

The Computer Club



Providing Computing Assistance for All

InfoBytes



Issue 23 - May 2001

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Welcome!

Hello again everyone – I hope you all enjoyed the last newsletter, and will find this one interesting:-)



Now – first things first – you will all be glad to hear that **I AM NOW EMPLOYED!!!** However this obviously means that I do not have quite the amount of time that I had before, so I may not be able to answer questions very quickly and may take longer providing and information promised. On the plus side I am now employed, (as IT Support Technician for University of Bath Physics Dept) and so hope to find my niche providing network and general IT support to the staff and students.

This issue is probably going to turn out to be a hardware one, as I have decided to write articles on building your own PC and home networking (if I have time!). Both of the subjects mentioned are things that I have recently completed (those that come to meetings will be pleased to know that I am no longer risking all of my data and my only PC by bringing it to meetings) and now own half of a new PC (shared with Liz, as the original one was) that should last for a good while – you can find the specification of the new machine (named Charlie – don't ask why, but then the original was Albert!) in the article – it then seemed an obvious step to network the two machines, so that is what has been done!

Anyway, enough from me (though I haven't rambled very much this time), lets get on with the rest of the newsletter.

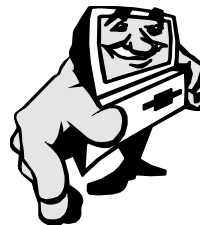


The Story of a Virus

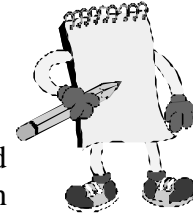
Last August our son informed us that he thought we might have a virus. He had one and wasn't sure whether we had given it to him or he to us. He bought the Norton Anti Virus disk and put the files into quarantine. We were very pre-occupied at the time and weren't using the computer so didn't look into it. Then in September our friend in Canada, who had been having a lot of trouble with his computer, bought a new one. This came complete with the Norton Anti Virus system. He immediately found our messages were infected with KAK Worm! We immediately acquired the Norton Anti Virus disk and isolated all the messages with the virus. Because we had used the computer very little during the summer we were able to go back and find that the virus had originated from our friend in Canada in the May. He has a great number of correspondents throughout the world, so where he originally got it from will never be known. However it seems likely that all the problems he had been experiencing were probably due to the virus.

Once the virus was isolated we were able to send and receive E-mails once more. However the large number of quarantined files meant that we repeatedly had a message saying that the memory was full. We spoke to Adrian about our problem and he kindly offered to come to our house and clear the computer of the virus. This he successfully did a few days later, much to our relief. MANY, MANY THANKS, ADRIAN.

Jo and Roy Orchard.



Diary Dates



Friday 11th May Databases Stage 2 Hands On (?)
Please note that this meeting will not be held in the normal room, but will be elsewhere in the building.

Friday 8th June MEETING POSTPONED UNTIL JUNE 15TH

FRIDAY 15TH JUNE General

Friday 13th July Spreadsheets stage 2 Hands On

Friday 10th August Word processing stage 2 Hands On

Friday 14th September ANNUAL GENERAL MEETING

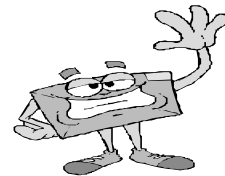
Please can as many people as possible try to attend the AGM in September, as this is important for the future of the club.

Hardware News/Software News

Not aware of any hardware news this month!

On the software front, Microsoft has announced the beta testing of Windows XP, and the (partial) release of Office XP – the latest versions of the operating system and office program. More information at a later date.

Handy Hints



You can lose your work at any stage—
remember to save at regular intervals—not just at the end.

When preparing a complicated document—supply your family with a set of ear plugs each.



Gwen's Corner

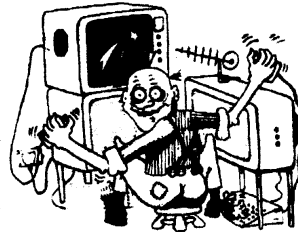
Computers have become invaluable in our businesses and our hobbies. In fact, in my hobby, photography, they have completely revolutionised it. You no longer need any technical knowledge of darkroom mysteries. Nowadays anyone with a camera, a computer, a scanner, and a little practise, can turn an ordinary looking snapshot into something they can be proud of. What used to take hours fumbling around under a dim red light in a darkroom, involving various messy, smelly chemicals, can now be achieved digitally in a comfortable, warm, light room in minutes.

