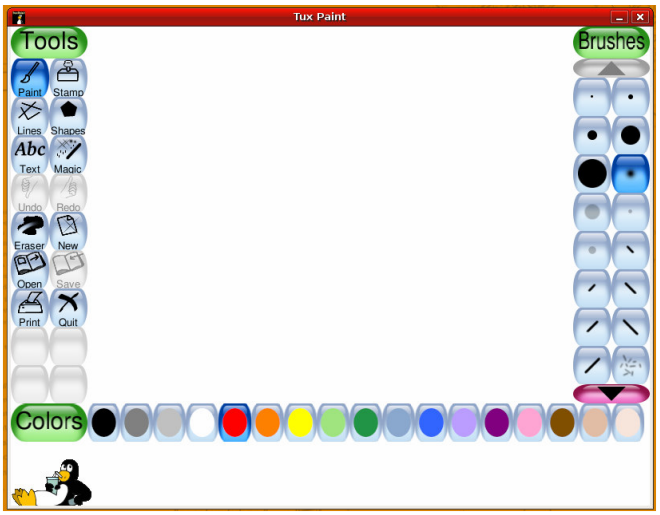

Applications
Places
System
Wed Apr 25, 8:06 PM
sda1
sda5
sda6
screnshots
Tux Paint
music.wav
Rashtrageet.mpg
edubuntu
[system@ASL-Edubuntu: ~]
[system - File Browser]
[Index of /~srinath/ed - Firefox]
[ssrvm_(1.13+1.14)_sridhar.doc - Ope...]

Each of these small pictures you see on the Desktop is called an **icon**. Icons are linked to activities that we want to perform using the computer. For example,

This is the icon for a music file.	This is the icon for TuxPaint.
	

You can start the activity by moving the mouse to be on top of the icon, then clicking on the mouse button and pressing Enter. (Use the notion of double-click if they are already familiar, otherwise introduce double-click later).

When you click on the icon, the activity starts. The computer opens the activity and displays a new icon. This is a much bigger icon and is called a **Window.** It is the Window that actually lets you do the activity. (Play a music file and/or draw something for demonstration). For example, here is what happens when:

When you Click on the Music icon	When you click on the Paint icon
	

Each time you click on an icon, the computer opens a new Window for the activity. As you can see, the window is quite big. Suppose you want to do two activities at the same time, say listening to music and painting, the two windows may not both fit on the desktop.

Notice the interesting thing: When you click anywhere in a Window, that Window moves to the front of the Desktop. The other Windows go back. Whichever Window you click your mouse in, the computer is ready to do your command for that activity. (Demonstrate using the music player and paint application).

What happens if one Window is fully hiding the other and you cannot see it at all to click?

Windows and Icons can be moved around on the Desktop by clicking on them and dragging them out of the way. (Demonstrate).

Lesson Plan:

- Prepare for the lesson by making a clean Desktop with only a few icons relevant to the lesson. Have an interesting background Wallpaper but ensure that it does not clutter the Desktop or reduce the readability of the icons.
- Take the computer to the class or vice versa, whichever is applicable.
- Switch on the computer.
- Engage the children by asking some quick questions from the earlier classes. For example, names of the various components, what is the use of the mouse.
- Let the children simply look at the Desktop and describe what they see.
- Tell them about icons and the functions of the icons that they see.
- Demonstrate launching of an application by clicking on a icon. Play a music file.
- Tell them about the Window that opens up. Let them try it on their own, if possible.
- Click on another icon to open another Window, say a Paint application.
- Demonstrate some rudimentary actions using Paint. Again let them handle the mouse, if possible.
- Clutter up the desktop with a bunch of open Windows. Hide the Window that they seem to find most attractive.
- Now ask them how to find the Window that they are interested in.
- Then tell them about clicking on the Window to get it forward. Also demonstrate moving the Windows around.
- Ask them what they do after they finish writing in their notebooks. Introduce the notion of closing an application Window by clicking on the Red X button.

Finally tell them that the screen they see when there are no open Windows is called the Desktop. Change the Wallpaper while they are watching but without telling them what you did or how. When they ask, say “Magic!” and leave it for a future class. ☺

Worksheet (Ref No: 1.17, 1.18)

1. Mark the following in the picture:
    a. Where can you click to play music?
    b. Where can you see the time?
    c. Where should you click if you want to paint?
    d. Where should you click to see a movie?
    e. Which is the task bar?

2. How many icons can you count in the picture?

3. The desktop shown in the picture does not have interesting wallpaper. Change it by drawing something on it!

Title:	Open a music player and play a music file		
Date:	May 2007	REF No:	1.19
Contributors:	Semeena Kader	Std:	1
		Reviewers:	Srinath Perur
Brief Description:	Teaches children how to play music by opening files from a music player		
Goal:	To introduce the music player and music files as separate entities.		
Pre-requisites:	Familiarity with computer icons, mouse usage.		
Duration:	One class of 40 minutes		

Detailed Description:

So far the children have seen music played by clicking on the icon of the *music file*. The distinction has not been made between a *music player* as an application that plays music files, and the *music files*, as something where music is stored. In this lesson we open a music player first, and then add music files to the playlist.

Lesson Plan:

- Prepare for the lesson by creating an icon for the music player on the desktop. This is done as follows: Clicking on **Applications=>Multimedia** gives a list of music and movie playing software installed on the system. Drag the entry corresponding to a music player on to the desktop to create an icon for it.

- Introduce the topic by asking students how they usually listen to music. Expected answers: tape recorder, radio, CD player, maybe even mobile phones and computers.

- Show them the music player icon and double click to launch it. Let the application already contain some music files so that when we open it , children can see a list of songs.

- Select a file and click on the **Play** button. Let them watch the window as the music plays. Ask them to find other buttons. Show the **pause**, **next**, **previous**, and **stop** buttons.

