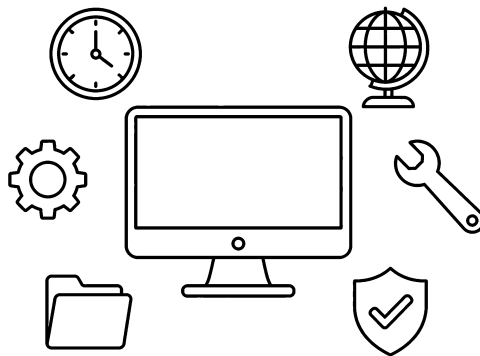


ICT

INFORMATION AND COMMUNICATION TECHNOLOGY

GRADE 8



UNIT 2

Configuring and Formatting a Computer

Student Workbook



"The King of ICT"

CHAMEEN RATHNASENA

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Motivational Speaker

BSc (Sp) Computer Science - University of Peradeniya
PGDE - Open University of Sri Lanka
MIT (Reading) - University of Sabaragamuwa

STUDENT DETAILS

Name:

School:

Institution:

Contact:

BEFORE WE START



What This Unit Is About

Read this page with your teacher

AT THE END OF THIS UNIT YOU WILL BE ABLE TO

- ☐ Set the date, the time and the time zone of a computer.
- ☐ Set the money sign and the number format for Sri Lanka.
- ☐ Name the six attributes of a file.
- ☐ Make a file hidden or read only, and find a lost file.
- ☐ Name the ports and say what goes into each one.
- ☐ Fix simple hardware problems in a safe way.
- ☐ Fix simple software problems and say what a virus does.

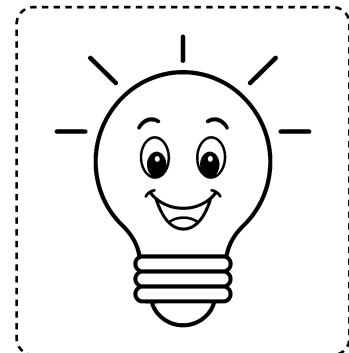
THREE RULES FOR THE COMPUTER ROOM

- **Never** touch a power cable before the teacher says you may.
- **Always** ask the teacher before you change a setting.
- **Never** work alone. Work with your partner.

HOW TO USE THIS BOOK

Each chapter has three parts. First you **read** the chapter with your teacher. Then you **do** the practical task on a real computer. Last you **write** the exercises in this book.

Colour the small pictures when you finish your work early.



Colour me!

"The computer only does what you tell it. So learn to tell it well."

- THE KING OF ICT



CHAPTER 1

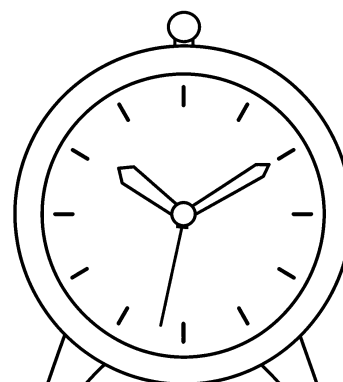
Date, Time, Time Zone and Money

**? TWO REAL PROBLEMS**

"My computer shows dollars. I want rupees."

"My watch and my computer show different times. I fixed it yesterday. Today it is wrong again."

The operating system can fix both. We only change the settings.

**2.1 The date and the time**

Every computer must show the correct date and time. This matters, because the computer itself uses them:

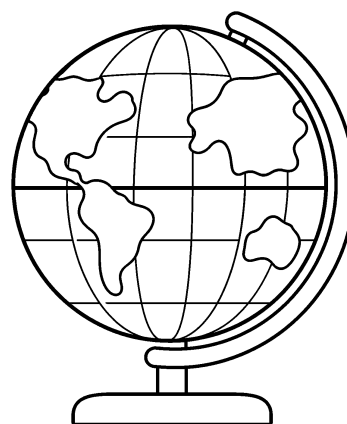
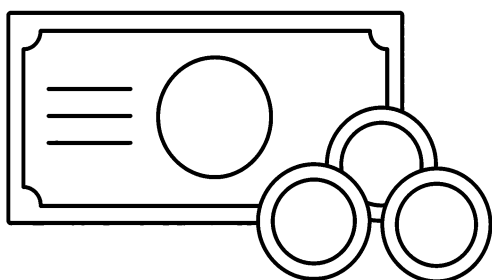
- when it **saves** a file,
- when it sends a **reminder**,
- when we **install** new software,
- when it **finds** a file,
- when we write a **letter**,
- when it checks a software **licence**.

i TIME ZONES

The world is divided into **time zones**. Each zone keeps its own time. Countries need this for work, for business and for law.

Example. When it is 6.00 a.m. in Sri Lanka, it is 1.30 a.m. in England.

Our time zone is **UTC +05:30**. Windows calls it **Sri Jayawardenepura**.

