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NOTES FOR STUDY PURPOSES

How to create effective notes for later reference

Blended learning, with its mix of learning opportunities, places even more emphasis on creating notes as a record of online teaching, as well as the independent learning that follows from that. Regardless of your degree course, there will simply be too much information to retain, thus, notes are essential to support your learning. This chapter explores different approaches to note creation and the styles that you might use to suit the subject, topic and content of what you hear or read.

Creating notes is a life skill that applies to your university studies and to your future career. How you create notes is a matter of personal preference and should reflect the topic, the source and presentation of the material and, most importantly, the purpose for creating the notes.



What's the difference between note-taking and note-making?

Note-taking is recording information as you receive it orally – for instance, in a lecture or tutorial – and tends to involve following the thought patterns of the person delivering the information.

Note-making is the process of creating notes following your own thought processes and it relates to creating printed material that you want to record for future reference.

WHY YOU ARE CREATING NOTES

Some people never get beyond seeing note production as simply something that students are expected to do – something of a traditional chore. Perceptive learners will have gone through some thinking about the why, where, when and how of their approach to creating notes:

- as a record from listening to someone else explain information, with or without interpretation;
- as a way of putting the information into a format that clarifies meaning to aid learning;
- as a way of arranging information in a format that can be used as a resource for assignment writing and possibly later exam revision.

Apart from lectures, you'll draw your source material from textbooks, journal articles and web materials, possibly based on a list of recommended resources appropriate to your subject. At other times you will have to find the relevant material for yourself in references in the text or through a digital search using library or web resources. The techniques described in **Ch 9–11** will help you identify the most relevant parts of the text quickly and provide basic information for your note-making.

WHERE AND WHEN YOU CREATE NOTES

Notes from lectures

Taking notes in a lecture or tutorial defines the place and time of note creation. Your lecture note-taking style is dictated by several factors, including the pressure of gathering information at the rate of the speaker's delivery and the stress of not wanting to miss key points. Usually, there is little time to process information and lay it out in a way that is always coherent. Sometimes it makes only limited sense when, and if, you look back at it.

You may feel that you have to rewrite notes from lectures so that you can arrange them in ways that are clearer and more memorable (**Ch 9, 10**). This takes time, and debate rages about whether this rewriting process is a worthwhile use of time. The argument goes that this reproduction does not aid learning. This has validity up to a point; but if you do revisit your notes and create a more coherent record that you can use for revision purposes later, then there is some merit in it. Whether this practice is sustainable as coursework becomes more intensive is controversial. A compromise might be to review the notes taken in lectures *on the day of the lecture* and annotate them using highlighters and different coloured pens so that, at a later date, you can identify key points, comments and ideas you've added for yourself.

Notes from text material

When you are making your own notes, you are more able to be in control of the location and the time that you allocate to the task. You can make notes anywhere you choose, but a desk and chair are more likely to keep you at the job than if you're lying on the floor or on your bed. Your material may be from primary, secondary, or tertiary sources (see Table 13.1) and you may be reading it in hard copy or on screen. Using speed-reading (**Ch 11**) and evaluation (**Ch 13**) skills will help you gain an oversight of the structure and content of the text. That way, you can select an appropriate style of note-making that will provide you with a concise, coherent and accessible record of what you have read.



Handwritten or keyboard notes in lectures?

This has become a subject of much controversy. Handwritten notes may be seen as old-fashioned and out of step with modern technology among modern students. Tablets and laptops are more likely to be seen on lecture room desks than A4 notepads. But what are the arguments for either option?

- Handwritten notes can be easily annotated, but so can computer notes.
- Handwritten notes can be easily lost, but computer notes and the storage systems on which they are saved can inadvertently be erased, corrupted or physically lost.
- Handwritten notes can be hard work, but computer notes straight onto the screen or using note-making apps with pre-designed templates may be more convenient and faster.
- Handwritten notes can allow for a choice of note-taking layouts, but note-making apps may only suit particular types of content.

Overall, the jury is out. Which approach you use, again, is your choice as long as it works for you. It may be that you choose a linear or key-word approach to note-taking in lectures (see Figure 10.1), but other methods for note-making from text. You may wish to experiment with some of the layouts shown at the end of this chapter; some of these can be done on paper or in similar styles using a note-making app. However, be aware that the handwriting you do, especially in lecture note-taking, allows you to maintain your handwriting speed. This is a factor in traditional exams (**Ch 51**): if you cannot write quickly enough, you may not manage to put your answers down on paper in two- or three-hour exams.