- Click on the **pause** button and show its function. Similarly click on other buttons and show they do.

- Ask the students to play a song by themselves.

- Show them the play list and explain the idea of *music files* as where the music is contained. Say that the music player is similar to the CD player or tape recorder, and the music file is similar to the CD or the cassette. Ask them whether we can hear music using other files such as those created using paint.

- If possible, create a small recording of some of the children singing and play it to demonstrate how music files are made.

Worksheet (Ref No: 1.19)

1. Add Music files to play list. (Teacher supervised lab activity)

2. Which of the following is like a music player and which is like a music file:

a.

b.

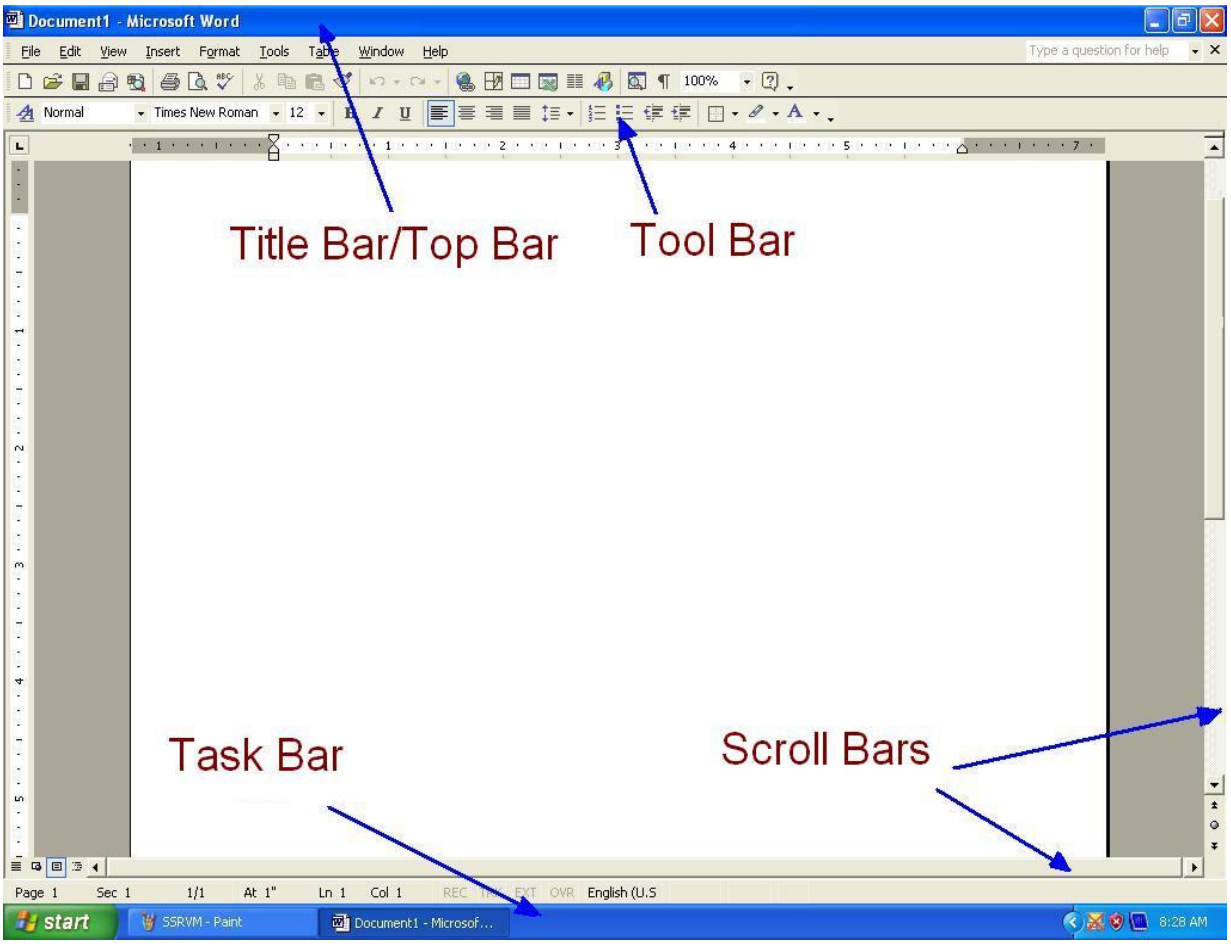
Title:	**Elements of a Window: Top bar**		
Date:	May 2007	**REF No:**	1.20
Contributors:	Usha Viswanathan	**Std:**	1
		Reviewers:	Srinath Perur
Brief Description:	This topic gives an idea about the title bar and how to maximise and minimise a window.		
Goal:	To familiarise the child with different elements of a window. The child will recognise the titlebar of a window and be able to maximise, minimise and close a window.		
Pre-requisites:	The child should know how to open an application (double clicking the application icon/ select the icon, right click and select "open" from the drop down menu/select the icon and press "Enter").		
Duration:	One hour		
References:	http://www.kidsdomain.com/brain/computer/index.html		

Detailed Description:

Note: This lesson uses screenshots from the Windows operating system. This is unlikely to be a hindrance because the elements shown here can easily be recognised in Edubuntu.

Title Bar

Many programs and applications run within **windows** that can be opened, minimized, resized and closed (See figure (a)). The top bar of the window is called the **Title Bar.** This horizontal area at the top of a window identifies the window. It usually displays the application name along with the file name ie. the title bar contains the title/name of the application which is running.



figure(a)

The title bar also acts as a handle for dragging the window. At the right hand end of the title bar are three buttons (see figure (b)).

figure(b)

Button with the “box” sign is used to resize/restore the window. The resize button helps the user to give the window any intermediate size between 'minimum' and 'maximum' sizes. This button can also be used to restore the window to the intermediate size from the maximum size and vice versa.