Don't be put off if you haven't got a digital camera or other expensive equipment. All you need to start you off is an ordinary camera, a computer with a reasonable amount of memory (images take up a lot more memory space than text), any flatbed scanner, and some sort of imaging software. There are many such programmes on the market at the moment at a wide range of prices. These include Photoshop, Photosuite, Photodeluxe, Paintshop Pro, Coral Draw, and Paint, to mention just a few. It is quite possible that you already have one such programme installed into your computer. If so, open it up, scan in a snapshot, save it in its original form, and then have a go. You can learn a lot through trial and error and just seeing what happens when you click this or that button. Don't be afraid of it. If you loose it just start again. You'll be amazed at the results. You can also repair and restore old photos by scanning them in and manipulating them in the same way.

Digital imaging has put the fun back into photography. As you are no longer restricted to the conventional picture you will find yourself looking at subjects in a completely different way, taking pictures that you had never thought of before. Have a go – and you'll be hooked. Maybe your final images won't win any prizes but, print them of glossy computer paper, and they'll certainly impress the relatives.



Building your own PC



First we tackle the question WHY? – why would anyone in their right mind go out and build themselves a PC when there are so many on the market to choose from, well there are several reasons:

1. The sense of achievement you get when it finally runs!
2. You get the machine YOU want, not what a salesperson thinks you want.
3. You can save yourself money (possible – but not likely!).
4. If you want to you can continue using parts of an existing PC (assuming you don't want to use this one as well).
5. The amount you will learn by doing so.

There are several steps that go towards the final product, and I will tackle them each in turn, but because I know you will be impatient, they are (icons show the relative difficulties of the stages):

- | | | |
|-----|---|-----|
| 1. | What do you want the PC for? | ☺ |
| 2. | Saving up some money! | ☹ |
| 3. | Choosing components. | ☺ |
| 4. | Saving more money! | ☹ |
| 5. | Buying the components. | ☺ |
| 6. | Putting the PC together | ☺ |
| 7. | Testing the PC | ☹ |
| 8. | Installing all the software, drivers etc. | ☹ |
| 9. | Testing the PC | ☹ |
| 10. | Adding Extras | ??? |

Right, so let's get on with:

Stage 1 – What do you want the PC for?



This may seem like a silly question; you obviously know what you want a PC for! So write it down, then right down anything you have always fancied doing but haven't because your PC *was too old*. Now right down some things that sound ludicrous now, but

will probably be commonplace by this time next year (DVD RAM, always on internet, home appliance control, wearable computers – that sort of thing). Note that if you intend to play a lot of games, or do a lot of graphics or video work you will need a very different PC to someone just wanting to use Word.

Stage 2 – Saving up some money! ☹

Let's face it; if you are going to be building a PC you are (probably – unless you have a lot of components you can reuse from an old PC) going to be spending a serious amount of money. I would not expect anything less than £800 – but for a “power PC” (similar to the one that will be specified here) you are talking a lot more, possibly £1500-£2000. So get saving!

Stage 3 – Choosing Components 😊

This is probably the most exciting time, as you have to make some fundamental decisions about your new PC. As a basic list, you will need the following (suggested suppliers in brackets – more details at end):

- * Case with Power Supply (230W minimum) (Maplin)
- * Motherboard (to match processor – see below) (Maplin, Jungle, Dabs)
- * Processor Intel Celeron/PIII/IV (Maplin, Jungle, Dabs)
AMD Duron/Athlon
(note this comes in different packages – slots or sockets!)
- * Processor fan
- * RAM (DIMMs – or RAMBUS for P IV) (Maplin, Jungle, Dabs)
- * Hard drive (Jungle, Dabs)
- * Floppy drive (Dabs, PC World)
- * CD ROM (or CD-RW or DVD ROM) (Dabs, PC World)
- * Graphics Card (AGP if motherboard supports) (Dabs, PC World)
- * Keyboard and mouse (Anywhere!)
- * Monitor (Dabs, PC World, Jungle)

- * Software (Windows 98/Me, Office, Virus Scan etc)
(Anywhere!)