HOW YOU CREATE NOTES

Your note-making skills will develop as you progress in your studies. It takes time and experimentation to achieve methods that suit you. They will need to fit with your learning style (**Ch 7**), the time that you can allocate to the task, be appropriate for the material and the subject area you are tackling and also complement the delivery style of lecturers and authors.



Fundamentals of note creation

Routinely, you should always note the author's surname and initials, the full title, date of publication and name of publisher, plus: if a book, chapter and pages; if a journal, volume number and pages; and if a web source, the source URL. This information will be required to allow you to cite the source of your reading if you wish to reference it in your text (**Ch 27**). Note that in a lecture, you may be given only a surname and date; these will probably relate to a topic booklist where you will find the full bibliographic notation.

Personalising your notes on paper



Your notes have to be as meaningful in six days, six weeks or six months. Personalise them by using strategies that align with your learning style (**Ch 7**).

- **Underlining** – use highlighting or colour coding (for visual thinkers) to emphasise key words, concepts and facts.
- **Numbered lists and bullet points** – useful (for logical thinkers) for highlighting processes and sub-categories.
- **Layout** – mark out important content by putting it in boxes (for visual-spatial learners).
- **Mnemonics** – create or use a well-known sequence of letters or words (for read-write thinkers) to help recall a key point (e.g. 'Richard of York goes battling in vain' to remember the colour spectrum of a rainbow: red, orange, yellow, green, blue, indigo, violet).
- **White space** – avoid cramming too much on to a page; white space surrounding your notes will help to make them more visually memorable.

Personalising your notes on screen



Blended learning and the increasing use of VLE technology has laid emphasis on sourcing material online. These forms of learning have expanded the market for software applications that can aid students in their studies on and off campus. One of the growth areas has produced various note-making apps (some of these offer other functions also). This software is constantly morphing to meet new conditions as they emerge, which makes it difficult to appraise the apps other than to list some of the general features. These can include the ability to highlight sections, make notes on screen (which can be searched later) and insert callouts. To obtain up-to-date information on reputable note-making software it is important to seek recommendations from a member of teaching or library staff, since not all the offers that are available on the internet are free from obligation or totally compatible.

What you need to select a note layout

An initial scan of the text material will allow you to assess what you expect to glean from a source and thus will influence how you make your notes. While some texts will simply be a 'dip in and out', others will require intensive reading. For example, you may find that the text:

- frames an overview of the subject or a statement of facts;
- records a sequence or process;
- enables you to analyse an issue, problem or situation;
- explains the reasoning or presentation of a logical argument;
- compares different viewpoints, often with a critique of each;
- borrows quotes (with suitable citation **Ch 27**).

Your appraisal may mean that you want to add your own commentary about the text, perhaps by linking key points with what has been raised in a lecture or tutorial.

There are several layout strategies that you might consider using. Figures 14.1–14.7 illustrate some examples (see also **Ch 10**). Not all will be relevant to your subject, but some will. Some techniques may not seem directly suitable, but with a little adaptation they may work for you and

align with your learning preferences (Ch 7). For example, a ‘visual learner’ might prefer the concept map shown in Figure 14.5. Other methods might suit a specific task: an assignment that requires you to analyse a complex set of viewpoints or positions might best be approached using the matrix method shown in Figure 14.6; while one that asked you to review two sides of an argument could be tackled using the herringbone map idea shown in Figure 14.7, or a variant of it. Table 14.1 compares the advantages and disadvantages of each method.