The button with an “X” sign is used to close the window.

The button with the “Minus” sign is used to minimize the window. When we want to clear the desktop of the open window, the minimize button is used. When a window is open, you

will see a rectangular button on the taskbar that displays the windows title and maybe an icon. Minimizing the window clears it from the screen, but keeps the program running - all you will see of a minimized window is the button on the taskbar. A raised button indicates a minimized or **inactive** window, and a depressed button indicates an open or **active** window. Minimizing a window is helpful if the user is temporarily not using the program, but plans to return to it soon. To restore a minimized window, simply click on the button on the taskbar.

Figure (c)

Lesson Plan

- Let the Icons of different applications kept on the desktop be the starting point to this class. First, ask the students show the different icons kept on the desktop.

- Show them how to open a window. Show them the different ways of opening the application. You can double click on the icon(if double click is familiar) or select the icon, right click and select "open" from the drop down menu or the easiest of them all **select the icon and press "Enter".** To make the topic more interesting play a music file. Then show them the name of the application on the title bar.

- Open two or three windows and arrange them in such a way that the title bars of each window is visible.

- Now we can introduce the concept of a title bar. Explain that the title bar is like the name of a person. It is used to identify one window from another. Give a window name and ask the children to pick that window.

- Once they understand the significance of the title bar, go to the buttons located on the right hand side. Give the name of each buttons and show them how each one of them works.

- Minimise all the open windows using the minimise buttons. Ask them where all of them went. Some children who are familiar with the application may be able to show it. Now show the task bar and the minimised windows.

- Click on each of the buttons on the task bar to restore the windows.

- Now close all the open files, stress using the window title bar button with the **"X"** sign to close the files. So they will be through with the use of this button.

- If possible, open a window and allow them to play around. While leaving the class ask them to close all the open windows.

Evaluation

In Class

- Draw the maximise/ minimise/ close buttons on the black board and ask the name of each button.

- Create a different match- the-following or labeling worksheet and use it.

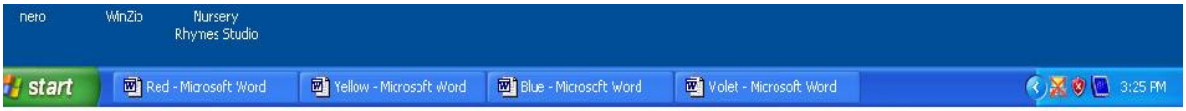
In Lab

- Open two or three windows. Give the name of a specific window and ask to pick that. Ask how they identified the window .

- Ask them to move a window using the title bar.

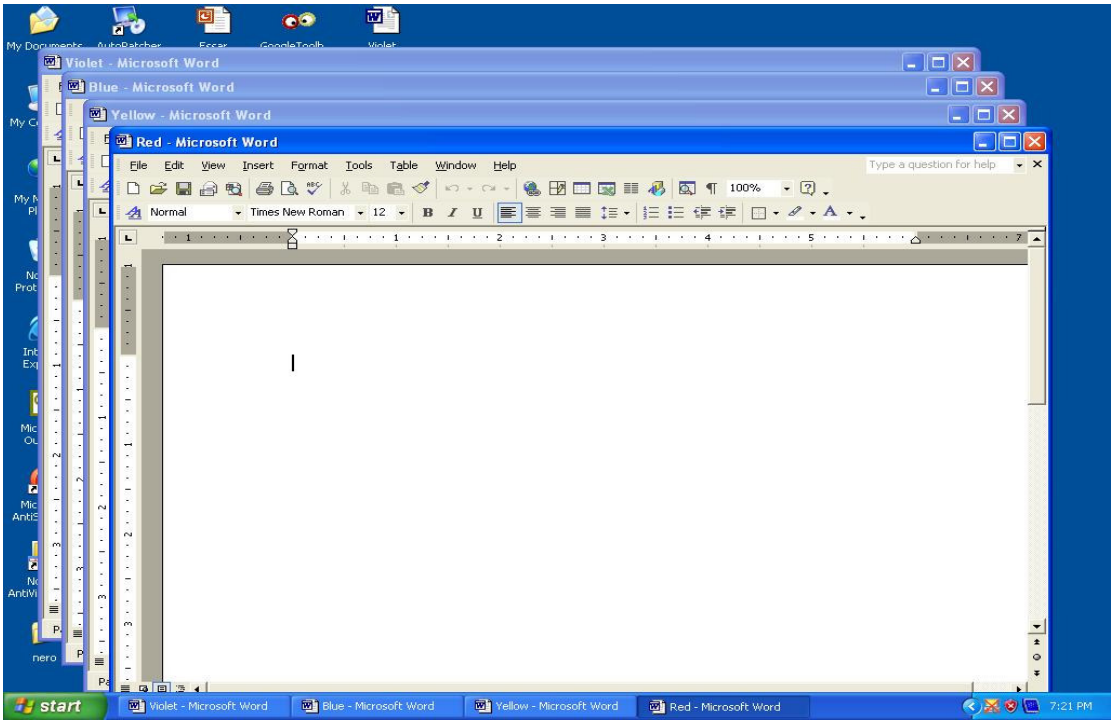
Worksheet (Ref No: 1.20)

1.



Select the file "Yellow"from Task bar and maximise it

2. Prepare the desktop in the following fashion and ask the children to minimise all the windows. The children can then be asked to restore all the windows.



3. In the following figure mark the title bar and identify the application opened.

4. Match the following buttons with their respective functions.

Minimize

Restore

Close

- 5 .

In the above title bar find the name/title of the file opened?