Please note this must be a full version not an upgrade!

Other items worth considering:

- * Sound card
- * LS 120 drive
- * Zip/Jaz drive
- * Modem
- * Network kit (if have more than one PC)
- * Case fan(s)

It is very important to check all of the information supplied by the manufacturers BEFORE you purchase (web sites are very good for this) to ensure everything will work together. Magazines are always good for information as well – I would particularly recommend PC Advisor as it has pages of reviews, very useful for comparing similar products.

Decide what you want, and write it all down, with (approx) prices, then sit down and add it all up.

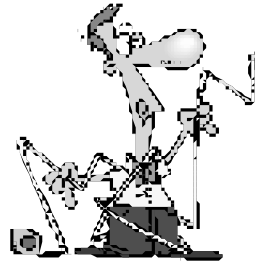
Stage 4 – Saving more money! ☹

I suspect that you will need to do this after the previous stage – as it is very easy to get carried away when deciding what you want to have in your PC. You will find yourself going through steps 3 and 4 for a while, saving money and changing your list of desired components until eventually you get to the next stage.

Stage 5 – Buying your components 😊

This is when it gets frightening! You will probably not purchase everything from the same place (with mine things were purchased from all of the above suppliers), and some will buy in person, and some via mail order or the internet – remembering to use a credit card if at all possible, for added security. Spend a bit of time over this stage, and make sure you have a receipt or invoice for every single item.

Stage 6 – Putting the PC together



For this stage you will require:

- * 1x No. 1 Philips screwdriver
- * 1x No. 2 Philips screwdriver
- * 1x tweezers or needle nosed pliers
- * 1x Anti-static wrist strap (I have one you can borrow if necessary)
- * Large table to do the assembling
- * 1-6 hours (depending on various factors)
- * 1 cloth to wipe your hands/brow or whatever (when assembling some of these bits you will sweat!).

The first thing to do is to clear yourself a space, and set out all of the items in the order in which they need to be installed – obviously the motherboard has to be first, with everything else being fitted into it.

1. Open the case (not as easy as it sounds – our case was a screwless one from Maplin – as no instructions came with it I took nearly 45 minutes just trying to get into the case in the correct way). If you have purchased a tower (full/midi/mini) case you will probably be able to remove the motherboard “tray” from the case, to make the assembling easier (tower cases are a lot easier to deal with than desktop ones – NEVER think of building your own “slimline” PC – far too fiddly). Hopefully inside the case you will find a bag with a lot of screws, spacers etc in – keep these safe, they will be needed!
2. Get your anti-static strap on! You are about to pick up the motherboard, so don’t take any chances – stray static that you may have picked up can kill a motherboard completely. Pick up the motherboard, and position it above the motherboard tray, look for the screw holes in the board, and make a note of which holes they correspond with on the tray. Put the motherboard back in its box, and turn your attention to the bag of screws etc that came in the case – you should find a number of “spacers” (usually metal or

- plastic, they sit between the motherboard and the tray), one of these should be inserted into each of the holes in the tray that you noted earlier. When all these are fitted, pick up the motherboard and carefully position it onto the spacers – in your bag you may find some small card/plastic or felt washers – place one of these on each of the screw holes, then find screws that fit (you will probably have various sizes in your bag) and securely fasten the motherboard in place – don't overtighten the screws! You may want to wipe your hands etc now:-)
3. Locate the processor socket/slot on the motherboard (I will assume you are using a socket based processor as much easier). This will almost certainly be a ZIF (zero insertion force) type socket, so raise the lever, ensure the pins are aligned with the holes (normally a pin missing in one corner to help with this) and then drop it into the slot – if any force is needed you are doing something wrong! Then bring the lever into place, locking the CPU in.
 4. Now you need to install the CPU heatsink and fan. **WARNING: NEVER USE A PC WITHOUT A HEATSINK AND FAN FIXED TO THE CPU (and working) OR YOU COULD BURN OUT THE CHIP.** On the base of the heatsink you should find a small square of heat transfer compound (this provides a better connection between the chip and the heat sink) – remove the plastic covering this. **VERY CAREFULLY** place the heatsink on top of the CPU, ensuring aligned correctly, then fasten the clip on the heatsink to the projecting lugs on the CPU socket – this may need a screwdriver or box spanner to accomplish, and should be fairly easy to do – **DO NOT ROCK THE CHIP** or it may be broken! When the heatsink and fan are firmly attached to the CPU, plug the fan into the appropriate place on the motherboard (see motherboard manual for this info).
 5. Next locate your RAM and the sockets for it – these will probably be the DIMM type package rather than the SIMM – installation is slightly different. If using dimes, pull the clips down at each end of the socket, place the RAM into the slot (may take a little effort) and then push the clips back up to hold in place.