Table 14.1 A comparison of the different methods of note-making from texts (illustrated in Figures 14.1–14.7)

Note type	Figure	Advantages	Disadvantages
Keyword notes	14.1	Good as a layout for easy access to information	Dependent on systematic structure in text
Linear notes	14.2	Numbered sequence – good for classifying ideas	Restrictive format, difficult to backtrack to insert new information
Time line notes	14.3	Act as a memory aid for a sequence of events or stages in a process	Limited information possible
Flow chart notes	14.4	Allow clear path through complex options	Take up space; may be unwieldy
Concept maps/ Mind maps	14.5	Good for recording information on a single page	Can become messy and difficult to follow; not suited to all learning styles
Matrix notes/Grid notes	14.6	Good layout for recording different viewpoints, approaches and applications	Space limitations on content or amount of information
Herringbone maps	14.7	Good for laying out opposing sides of an argument	Space limitations on content or amount of information

Topic: DEPOPULATION OF THE COUNTRYSIDE		Source: Ormiston, J., 2002. <i>Rural Idylls</i> . Glasgow: Country Press.
Problem:	Population falling in rural areas Traditional communities disintegrate Incomer settlement – dormitory villages	
Reasons:	Mechanisation of farming Creation of farming combines Bigger farms, fewer employed Decline of traditional farming & related activities	
Effects:	Families dispersed – fewer children Closure of shops, post offices, schools, surgeries Transport links less viable	
Solutions:	Housing subsidies to encourage families to remain Diversify economic activity, e.g. tourism/action holidays Stimulate rural economy – farm shops, farmers' markets Diversify from traditional crops – seek new markets	

Figure 14.1 Example of keyword notes. This method uses a clear layout that supports an analytical style.

- (a) **Topic: OBESITY IN CHILDREN** Source: Skinner, J., 2001. *Diet and Obesity*. Edinburgh: Castle Publishing.
1. Lifestyle
 - 1.1 Television, computer-games generation
 - 1.2 Unsupervised leisure time – sedentary
 2. Diet
 - 2.1 Constant 'grazing' – junk food
 - 2.2 Additives/processed foods
 - 2.3 Lack of adequate fresh food, including fruit & vegetables
 3. Exercise
 - 3.1 Sport by spectating rather than participating
 - 3.2 Decline in team sports in schools
 - 3.3 Children over-protected from 'free play' outdoors
 4. Family
 - 4.1 Parents overeat; children likewise
 - 4.2 Instant food
 - 4.3 Food as an incentive & reward
 5. Schools
 - 5.1 School meals spurned in favour of snack bar/chip shop
 - 5.2 Healthy-eating programmes as part of curriculum
 6. Health service
 - 6.1 Less emphasis on prevention
 - 6.2 Limited health education of parents and children
- (b) **Topic: GENERAL FEATURES OF ORGANIC MATERIALS** Source: Barker, J., 2001. *Chemistry for University*. Manchester: Midland Publishing.
1. Solid state – molec. crystal – powder, poly. Thin films
 2. Unique physical properties – exploit for high-tech applications
 3. Advantages
 - 3.1 Versatile properties – reg. by organic chemistry
 - 3.2 Readily accessible – via organic synthesis
 - 3.3 Low cost – cheap raw materials
 - 3.4 Tractable – fusible, soluble: easy to fab.
 4. Disadvantage
 - 4.1 Relatively fragile
 5. Important types
 - 5.1 Conducting CT salts
 - 5.2 Conducting poly
- (c) **Topic: OPERATIONAL AMPLIFIERS** Source: Scott, D.I., 1977. *Operational Amplifiers*. Coventry: Circuit Publishers.
1. Usually an integrated circuit; can be discrete
 2. Uses all technologies: bipolar; FET; MOS; BI-FET
 3. Effectively a highly stable differential amplifier
 4. Advantages
 - 4.1 High voltage gain – typ. 100,000
 - 4.2 High input impedance – typ. $1\text{ M}\Omega$ – can be much higher, FET, MOS
 - 4.3 Low output impedance – typ. $600\ \Omega$
 - 4.4 Low drift, BI-FET best
 - 4.5 Wide voltage supply range
 5. Disadvantages
 - 5.1 Relatively narrow bandwidth – GBP typ. 1 MHz (but operates to DC)
 - 5.2 Very unstable in discrete versions – requires matched transistors
 6. Common types
 - 6.1 741 – most common
 - 6.2 LM 380 – common AF AMP
 - 6.3 TDA 2030 – common power amp. – 20 W into $4\ \Omega$

Figure 14.2 Examples of linear notes. These are drawn from three diverse disciplines where topics lend themselves to hierarchical approaches.