Title:	**Open a game and play it**		
Date :	May 2007	**REF No:**	1.21, 1.22
Contributors:	Srinath Perur	**Std:**	1
		Reviewers:	Malati Baru
Brief Description:	The child opens a game and plays it		
Goal:	To consolidate what has been learnt so far. And to have some fun!		
Pre-requisites:	Basic familiarity with mouse and keyboard operations		
Duration:	Two classes of 40 minutes		

Detailed Description:

The teacher can choose one or more games that the children can enjoy playing by making use of the skills learnt so far.

Lesson Plan:

The choice of games is left to the teacher. The **gcompris** and **Childsplay** suites, already installed on the Edubuntu distribution, are good places to look for suitable games. There are also other games that come with the system in **Applications=>Games**.

Some suggestions:

- Choose games that are reasonably challenging, but within the capabilities of the children.
- Depending on the abilities of the children, let them have to navigate briefly before reaching the game.
- Ensure that every child gets some time to play on the computer.
- To keep the rest of the children involved, see if they can also participate in some way -- cheering or making suggestions.

Work Sheet:

This is a fun lesson. No work sheet required. ☺

Title:	**Open a Paint application and scribble something.**		
Date :	May 2007	**REF No:**	1.23
Contributors:	Usha Viswanathan	**Std:**	1
		Reviewers:	Srinath Perur
Brief Description:	This topic teaches the child to open the Paint Application. He/She will learn to scribble using the paint application.		
Goal:	To help the kid to use the PAINT program to scribble and rub it clean.		
Pre-requisites:	The kid should know how to use the keyboard and have a good mouse control.		
Duration:	One hour		
References:	None		

Detailed Description:

The PAINT(in windows) or the KolourPaint (in linux) or Tux Paint (in edubuntu) is an easy-to-use application which is used to draw and paint pictures. You can even insert text matter in these pictures. The icon for the Tux Paint application is shown in figure(a).

Icon for Tux Paint

Figure a

Now double click on the Icon or select the icon and just press “Enter”. The Tux Paint application opens up. The application has a canvas area where we can draw the pictures. Toolbars are also provided on both sides of the canvas area to assist us in drawing and painting. Figure(c) shows a screen (which is labelled) which opens up when the icon is double clicked.

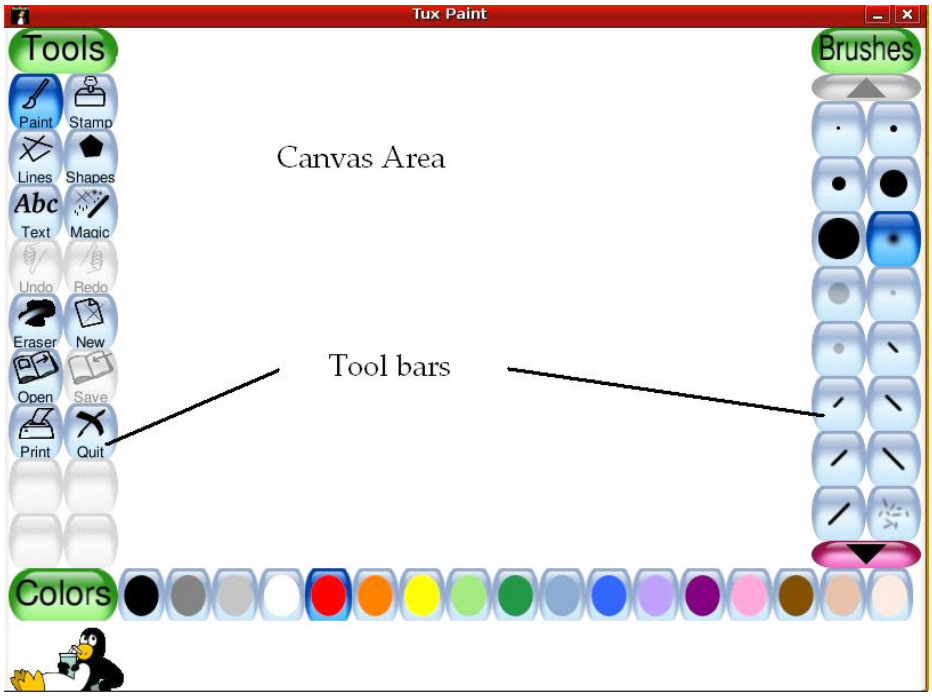


Figure b

Taking a closer look at the toolbars:

The toolbars are located on both sides of the canvas area. They assist the user to draw and paint figures. The 'Tools' tool bar provides various options, such as Paint, Stamp, Lines, etc. Once any option is selected from this toolbar; sub options (if any) will be displayed on the right hand side tool bar. For example, the following figure shows the sub options tool bar for the 'Magic' option on the Tools tool bar.

Figure c

The paint tool allows the user to scribble anything on the canvas. It even allows you to

select the thickness of the strokes. The eraser rubs the data or contents written on the canvas. The line tool is used to draw lines. The Magic tool is used to give different effects to the picture drawn. The colour palette provided at the bottom of the screen allows us to select the desired colour and paint the picture.

The following figure shows a Tux Paint screen with something scribbled.

Figure d

From the 'Tools' toolbar select the 'Save' option to save the file. Once the figure is saved a message " Your image has been saved" appears at the bottom of the screen.

Lesson Plan

1 Ask questions how they will draw pictures using a computer. Get their ideas. PAINT applications may also pop up as an answer!

2 Now just show them the Tux Paint icon. The icon itself can catch the attention of the kids.

3 Double click the icon and open the Tux Paint application.

4 Show them the toolbars and the canvas area. Explain that the canvas area is just like the paper we use to draw.

5 For the time being let us just concentrate on the Paintl tool. Select it and show the sub options displayed on the right hand side.

6 Show them the eraser tool.

7 Now just scribble something and erase it. Draw some lines changing the thickness

of the lines. Erase it.

8 Do it over and over some 2-3 times, so that they get familiarized with the icons on the toolbar.

9 Now save the picture drawn.

10 Now allow them to practice.

.