- If using Simms, these have to be inserted at an angle, and then pushed up into place.
6. Now is a good time to put the motherboard back into the case (if you took it out!), as we are almost ready to install the drives and any interface cards necessary. Note that there will be a thin piece of metal somewhere to go around the sockets at the back of the case where the motherboard shows through – you may have to remove some of the pre-punched sections to correspond to your board – this just clips into the case in the necessary place.
 7. Find the large connector coming from the power supply (PSU) and push it into the corresponding socket on the motherboard – you can't miss it! You will also find a lot of other cables from the case need to be plugged in – these do things like work the LEDs, and the power switch, so they are worth plugging in – use the manuals again to find where they have to go.
 8. Now decide which positions your drive(s) are going to go into (you may be limited by cable length). Fix the floppy drive into the appropriate position (probably obvious for this one – it is a good idea to slide the drive in place, then see how far it needs to stick out to be flush with the front panel), and use the floppy drive ribbon cable to connect it to the floppy drive socket on the motherboard (again, see the manual), and take one of the connectors from the PSU and plug into the power socket of the drive. That was easy wasn't it!
 9. Now we turn our attention to the CD-ROM (or DVD or whatever) and hard drives – these are slightly more complicated!

On your motherboard you will have two (possibly more) sockets for the drives – these may be referred to as ATAPI or IDE, EIDE or various others, it all means pretty much the same thing! One of these will be designated the Primary channel and the other the Secondary. Each channel can take up to two drives – the Master and the slave (told you it was complicated!). It is normal to put drives into a computer using the following scheme:

Primary Master	Main (bootable) hard drive
Primary Slave LS120, other drive)	Unused (may be Zip,
Secondary Master DVD-ROM	CD-RW/ROM or
Secondary Slave	Unused (may be Zip, LS120, other drive)

The socket the connecting cable is connected to shows the primary or secondary status of the drive. The Master or Slave status is decided by a series of DIP Switches or Jumpers on the drive itself – the manufacturer will provide information about the different positions required for the different methods of operation.

Now you have decided where your drives are going (physically) and what positions they are taking logically, put them in place in the case (again, for the CD ROM slide it in place and see it comes flush with the front panel). You may have to remove a metal “blinking panel” from the computer case to enable you to insert the CD-ROM drive – this can take a bit of work! Remember to take a power connector from the PSU to each of the drives as well!

10. Now we will look at the interface cards (i.e. Sound card, graphics card, modem etc). If you have purchased a motherboard with all these built in your life is a lot simpler so you can miss this step!

First step is the graphics card – this will probably be of the AGP type, and will therefore need the AGP slot on the motherboard, so locate this. Now remove the blanking plate on the case corresponding to this slot, and carefully push the card into the slot (may need a bit of effort), making sure you keep the applied force even over the whole of the card – when it is in place and seated firmly, screw the top of the card to the case (will make sense when you do it).

Now insert any other cards into the case – these will probably be PCI cards, but may be ISA ones – they insert in exactly the same way as the graphics card. At this stage it doesn't really matter which slots you put them into (unless any of your manual state otherwise), but you may find later

that certain cards work better in certain places – in mine for instance my network card mustn't be directly next to the sound card! Not that the sound card will probably have some cables to connect – either to a point on the motherboard, or more likely directly from the CD-ROM drive (this allows CD playback without using the motherboard resources – normally just a CD Audio cable, but newer sound cards and DVD Rom drives may have SPDIF outputs – in which case connect up both!).