**2.2 Money and numbers****i REMEMBER**

A new computer shows the money of the country where the operating system was made, usually the **dollar (\$)**. For Sri Lanka we change it to **Rs.**

We also set the number format, so numbers look right on the Internet.

> DO IT - PRACTICAL 1 (WORKBOOK ACTIVITY 2.1)

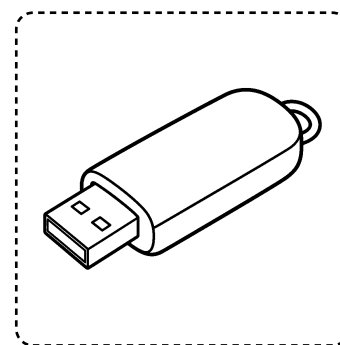
Do this on a computer with Windows 10. **Ask your teacher first.**

1	Click Start , then Windows System , then Control Panel .
2	Click Date and Time .
3	Click Change date and time . Put the correct date and time. Click OK .
4	Click Change time zone . Choose (UTC+05:30) Sri Jayawardenepura . Click OK .
5	Go back to the Control Panel. Click Region .
6	On the Formats tab choose a date format. Click Apply .
7	Click Additional settings . On the Numbers tab choose Metric .
8	Click the Currency tab. Delete \$. Type Rs. Click OK .

i WRITE WHAT YOU SAW

Time zone before _____

Money sign before _____



Colour me!

A Fill in the blanks

8 marks

Use the words in the box.

WORD BANK

date and time

time zones

Control Panel

Sri
Jayawardenepura

dollar

Rs.

Region

Metric

- The computer uses the when it saves a file.
- The world is divided into Each one has its own time.
- We change all the computer settings in the
- For Sri Lanka we must choose the time zone
- A new computer often shows money in
- In Sri Lanka we change the money sign to
- We change the date format in the window.
- Sri Lanka uses the measurement system.



B True or false

8 marks

Write T or F in the box.

1. ☐ A computer can show the wrong time if the time zone is wrong.
2. ☐ All countries in the world have the same time.
3. ☐ You can change the money sign on a computer.
4. ☐ When it is 6.00 a.m. in Sri Lanka, it is 1.30 a.m. in England.
5. ☐ The computer uses the date when it saves a file.
6. ☐ The time zone of Sri Lanka is UTC +05:30.
7. ☐ You must switch off the computer to change the time.
8. ☐ The Control Panel is a part of the operating system.

C Match them

5 marks

Write the correct letter in the box.

A - The setting		B - What it does
1. Date and Time		A. Chooses Sri Jayawardenepura B. Sets the measurement system C. Chooses how the date will look D. Sets the day, the month and the year E. Changes \$ into Rs.
2. Change time zone		
3. Currency tab		
4. Numbers tab		
5. Formats tab		

D Time zone maths

4 marks

It is 12.00 noon in Sri Lanka. Write the time in each country.

Country	Their time is	So the time there is
England (London)	5 hours 30 minutes behind us	
India (New Delhi)	the same as us	
Singapore	2 hours 30 minutes in front of us	
Japan (Tokyo)	3 hours 30 minutes in front of us	

E Answer these

4 marks

Write full sentences.

1. Write two things a computer does with the date and time.



2. Why do we change the money sign to Rs. in Sri Lanka?

CHAPTER 2

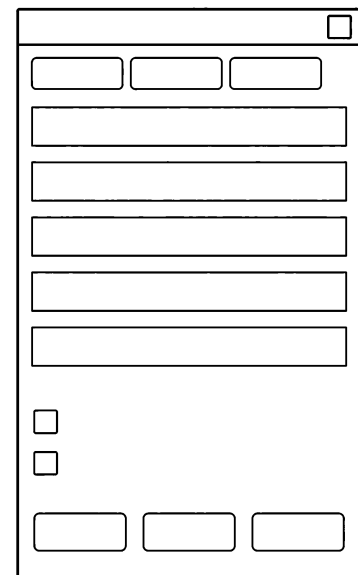
Files and How to Find Them



2.3 What are file attributes?

Every file you save keeps some details about itself. We call these the **attributes** of the file. To see them, **right click** the file and click **Properties**.

Attribute	What it tells you
Type, name and extension	What kind of file it is
Size	How much space it takes
Location	The place where it is kept
Date made	When the file was made
Date changed	When it was last changed
Rights	Who may see it and change it



A diagram of a file properties window. It has a title bar with a close button. Below the title bar are three input fields. Then there are four more input fields. Below those are two checkboxes. At the bottom are three more input fields.

THE EXTENSION TELLS YOU THE KIND OF FILE

The letters after the dot are the **extension**. A program file ends with **.exe**

.docx	Word document	.jpg	Picture
.xlsx	Spreadsheet	.mp3	Sound
.pptx	Presentation	.exe	Program

2.4 Hidden files and read only files

You can protect a file in two ways. Tick the box in the **Properties** window.