Title:	**Open an existing Paint application, edit and save it.**		
Date:	May 2007	**REF No:**	1.25,1.26,1.27, 1.28
Contributors:	Usha Viswanathan	**Std:**	1
		Reviewers:	Malati Baru
Brief Description:	This topic teaches the child to open an existing Paint Application file. He/She will learn to edit it and again save it.		
Goal:	To help the kid to use the PAINT program.		
Pre-requisites:	The kid should know how to use the keyboard and have a good mouse control.		
Duration:	One hour		
References:	None		

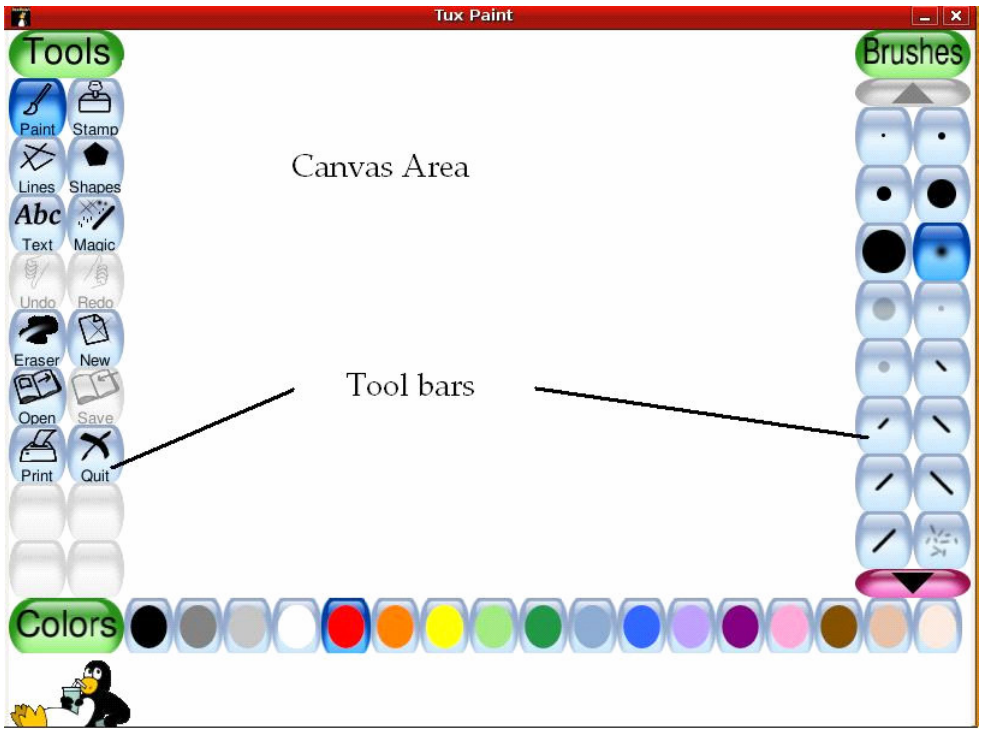
Detailed Description:

The PAINT(in windows) or the KolourPaint (in linux) or Tux Paint (in edubuntu) is an easy-to-use application which is used to draw and paint pictures. You can even insert text matter in these pictures. The icon for the Tux Paint application is shown in figure(a).

Icon for Tux Paint

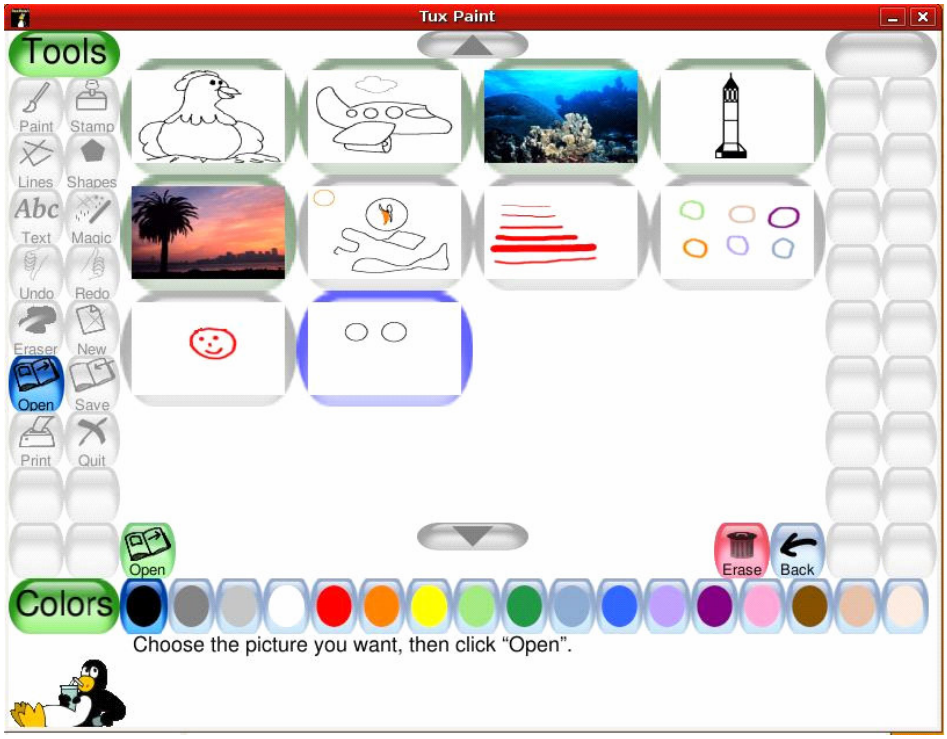
Figure a

Now double click on the Icon or select the icon and just press “Enter”. The Tux Paint application opens up. The application has a canvas area where we can draw the pictures. Toolbars are also provided on both sides of the canvas area to assist us in drawing and painting. Figure(c) shows a screen (which is labelled) which opens up when the icon is double clicked.