11. If you have anything else to go into the case (case fans, extra USB plates etc) now is a good time to put them in!
12. Now, plug your monitor in, plug the computer in (we are going to operate it without the cover for the first time, so that we can check fans etc are working, and to make it easier if they aren't), and go and have a cup of tea – testing can wait until your nerves have settled!

Stage 7 - Testing the PC



This is probably the most nerve-racking part of the whole operation – does it actually work?



1. With everything plugged in (including keyboard and mouse), and switched on, press the Power switch on the PC (may need to be worked out if you haven't got a front panel in place!) – hopefully everything starts to whirr, the fans go around, and you start to get a BIOS screen appear – if so, well done! If however like most people, myself included, this doesn't happen, it is time to switch off the PC and check all connections – I spent a long time doing this, then discovered that the PC power lead had a blown fuse in it!
2. Try again – when you finally get to the BIOS screen follow the instructions in your motherboard manual to set up the clock, drives etc.

Stage 8 - Installing all the software, drivers etc.



1. In the BIOS, set the PC to boot from the CD-ROM, then

- place your operating system CD in the drive, and reboot. Hopefully it will start the installation automatically – this will take care of the formatting of the drive(s) for you (you can partition the drive if you want, to give you more than one apparent drive in Windows – that is entirely up to you) – it may also go a long way through the process of installing the drivers for your hardware.
2. When you finally get to Windows (that installation takes a long time doesn't it!), you can start installing the drivers for all your hardware – it is a good idea to do the motherboard drivers (if any) first, then the graphics card, then reboot and change the graphics settings to something a little more impressive than that available from the standard Windows drivers. You can then install and other drivers (sound card etc).
 3. Reboot the PC.
 4. Install any software that you need on your PC (office suites, virus scanners etc), and reboot whenever prompted.

Stage 9 - Testing the PC



Yes, it is time to test again – this will probably take you quite a long time! You will need to test the entire computer thoroughly – and the only way to do this is by using it! Consider your first month of use as the test period – during this time you will probably find yourself making a lot of adjustments to the system settings, you may even end up changing the order of some of the cards in your case!

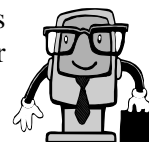
Stage 10 - Adding Extras

???

Now you have a fully working PC it is time to add in all those nice extras – LS120 drives, Zip drives, scanners, printers, networking (?), graphics tablets etc, and of course all your new software!

Then sit back, and look smug when your friends come around and ask you where you bought your new PC!

Adrian



Internet Phone

If, like me, you have distant friends and relatives in this country or countries overseas, you may be interested in using your PC as an alternative to the telephone for voice communication.



You will need a Microphone, Loudspeakers and Sound Card, and an agreement with your recipient when you will be on line – unless you are happy to be on line permanently, which will cost you money.

Go to Search Engine ‘Yahoo’, the Internet Phone and ‘paltalk’. Sign up (totally free) and, when accepted, make the necessary adjustments to your microphone sound level. The cost of your voice link will be only that of a local call to your server.

If you would like to exchange video pictures of each other, it is possible to connect a Web Cam, a small cheap video camera obtainable from PC World or Argos, cost about £40.

Roy Orchard.

Gender Bender

Ladies state that computers **MUST** be Male because they have a lot of data but are still clueless.

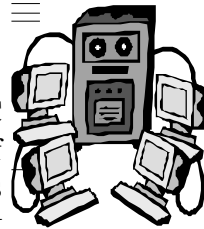
Handy Tip

When in ‘WORD’ hit the **equals sign (=)** five times, then the **return**.

The result is a double line the complete width of the page. Useful in some documents

Tony Seager

Home Networking



So what do you do with your old PC now you have built yourself a new one? If you're like me you will have literally hundreds of files and settings on your old computer, that you obviously like to get onto your new one – but how do you go about it? By far the simplest way is to keep the old PC (at least for a while) and to network it with the new one.

Why Network my home computers?

There are many reasons for wanting to set up your own network at home, the advantages being so great that I recommend **EVERYONE** with more than one PC in their home to set up some sort of network – it doesn't have to cost much, but the benefits are enormous.