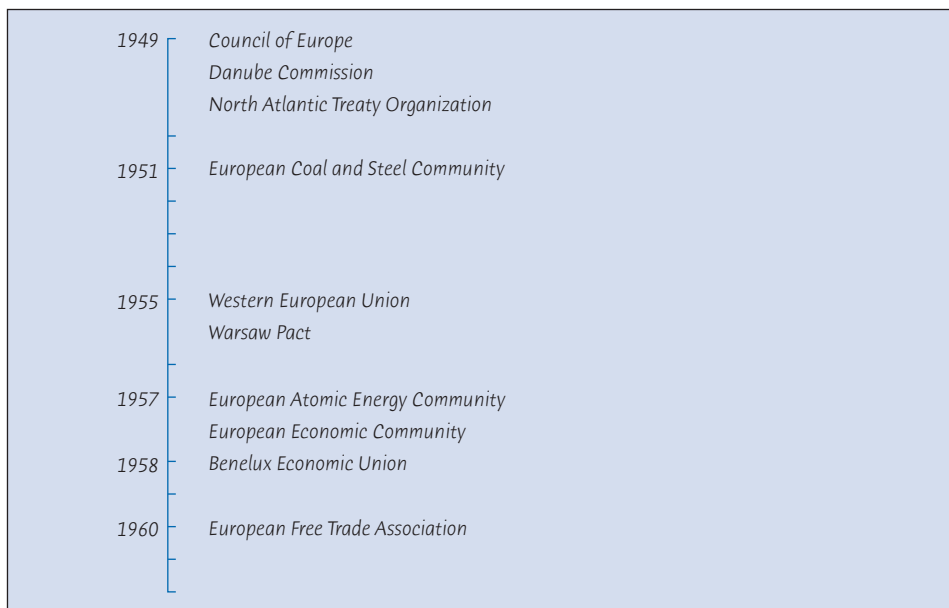


Figure 14.3 Example of time line notes. This design is good for showing a sequence of events, in this case the development of European organisations.

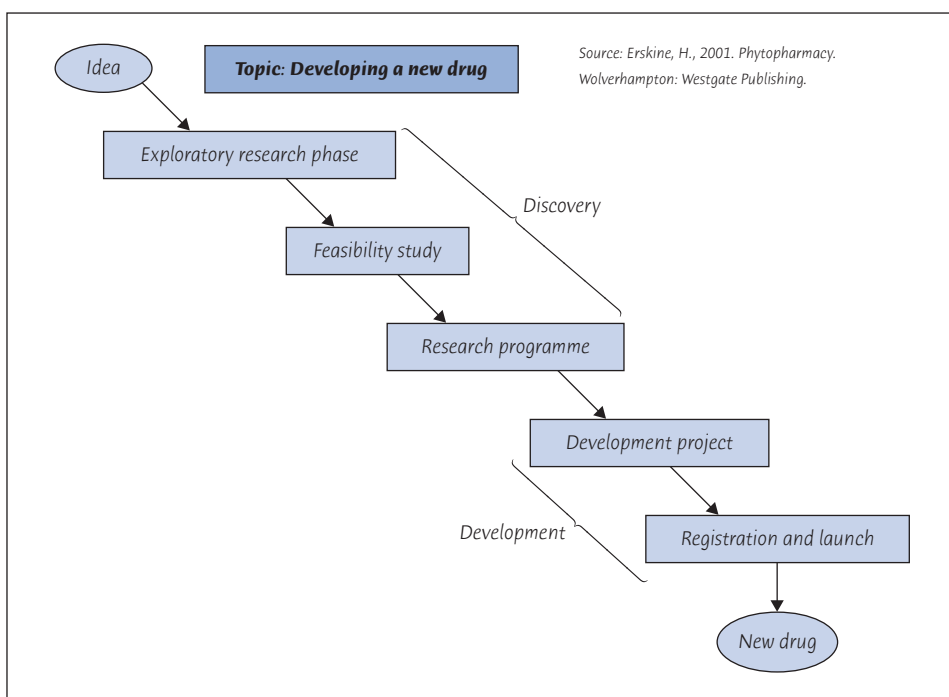


Figure 14.4 Example of flow chart notes. These are particularly useful for describing complex processes in visual form.