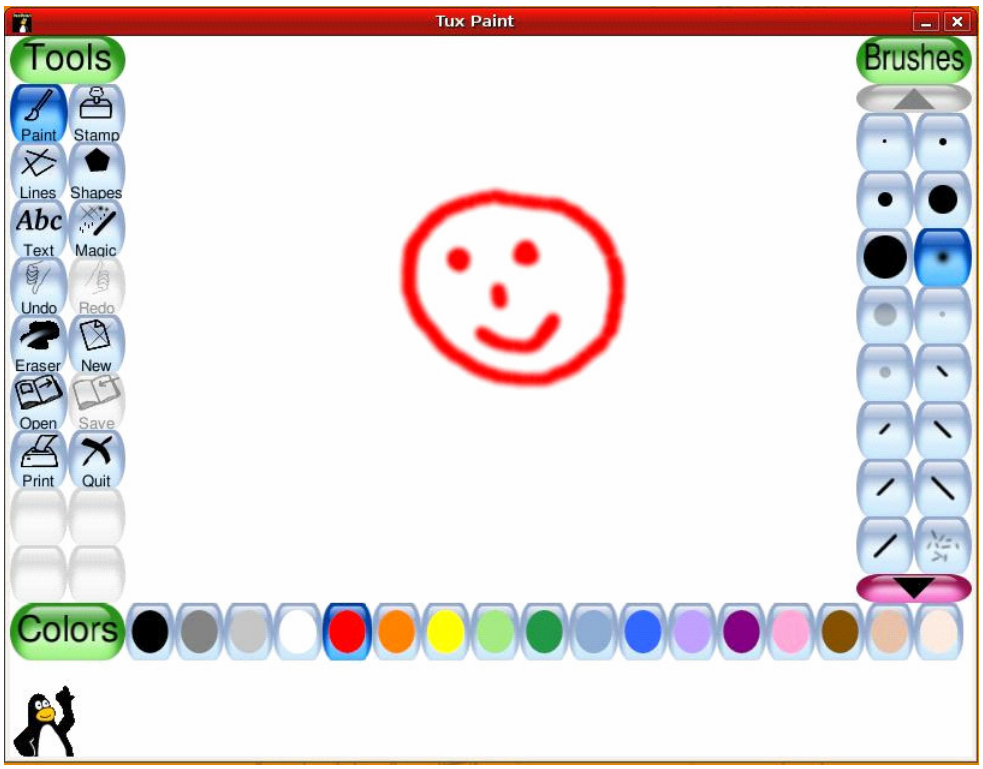


How to open and edit a file?

To open a file in the Tux Paint application, select the ‘Open ‘ option from the ‘Tools’ tool bar, this will open another screen which gives the list of available Tux Paint application files. See figure b.



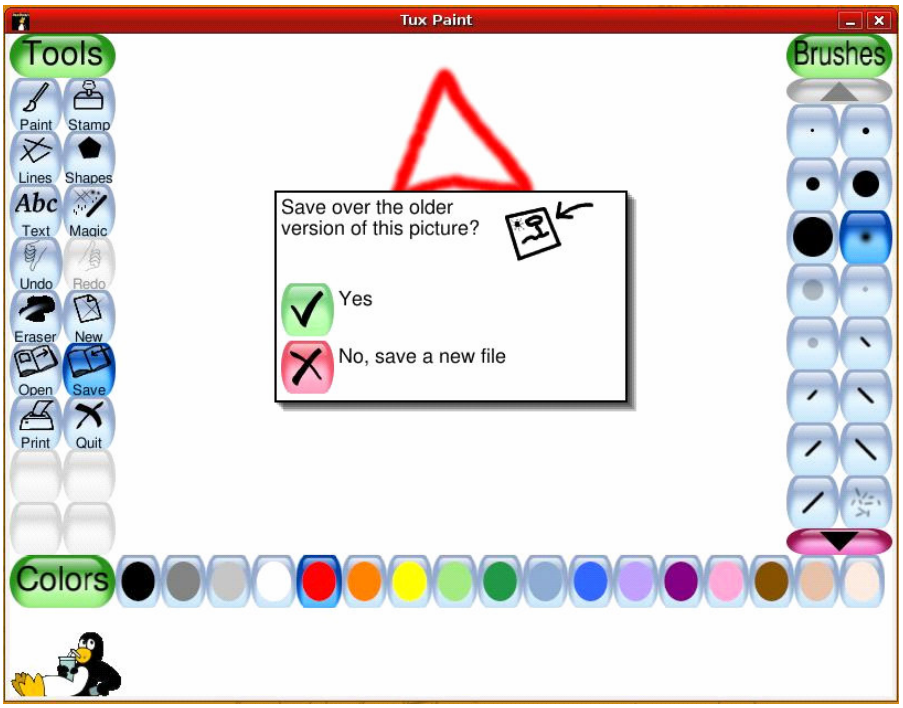
Select the file which is to be open. Let the following figure shows the selected file.



Now let us scribble something in this file, such as drawing a cap to the smiley face. For this select the ‘Paint’ tool from the ‘Tools’ tool bar. Select the thickness desired from the right hand side tool bar. Bring the cursor to the canvas and start drawing the cap. Let the modified figure look like this!