Home networking allows you to do many things – sharing files is just the beginning. Windows 95/98/Me are perfect for setting up a network, and allow all sorts of resources to be shared through the network – such as printers, CR-RW drives, modems, scanners etc. Another use for a network is of course to play games against somebody else! To give an example, I now have two PCs at home – my old one (over 3 years old now) and the new one I built myself (about 2 months old), 3 printers, a scanner, digital camera etc, and now CD-RW, LS120 and Zip drive in the new PC. Obviously all my files were on the old PC (totalled about 1.2Gb – so you can forget floppies!), and the printers had to be shared – all of the things like scanner etc were moved to the new PC (as so much more powerful) meaning they couldn't be access from the old one. The solution to all the problems was to network the 2 computers, thus sharing everything. I now have 2 printers (and all the extras) connected to the new PC and one printer to the old – yet both computers can print to any of the printers, or use any of the drives!

How do you go about setting up a network?

By far the easiest way is to buy a kit – there is a wide range available! PC World have an entire shelf of networking related products, so look for a kit of everything you will need, starting cost for a very basic kit is about £50.00 – the kit we have added to our computers was top of the range for home use, and cost £90.00.

So what do I need?

In the simplest case, just a Network Interface Card for each of the PCs (fitted internally usually, but there are some USB versions beginning to appear), and a cable to connect the 2 together – this should be a CAT5 cable, capable of up to 100Mbps (megabits per second) transfer. The interface card will be either a 10Mbps or 100Mbps.

However, there are problems with a simple direct connection like this, and by far the best approach is to purchase a hub (if you buy a full kit they usually have a 5 port hub), which sits between the computers – so each computer is independently connected to the hub. This has several advantages, mainly that you do not need to have both PCs on at the same time (sometimes necessary with direct connections), and also it allows you to very quickly add in another PC if it becomes necessary (eg a laptop). Of course you have to find ways of hiding the cables – so unless you want to go to a lot of effort, you will need to keep both PCs in the same room!

Another option now available is a wireless network – these work in the same way as ordinary adaptors except they use radio waves instead of cables – and have a starting cost of about £300.00.

If the speeds quoted don't mean much to you, think in terms of your dial-up internet connection:

Dial up	10Mbps Network	100Mbps Network
Max speed 56Kbps	10240Kbps	102400Kbps

So, we are talking about a fast connection here!

For the £90.00 we spent we had 2 interface cards, 1 five port hub, connecting cables, mains adaptor (for the hub) and driver disks. Also included were detailed instructions covering all the installation and software setup.

Is there anything else to consider?

Yes – each PC will need a name to identify it on your network – in our case they are Albert and Charlie! This allows you to easily identify which resources are where (all of the resources need to be given names as well – this is easy to set up). When set up you can access files as follows:

If working on Albert and storing on its hard drive, I store things in

c:\My Documents.

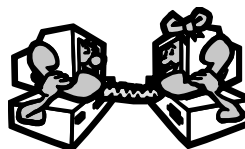
The C:\ drive on Albert is shared as “Old HDD”, so to access the files from Charlie I find them in the folder:

\\Charlie\Old HDD\My Documents

Simple!

Internet connections and all manner of other things can be shared in a very similar manner – so what are you waiting for?

Adrian



Puzzle Time



Do you remember the coin puzzle we set you in the last newsletter? - One of 12 coins is counterfeit, being different only slightly in weight (it may be heavier or lighter than the rest). Using a simple balance which only tells you which of the two sides is the heavier, how can you find the fake coin and say whether it is too heavy or too light in only three weighings.