HIDDEN	READ ONLY
Nobody can see the file in the folder.	People can see and open it. But they cannot change it.



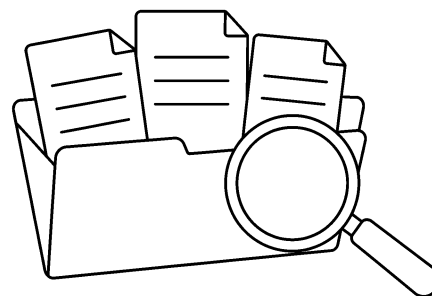
> DO IT - PRACTICAL 2 (WORKBOOK ACTIVITY 2.2)

Your **teacher will show you** this one. It needs an administrator account.

1	Right click your file. Click Properties . Read the type, the place and the size.
2	Tick the Hidden box or the Read only box.
3	Click Apply , then OK .
4	Try to open the file and change it. What happened?

2.5 Finding a lost file

Sometimes we forget the name of a file, or the place we kept it. Then we **search** for it. We can search by name, by extension or by date.



> DO IT - PRACTICAL 3 (WORKBOOK ACTIVITY 2.3)

1	Right click Start . Click File Explorer .
2	Click This PC .
3	In the Search box at the top right, type docx .
4	Count the files you get. Write the number here:
5	Now try jpg , then mp3 , then exe .

"You do not learn ICT by reading. You learn it by doing."

- THE KING OF ICT

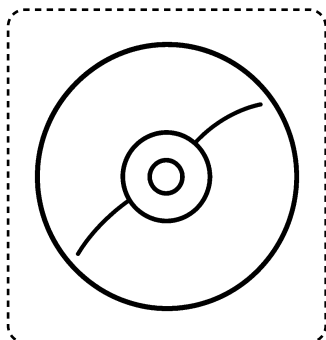
A Complete the table

16 marks

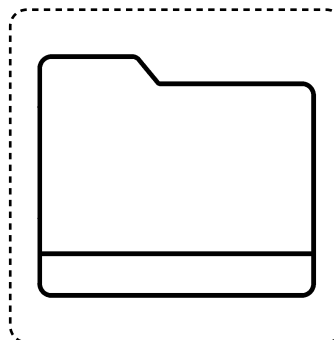
Write the extension and the kind of file.

File name	Extension	Kind of file
report.docx		
song.mp3		
photo.jpg		
setup.exe		
marks.xlsx		

File name	Extension	Kind of file
myschool.pptx		
notes.txt		
sports.mp4		



Colour me!



Colour me!

B Fill in the blanks

8 marks

Use the words in the box.

WORD BANK

attributes

extension

Properties

hidden

read only

search

place

size

- The details about a file are called file
- The letters after the dot in a file name are the file
- Right click a file and click to see its details.
- Other people cannot see a file.
- You can open a file but you cannot change it.
- Use the box to find a lost file.
- The location of a file is the where it is kept.
- The of a file tells us how much space it takes.

C Word search

10 marks

Find the 10 words. They go across, down and slanting - forwards and backwards.

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

FIND THESE WORDS - TICK EACH ONE

- | | | | | |
|-----------------------------------|---|---------------------------------------|---------------------------------|---------------------------------|
| ☐ DOCX | ☐ EXTENSIO
N | ☐ FILE | ☐ FOLDER | ☐ HIDDEN |
| ☐ LOCATION | ☐ PROPERTI
ES | ☐ READONL
Y | ☐ SEARCH | ☐ SIZE |

"A problem is only a puzzle that you have not solved yet."

- THE KING OF ICT



Colour me!

CHAPTER 3

Ports and Hardware Problems



2.6 Two kinds of problem

HARDWARE PROBLEMS

The parts you can touch. Keyboard, mouse, monitor, speakers, cables.

SOFTWARE PROBLEMS

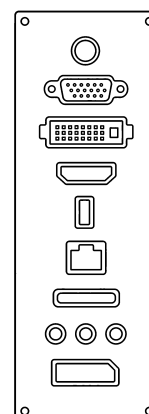
The programs. Application software and the operating system.

A **port** is a hole in the computer. We push a cable into it. To fix a hardware problem you must know the ports.

Port	What goes into it	Port	What goes into it
PS/2 port	Old keyboard and old mouse	eSATA port	External hard disk
VGA port	Monitor	HD Audio port	Speakers, microphone, headphones
DVI port	Monitor	Display port	Monitor. Better than VGA and DVI.
HDMI port	Television. It carries sound and picture.	Parallel port	Old printer. New computers do not have it.
USB port	Printer, pen drive, scanner, keyboard, mouse	Micro USB port	Mobile phone, camera
RJ45 Ethernet port	Network cable	SD card reader	Memory card of a camera