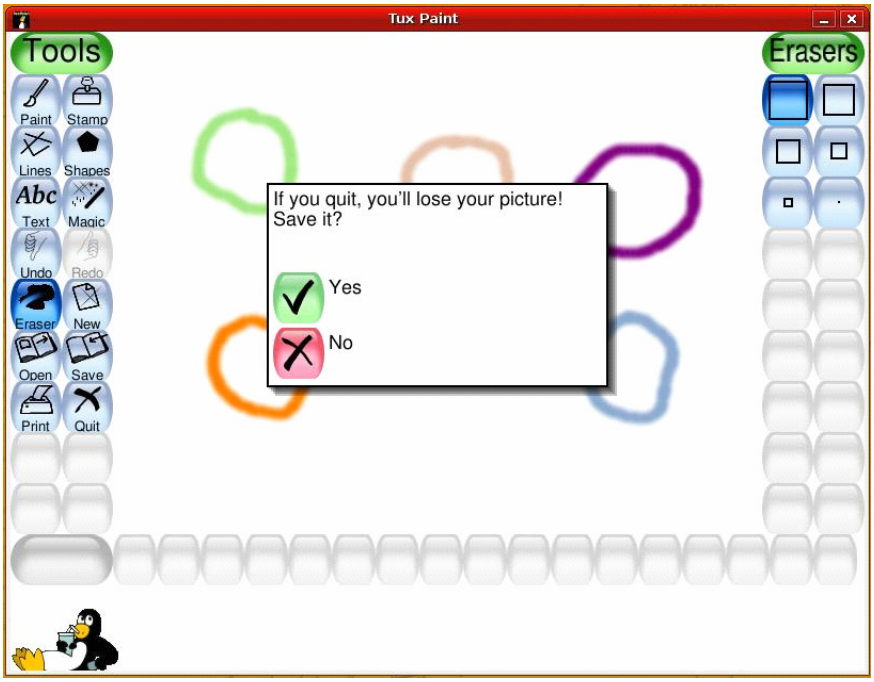
Now let the new file be saved. An existing file was now modified, there are 2 possibilities: either save this as a new file or save this over the previous file. Select the ‘Save’ option from the ‘Tools’ tool bar. A dialog box pops up asking how you want to save the file. See

figure f.



If the ‘Yes’ option is selected then the old file will be overwritten by the new version, in case of ‘No’ the file is saved as a new file. The old file will also be available.

If we wish to exit the application, select ‘Quit’ option from the ‘Tools’ tool bar. If the file we are working is not yet saved a dialog box pops up warning us that the file is not saved and the picture will be lost. See figure g.



Select ‘Yes’ option to save the file.

Lesson Plan

1 Start the class by asking the students why we need pictures. Explain that we can use pictures to explain things better.

2 Double click the Tux Paint icon on the desktop and open the application.

3 Show them the toolbars and the canvas area. Explain that the canvas area is just like the paper we use to draw.

4 Now use the 'Open' button on the toolbar to open a file.

5 It will be better if we open the same file saved in the previous class. So that we can modify the same and make the concept more understandable.

6 Select the 'Magic' tool from the 'Tools" tool bar and give some effects like smudge, bricks, etc to make them understand what all they can do with a picture.

7 Now save the picture drawn. Explain the concept of Dialog box and tell that computer does what we tell it to do. It is just a machine at our service!

8 Now allow them to practice.

Worksheet (Ref No: 1.28)

1.

Match the following buttons with their functions.

To exit the application

To write text matter

To open a file

To save a file

To draw a rectangle or a circle

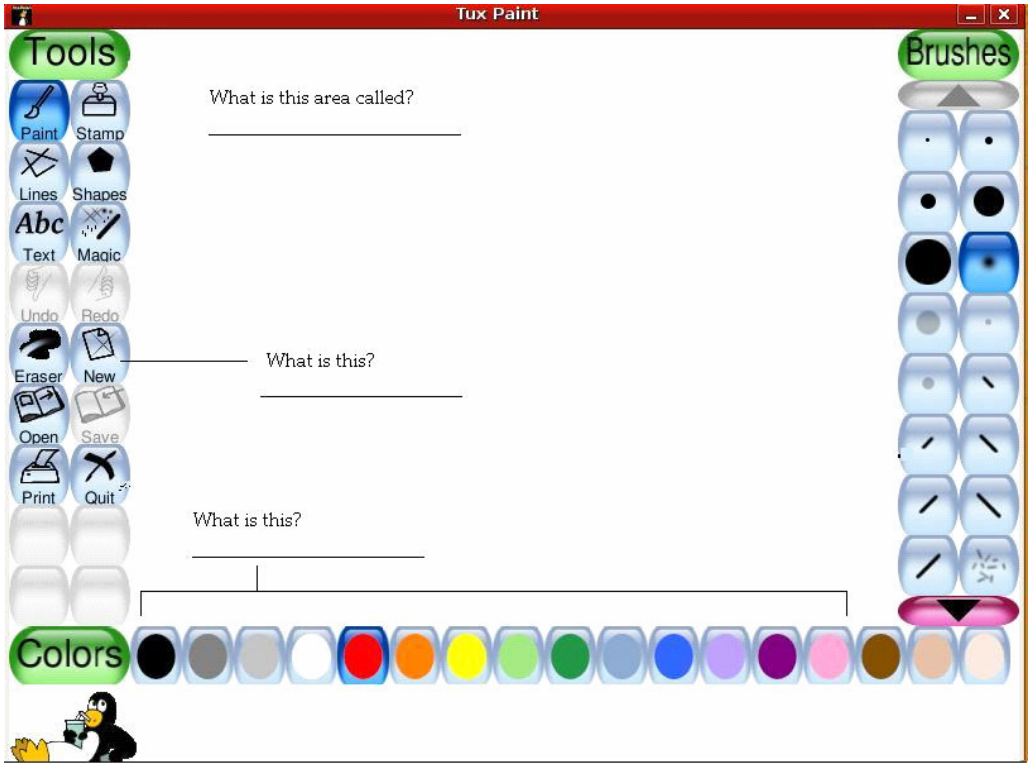
To scribble something

To erase text/lines

2.

Tick the Icon for Tux Paint:

3.