Here is the answer:-

1. Weigh coins 1,2,3,4 against coins 5,6,7,8. If they are equal, the fake is one of coins 9,10,11,12, so go to step 2. If they are not equal, go to step 3.
2. Weigh coins 9,10 against 11,1. If they are equal, the fake coin is number 12 and it can then be compared with number 1 to see if it is heavy or light.
If 9,10 are heavier than 11,1, then the fake is either 9,10 or This means that EITHER 9 or 10 is heavy OR 11 is light. (If 9,10 are lighter than 11,1, then EITHER 9 or 10 is light OR 11 is heavy). Weigh coins 10,11 against 1,2. If they are equal, 9 is the fake and we know whether it is heavy or light from the second weighing. If they do not balance, then either 10 or 11 is the fake - we can tell which by looking at the second weighing.
3. We know that 9 - 12 are genuine. Suppose 1,2,3,4 are heavier than 5,6,7,8. This means that EITHER one of 1,2,3,4 is heavy OR one of 5,6,7,8 is light.
4. .Weigh 1,5,9 against 2,6,7. If they are equal, then either 3 or 4 is heavy or 8 is light. Weigh 3 against 4. If equal, then 8 is the fake and it is light. If not equal, the heavier one is the fake. If 2,6,7 are heavier than 1,5,9, then EITHER 1 is heavy OR 6 or 7 is light. Weigh 6 against 7. If equal, 1 is the fake and it is heavy. If not equal, the lighter one is the fake. If 2,6,7 are lighter than 1,5,9, then EITHER 5 is heavy OR 2 is light. Weigh one of them against 9 to determine which.
PHEW!!!

Derick Alliban.

Some New Puzzles For you

1. What are the next few letters in the sequence -
O T T F F S S?
2. There are two balls in a bag, either of which could be black or white. Add one black ball to the bag. The probabilities of having BBB, BBW, BWB and BWW are each 1 in 4. Now draw one ball from each bag. The probabilities of it being black are -
BBB Probability 1, ie. certainty,
BBW Probability $2/3$,
BWB Probability $2/3$,
BWW Probability $1/3$.
To find the average, first add them together -
 $1 + 2/3 + 2/3 + 1/3 = 2\ 2/3$ or $8/3$,
then divide this by four, giving $8/3 / 4 = 2/3$.
BUT, this is the probability when there are two blacks and one white.
So, before the black ball was added, there must have been 1 black and 1 white ball in the bag !!!!!

3. Language Problem.
There are 36 guests staying at a hotel.
16 of them can speak French,
14 can speak English,
12 can speak German.

5 can speak English AND German,
3 can speak French AND German,
6 can speak French AND English.

2 can speak all three languages.

- Find (a) how many guests can speak only one language,
(b) how many guests can speak none of these languages.

Answers in the next Newsletter.

Derick Alliban.



Items for Sale

Nothing this month. Surely someone must have some software or manuals or some such thing that they'd like to pass on to other members. If you have **any** items for sale or wanted please complete form on the next page and return it to Adrian or myself.



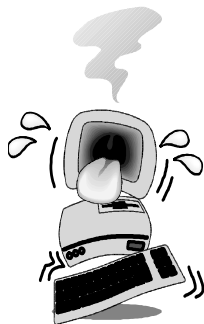
Items Wanted

An Epson Stylus 870 printer or similar.
More memory in my computer! - Editor

Another room to keep all my computer stuff in! Why is it that computers expand to fill any available space? - Adrian

WINDOWS

What does it mean?



W - Which
I - Idiotic
N - Numbskull
D - Designed
O - Our
W - Wobbly
S - System

Tony Seager

Items for Sale/Wanted

If you have an item for sale/wanted, please fill in the section below (or write the same information on a separate piece of paper) and send it to me, or hand it to me at a meeting .

Name:

Telephone:

E-mail:

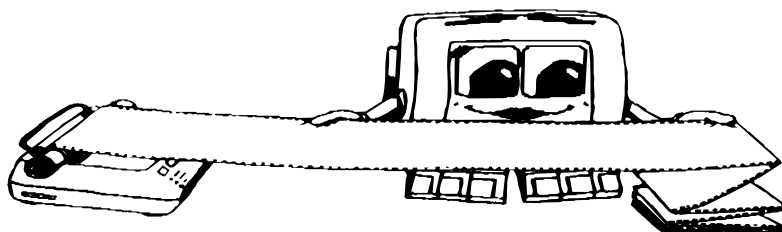
Is the item for sale, or wanted (please delete)?:

FOR SALE / WANTED

Description:

Price wanted/Willing to pay: £ _____

Date: _____



TO ERR IS HUMAN
To really cock things up
you need a
COMPUTER!