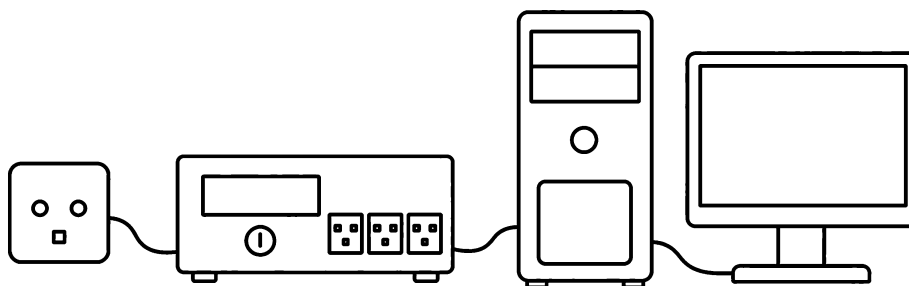
⚠ DANGER - ELECTRICITY!

These activities use electricity. **Be careful!** Work only when the teacher is with you. **Take the plug out of the wall socket first.**



2.7 How to fix hardware problems

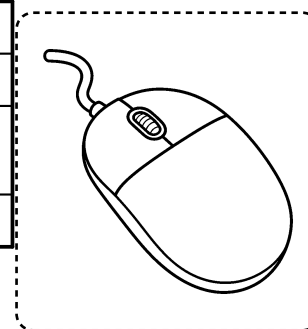
Problem 1. The computer does not start.



1	Take the plug out of the wall socket.
2	Check the plug of the UPS. Push it in well.
3	Check the cables from the UPS to the computer and to the monitor.
4	Switch on the UPS from the wall socket.
5	Switch on the computer. If it still does not start, call for help.

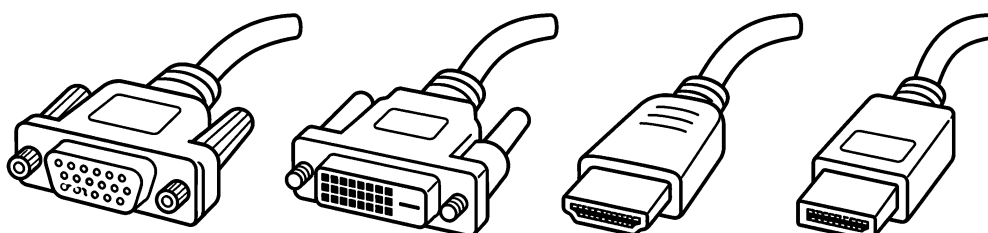
Problem 2. The keyboard or the mouse does not work.

1	Restart the computer. Most times this is enough.
2	If not, shut down the computer.
3	Push the USB plug into a USB port. An old plug goes into the PS/2 port.
4	Restart. If it still fails, try another keyboard and mouse.



Colour me!

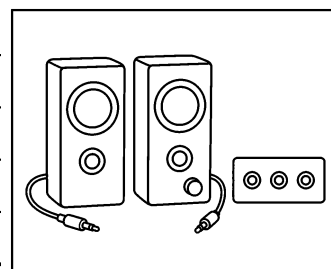
Problem 3. The monitor shows nothing.



1	Check that the monitor is switched on.
2	Restart the computer.
3	Push the cable in well at both ends. It can be VGA , DVI , HDMI or Display port .
4	Check the power cable of the monitor.
5	If it still fails, try another monitor.

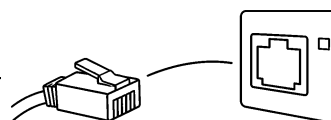
Problem 4. The speakers make no sound.

1	Turn the speaker volume up.
2	Look at the sound icon at the bottom right. Is it muted? Pull the slider up.
3	Push the speaker cables into the HD Audio ports.
4	Check the power cable of the speakers.
5	Restart. Then try another pair of speakers.
6	The driver software may be missing. Ask the teacher.



Problem 5. The computer will not join the network.

1	Push the RJ45 plug into the Ethernet port until it clicks. A small green light will blink.
2	If it still fails, right click the network icon at the bottom right. Click Troubleshoot problems .
3	Other network settings need the teacher.



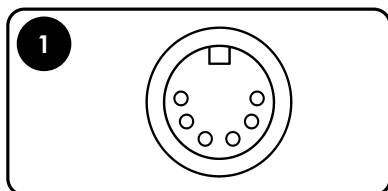
★ SIX GOLDEN RULES

- **Safety first.** Power off, then check.
- **Look before you touch.** Lights and cables tell the story.
- **Try the easy thing first.** Restart the computer.
- **Change one thing, then test.** Never three at once.
- **Swap to test.** Another cable, another monitor.
- **Know when to stop.** Then call for help.

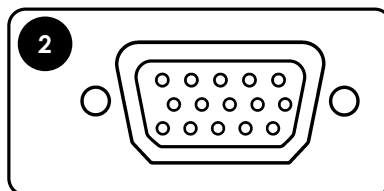
A Name the port

9 marks

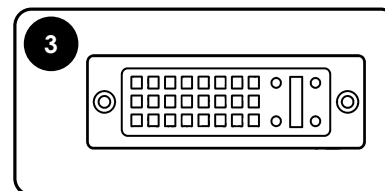
Write the name of each port on the line under it.