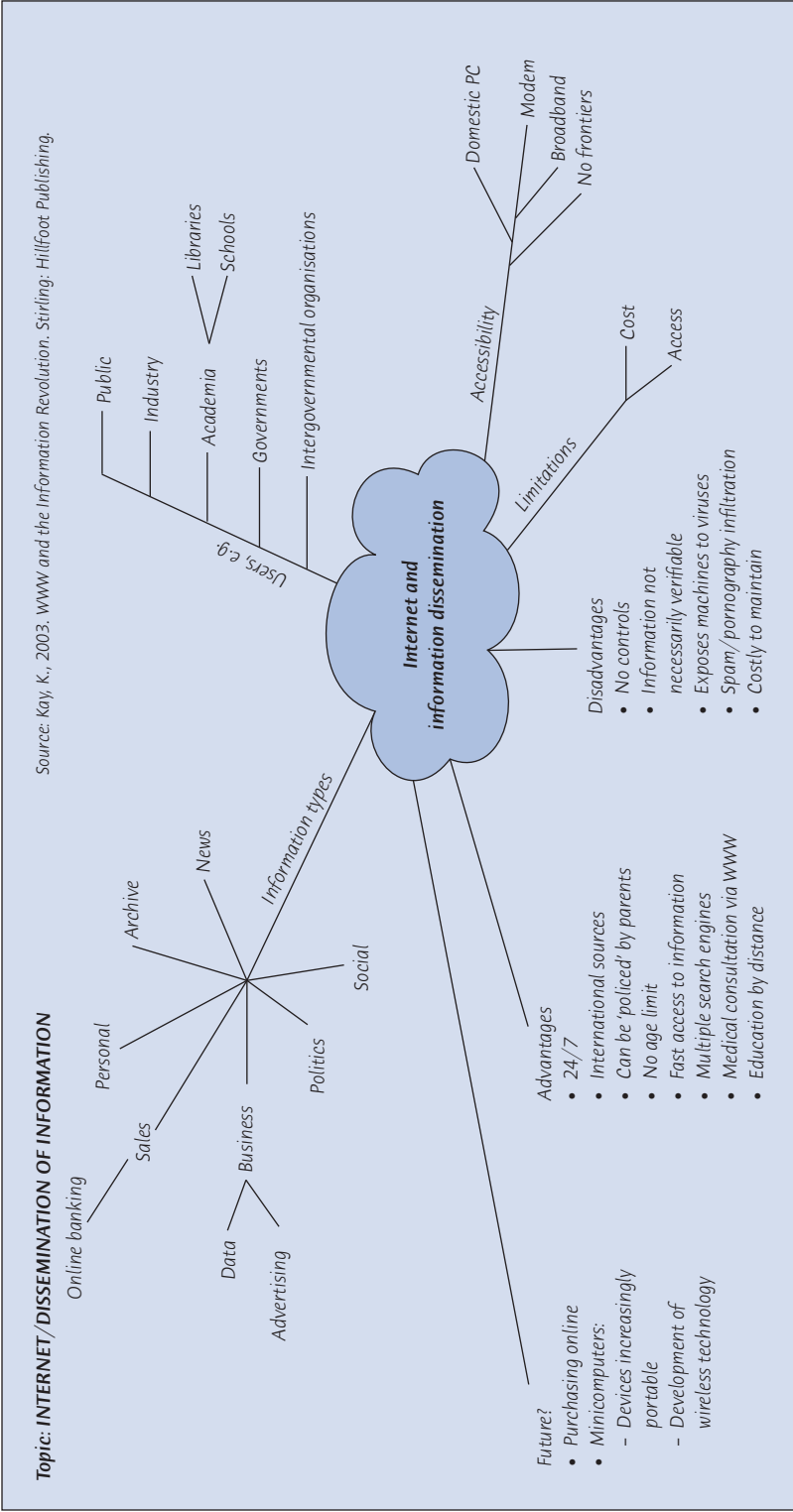


Figure 14.5 Example of a concept map. This may also be called a mind map. Suits visual-spatial/visual learners (see Table 7.1).

Source: Walker, I.M.A., 2005. *Urban Myths and Motorists*. London: Green Press.