4. Say whether True or False:

1. Tux Paint application helps to create documents True/ False
2. The files created in Tux Paint can be saved True/ False
3. Color Palette allows you to draw lines True/ False
4. You draw pictures on the canvas area True/ False
5. The ‘Shapes’ tool allows you to draw circles True/ False

Activities

1. Scribble something using the Tux Paint application and save it.
2. Using the ‘Lines’ tool draw a triangle and colour it.
3. Open an existing Paint file, modify it and save it.

Title:	**Right click and changing the desktop**		
Date:	May 2007	**REF No:**	1.29,1.30
Contributors:	Usha Viswanathan	**Std:**	I
		Reviewers:	Srinath Perur
Brief Description:	This topic explains how to change the background of the desktop as well as the screen saver.		
Goal:	To use the right click for accomplishing a simple task		
Pre-requisites:	Awareness of the desktop and basic mouse manipulation skills		
Duration:	2 classes of 40 minutes each		

Detailed Description:

In earlier lessons mouse manipulation was covered with emphasis on the left click. Various small tasks were performed using this. Here we encourage the child to use the right click and perform the simple task of changing the desktop background.

How to change the background of the Desktop?

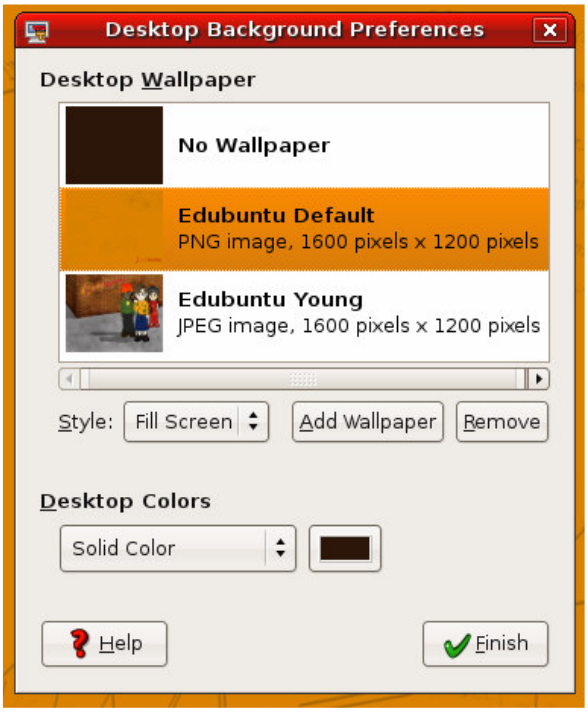
The Screen which we see when the computer is ready after booting is called the **Desktop**. When the computer is booted for the first time, it takes a default background which is specific to the operating system. This background is also called a **wallpaper**. This can be customized according to our taste.

The figure below shows the default Desktop background in the distributed version of Edubuntu.

Now if you want to change the background of the desktop; keep the mouse cursor anywhere on the desktop (not on icons/taskbar) and press the right mouse button. A dialogue window is displayed giving all the available desktop backgrounds and ask us to select a background.

Taking a closer look at the Dialogue window:

Figure(c) below , shows the window where you can change the wallpaper on the desktop in greater detail:



- The Dialogue window, apart from giving all the available desktop background options, also gives the option to **add new wallpapers**. You can also **remove existing wallpapers** from the available desktop background list.
- Another functionality in the Dialogue window is **Style.** The Style functionality helps us to decide upon how the selected wallpaper is displayed on the desktop screen. The four options under style are : Centered, Fill screen, Tiled, Scaled.
  Centered: The selected wallpaper is displayed in the centre of the desktop(depending upon the original size of the wallpaper it can fill the screen or just be a small figure in the centre of the desktop)
  Fill screen: In this option according to the size of the wallpaper it can be stretched to fill the whole desktop background.
  Tiled: The wallpaper selected will be displayed in a tiled format. (Just like tiles are laid.)
  Scaled: The wallpaper selected is scaled so that just covers the desktop area.
- **Desktop Colors**: is another parameter which we can change. We can change the background colour using this option and the colouring can be given vertical or horizontal gradient effects.

In the dialogue window shown, we click on the *Edubuntu young* wallpaper. The desktop changes as shown below. We then click 'finish' to exit.

Lesson Plan

Desktop and wallpaper

First, revise the ideas of left-click and right-click taught in a previous class. Earlier, the emphasis was only on left-click. If required let the children play some games for exercising the right click. Suitable games can be found in the **Childsplay** and **gcompris** suites that are part of the Edubuntu system. To change the wallpaper:

1. Keep a computer ready with a Desktop having simple and not so interesting/no wallpaper. Ask the children to identify the Desktop. Now tell them " Let's make the desktop more colourful".

2. Let them distinguish between left click and right click. Once they are able to do that ask anyone of the kids to do a right mouse click anywhere on the desktop (not on the icons).

3. Aha! A window opens up. (Make sure that you are ready with some nice wallpaper (for example figures with some cartoon characters like Tom and Jerry, Mickey Mouse or Superman, which will grab the attention of the children) in the available wallpaper list. Now you select the desired wallpaper and click the "Close" button.

4. Now ask the children whether the new wallpaper is appealing, and if they would be interested in doing the exercise again. Then show them how you can select another wallpaper. Repeat the exercise twice or thrice.

5. Adding or removing wallpapers can wait as it is too much of work for the little ones!!

Worksheet (Ref No: 1.29, 1.30)

In Lab

- Give a computer with a desktop having no wallpaper. Now ask them to select a wallpaper and display it on the desktop. **(Don't insist on a particular wallpaper).**

- Ask the children to change the existing screensaver.(the computer can be set such once the computer is idle, within seconds the screensaver is active).

- Let them also change the desktop background colour..

---End of Teaching Material for 1st Standard Computer Science---