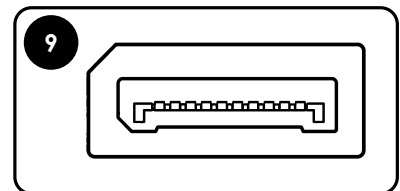
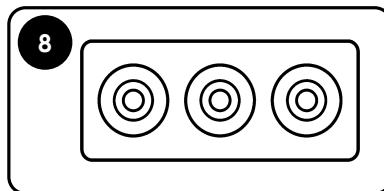
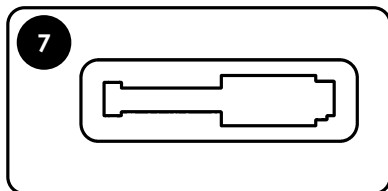
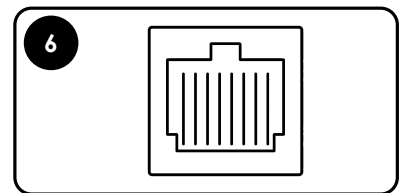
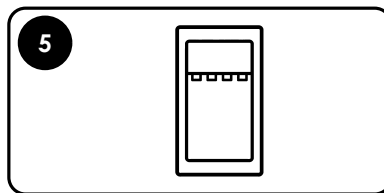
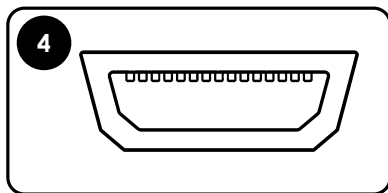
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B Which port would you use?

8 marks

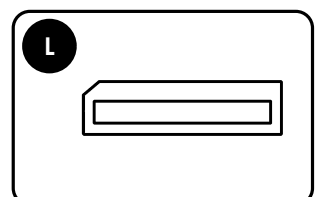
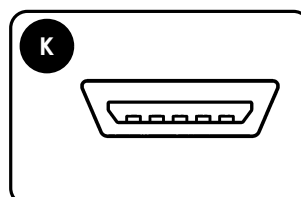
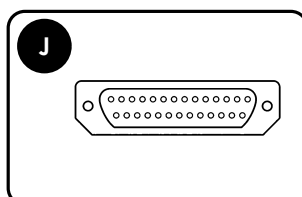
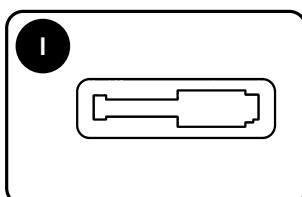
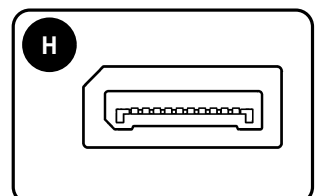
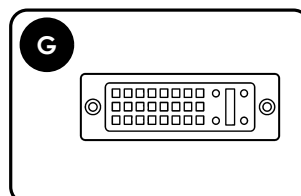
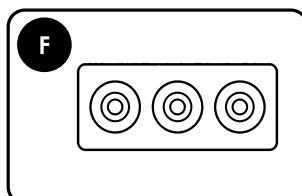
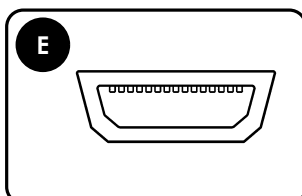
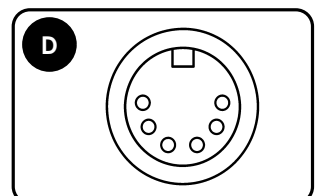
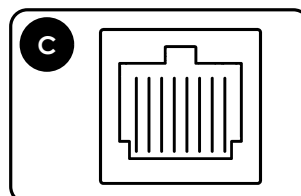
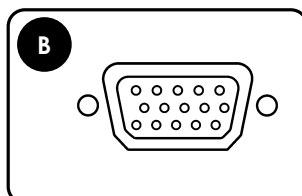
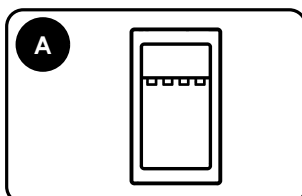
Write the name of the correct port.

You want to ...	Port
Connect a new printer	
Connect the network cable	
Use a television as the screen	
Connect an external hard disk	
Connect a mobile phone	
Read the memory card of a camera	
Connect an old mouse	
Connect speakers	

C Match the picture to the name

12 marks

Write the correct letter in the box.



DVI port		Micro USB port	
SD card port		RJ45 Ethernet port	
HDMI port		HD Audio port	
eSATA port		Display port	
Parallel port		PS/2 port	
VGA port		USB port	

D Put the steps in order

5 marks

The computer will not start. Number the steps 1 to 5.

- Switch on the computer.
- Take the plug out of the wall socket.
- Switch on the UPS from the wall socket.
- Check the cables from the UPS to the computer and the monitor.
- Check that the plug of the UPS is pushed in well.

E Fill in the blanks

9 marks

Use the words in the box.

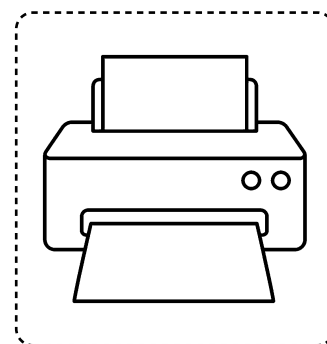
WORD BANK

hardware	software	USB	PS/2	HDMI
RJ45	restart	driver	power	

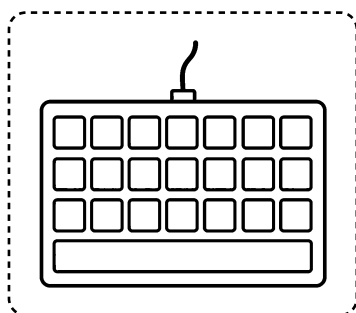
- The two kinds of computer problem are problems and problems.
- Always take out the plug before you check a cable.
- A keyboard can go into a port or an old port.
- The network cable plug is called
- We use an cable to join a television to a computer.
- The first thing to try for most problems is to the computer.
- A device will not work if its software is not installed.

"A problem is only a puzzle that you have not solved yet."

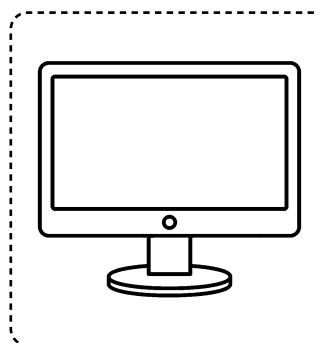
- THE KING OF ICT



Colour me!



Colour me!



Colour me!

CHAPTER 4

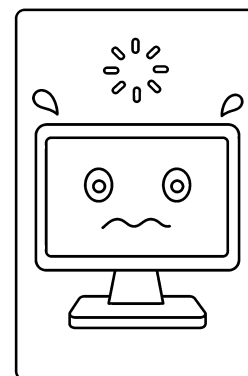
Software Problems and Viruses



i TWO KINDS OF SOFTWARE PROBLEM

1. Application software. A program that does one special job. For example MS Word, MS Excel, Chrome, Paint.

2. Operating system. The main software that runs the whole computer. For example Windows 10.



2.8 Application software problems

You have a problem when the program does not open, does not answer, is very slow, or works in a wrong way. Try these **in order**. Stop when the problem is fixed.

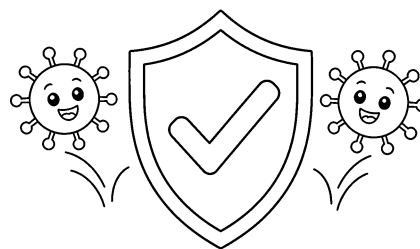
1	Close the program and open it again. This is the easiest one, and it often works.
2	Check that the program can work on your computer and your operating system.
3	Check the licence . The trial time may be over.
4	Try the Repair option. Then restart the computer.
5	Uninstall the program and install it again. <i>Ask the teacher for steps 4 and 5.</i>



SOMETIMES THE CAUSE IS A VIRUS

A **virus** is a bad program. It spoils the computer, destroys data, and makes copies of itself.

What to do: scan the computer with **antivirus** software. Then restart.

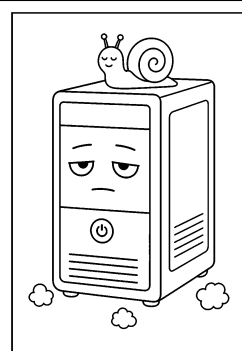


2.9 Operating system problems

WHY IS MY COMPUTER SLOW?

Too many programs start with the computer. Or there is not enough free space in the hard disk.

This needs an administrator account, so the teacher will help you.



Problem 1. The computer is slow.

1	Close the programs that start with the computer.
2	Use Disk Cleanup to remove files you do not need.
3	Try the Repair option of the operating system.
4	If that fails, install the operating system again.

Problem 2. The desktop has no icons.

Windows 10 has two modes: **Tablet mode** and **PC mode**. In Tablet mode you cannot see the desktop icons.

1	Click the message button on the task bar, left of the time. The Action Center opens.
2	Click the Tablet mode tile. Now the icons come back.
3	If they are still missing, right click the desktop. Click View , then Show desktop icons .
4	If the screen is still empty, ask the teacher.

THREE THINGS TO REMEMBER ABOUT SOFTWARE

- A **slow** computer is a **software** problem, not a hardware problem.
- Always try the **easy** answer first: close and open the program, or restart the computer.
- Only the teacher may **repair** or **install** the operating system.

A**Choose the correct answer****10 marks***Underline your answer.*

1. What are the two main problems of a computer?
 - (a) money and language problems
 - (b) maths and hardware problems
 - (c) hardware and software problems
 - (d) software and language problems
2. Which one is a hardware problem?
 - (a) The operating system does not work
 - (b) The mouse does not work
 - (c) The computer starts slowly
 - (d) The disk is full
3. What must you do first when a computer will not start?
 - (a) Fix the cable to the computer
 - (b) Check the UPS cable
 - (c) Take the plug out of the wall socket
 - (d) Press the power button again
4. Which one cannot go into a USB port?
 - (a) printer
 - (b) monitor
 - (c) scanner
 - (d) keyboard
5. Which is the best port for a television?
 - (a) USB
 - (b) DVI
 - (c) eSATA
 - (d) HDMI
6. Which port is NOT for a monitor?
 - (a) DVI
 - (b) USB
 - (c) VGA
 - (d) HDMI
7. Your spreadsheet program will not open. Why?
 - (a) A virus is in the computer
 - (b) The program is damaged
 - (c) The trial time is over
 - (d) Any one of these
8. Which device uses the eSATA port?
 - (a) monitor
 - (b) mouse
 - (c) speakers
 - (d) external hard disk
9. Many different devices can go into one kind of port. Which one?
 - (a) HDMI
 - (b) eSATA
 - (c) DVI
 - (d) USB
10. What does antivirus software do?
 - (a) It makes the computer faster
 - (b) It finds and removes viruses
 - (c) It prints documents
 - (d) It saves files



B Hardware or software?

10 marks

Write H for hardware and S for software.

1. ☐ The mouse pointer does not move.
2. ☐ MS Word does not open.
3. ☐ The monitor shows nothing.
4. ☐ The computer starts very slowly.
5. ☐ The speakers make no sound.
6. ☐ The trial time of a program is over.
7. ☐ The network cable has come out.
8. ☐ A virus has spoilt the files.
9. ☐ The keyboard keys do not work.
10. ☐ The desktop has no icons.

C Fill in the blanks

10 marks

Use the words in the box.

WORD BANK

application software	operating system	licence	Repair
uninstall	virus	antivirus	Disk Cleanup
Tablet	restart		

1. A program that does one special job is called
2. Windows 10 is an example of an
3. Check the of a program. It can stop working when the time is over.
4. If the program still fails, try the option.
5. If Repair fails, ... the program and install it again.
6. A spoils your data and makes copies of itself.
7. We use software to find and remove a virus.
8. The tool removes files we do not need from the disk.
9. Desktop icons are hidden when Windows 10 is in mode.
10. The easiest thing to try first is to the computer.

"Practise today. Lead tomorrow."

- THE KING OF ICT



Colour me!

D Answer these

Write full sentences.

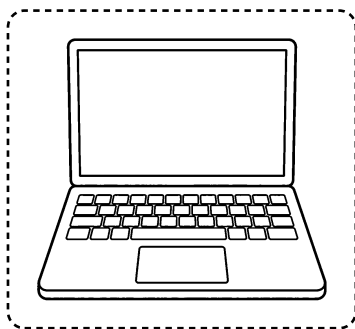
8 marks

1. What is a computer virus?

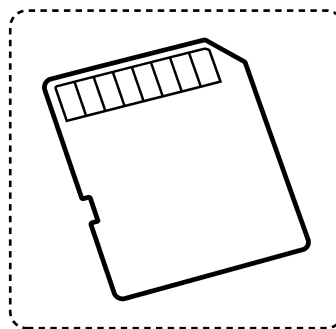
2. Write two problems of application software.

3. Why does a computer become slow?

4. Write the names of two application software programs you have used.



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REVISION

Unit 2 in One Page

Read this the night before the test



Topic	The key facts
Settings	The operating system lets us change the settings of a computer.
Date and time	Used to save files, find files, send reminders and write letters.
Time zones	The world is divided into time zones. Each keeps its own time. Ours is UTC +05:30, Sri Jayawardenepura.
Money	Change the money sign to Rs. for Sri Lanka. Use the Metric system.
File attributes	Place kept · date changed · kind of file · size · date made · rights.
Extension	The letters after the dot. They tell you the kind of file.
Hidden / read only	Hidden = nobody can see it. Read only = you can open it but not change it.
File search	Used when you forget the name or the place of a file.
Ports	A port is a hole for a cable. Learn the 12 ports.
Two problems	Hardware problems and software problems.
Hardware faults	Keyboard · mouse · monitor · speakers · network.
Software faults	Application software, and the operating system.
Slow computer	Too many start-up programs, or the disk is full. Use Disk Cleanup.
Virus	A bad program. It spoils data and copies itself. Use antivirus software.

TICK WHEN YOU CAN DO IT

- ☐ I can set the date, the time and the time zone.
- ☐ I can change the money sign to Rs.
- ☐ I can name six attributes of a file.
- ☐ I can name nine ports and say what goes into each.
- ☐ I can fix simple hardware and software problems.

END OF UNIT

Unit 2 Test

Time: 45 minutes

Total: 40 marks



Name _____

Class _____

Marks **1****Choose the correct answer****8 marks***Underline your answer.*

1. A new computer usually shows money as
 - (a) Rs.
 - (b) \$
 - (c) Pound
 - (d) Euro
2. The time zone of Sri Lanka is
 - (a) UTC +00:00
 - (b) UTC +05:00
 - (c) UTC +05:30
 - (d) UTC +08:00
3. Which one is NOT a file attribute?
 - (a) Size of the file
 - (b) Date it was made
 - (c) Colour of the file
 - (d) Location
4. You can open it but you cannot change it. It is a
 - (a) hidden file
 - (b) read only file
 - (c) deleted file
 - (d) new file
5. Which port carries sound and picture to a television?
 - (a) VGA
 - (b) DVI
 - (c) HDMI
 - (d) PS/2
6. The network cable goes into the
 - (a) eSATA port
 - (b) RJ45 port
 - (c) USB port
 - (d) DVI port
7. Which tool removes files we do not need?
 - (a) Disk Cleanup
 - (b) Control Panel
 - (c) File Explorer
 - (d) Paint
8. Which one is a software problem?
 - (a) The mouse cable is loose
 - (b) The monitor is switched off
 - (c) The trial time of the program is over
 - (d) The speaker cable is out



2 Fill in the blanks

8 marks

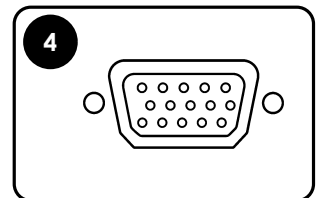
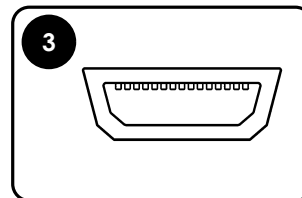
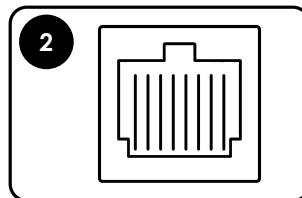
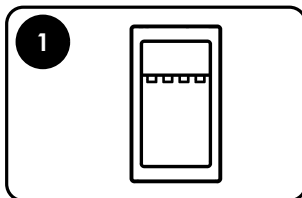
One word in each blank.

1. We change the date format in the window of the Control Panel.
2. The letters after the dot in a file name are the file
3. Nobody can see a file in the folder.
4. An external hard disk goes into the port.
5. software finds and removes a virus.
6. A virus can make of itself.
7. The two kinds of computer problem are hardware and
8. Sri Lanka uses the measurement system.

3 Name the port

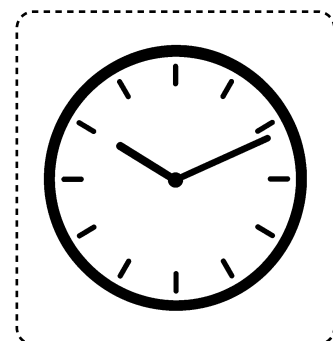
8 marks

Write the name under each picture.



"Ask the question today. Stay a beginner if you do not."

- THE KING OF ICT



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4**Answer these****16 marks***Write in the space given.*

1. Write FOUR attributes of a file. (4 marks)

2. Write FOUR ports of a computer. Write one device for each. (4 marks)

3. A computer starts very slowly. Write THREE things you would do. (3 marks)

4. Write the difference between a HIDDEN file and a READ ONLY file. (2 marks)

5. Your friend says: "My computer shows dollars, not rupees." Write the steps you would tell your friend. (3 marks)



WORD POWER

Unit 2 Word List

Seventeen words you must know



Word	What it means
Antivirus software	A program that finds and removes a virus.
Application software	A program that does one special job. For example MS Word or Paint.
Attribute	A detail about a file, like its size or its date.
Control Panel	The place in Windows where we change settings.
Disk Cleanup	A tool that removes files we do not need.
Driver software	Small software that helps a device work with the computer.
File extension	The letters after the dot in a file name. They show the kind of file.
Hidden file	A file that nobody can see in the folder.
Operating system	The main software that runs the computer. For example Windows 10.
Port	A hole in the computer. We push a cable into it.
Read only file	A file you can open but cannot change.
Region	The Control Panel window for date, number and money formats.
Time zone	One part of the world. It keeps its own time.
Troubleshooting	Finding the cause of a problem and fixing it.
UPS	A box that keeps the computer on for a short time when the current goes off.
Uninstall	To remove a program from the computer.
Virus	A bad program. It spoils data and copies itself.

"Every expert was once a beginner who refused to give up."

- THE KING OF ICT