Topic: TRAFFIC CONGESTION				
Solutions	Council view	Police view	Local business view	Local community view
Pedestrianisation	+ Low Maintenance – Initial outlay	+ Easier to police + Less car crime + CCTV surveillance easier	+ Safer shopping and business activity – Discourages motorist customers	+ Safer shopping + Less polluted town/city environment
Park and ride schemes	+ Implements transport policy – Capital investment to initiate – Car park maintenance	+ Reduces inner-city/town traffic jams + Reduces motor accidents – Potential car park crime	– Loss of custom – Lack of convenience – Sends customers elsewhere	+ Less polluted town/city environment – Costly
Increase parking charges	+ Revenue from fines – Costly to set up	– Hostility to enforcers	– Loss of custom – Delivery unloading problematic	– Residents penalised by paying for on-street parking
Restrict car journeys, e.g. odd/even registrations on alternate days	+ Easy to administer	+ Easy to police	– Seeks exemption for business vehicles	+ Encourages car-sharing for daily journeys – Inconvenience
Levy congestion charge for urban journeys	+ Revenue raised – Cost of implementing tracking system	– Traffic jams on alternative routes	– Cost of loss of custom	– Inhibits work/leisure activities – Cost

Figure 14.6 Example of matrix notes. This particular analysis lays out positive (+) and negative (–) viewpoints on an issue from a range of different perspectives.

Topic: **TRANSPORT POLICY PROPOSAL:**
MOTORISTS PAY BY THE MILE

Source: Driver, I.M., 2005, *Radical Policies*.
Edinburgh: Calton Press and Publishing.



Figure 14.7 Example of a herringbone map. This design is good for showing, as in this case, two sides to an argument. May be particularly appealing to visual learners (see Table 7.1).

Some of these models, or variations on them, are available in some note-making applications. Some apps are better suited to subjects where there is a heavy factual content; others are more suited to conceptual material.

This chapter has suggested ways in which you might approach note creation, taking into account the different contexts of note-taking from lectures and note-making from textual material. In addition, it has recognised the debate on the relative merits of handwritten and keyboard methods, including the use of commercial note-making apps. The next chapter will provide some further insights into how you might use critical thinking to identify what you need to record in your notes and integrate into your knowledge and understanding.



PRACTICAL TIPS FOR CREATING NOTES

- **Read text for meaning.** One of the snags about making notes from text is that there is a tendency to begin well but slip into writing down almost everything you read. This becomes a passive mechanical exercise and means that you are not processing the information and integrating the content into your knowledge base and understanding. Return to [Ch 11](#) and [Ch 13](#) to remind yourself of ways in which your reading can be more productive.
- **Make your notes memorable.** For handwritten notes, it's important to make sure that your notes are visually striking. However, spending lots of time making them look pretty will not necessarily pay dividends. Again, try to achieve a balance – visually memorable enough to trigger your recall but not so elaborate that they become a meaningless work of art without substance. Ensure that this does not become a displacement activity ([Ch 4, 6](#)).
- **Develop your own 'shorthand'.** Some subjects have their own abbreviations, for example MI (myocardial infarction) or WTO (World Trade Organization), and of course there are standard abbreviations – e.g., i.e., etc. However, you'll also develop your own abbreviations and symbols drawn from your own experience – for example, maths symbols, text messaging or words from other languages. As long as these are memorable and meaningful to you, then they can be useful tools in making and taking notes.
- **Save time by using a photocopy.** Sometimes you may find that the extent of notes you require is minimal, or that a particular book or other resource is in high demand and has been placed on short loan in the library. It may be more convenient to photocopy the relevant pages, which can then be highlighted and annotated. Remember that photocopying restrictions are imposed on readers by copyright law ([Ch 12](#)) – details will be posted prominently in your library. However, note also that as a learning technique this type of activity is essentially passive, and, if your note-making is meant as an aid to revision or for memorising, one of the more active methods described in this chapter or in [Ch 48](#) may be better.
- **Take care when using material straight from the text.** It is important that, if you decide to use an excerpt from a text as a direct quotation, you record the page number on which that particular piece of text appeared in the book or article you are citing and place the quote in your notes (but not the final text) using a colour that you reserve only for quotations. You should then insert the author, date of publication and page number alongside the quotation. (More information on citing sources is given in [Ch 27–28](#).)

- **Make your notes your own.** Copying out directly from the text is time-consuming, and when you come to look at the notes in a few weeks' time you may not remember that this is what you did. So, ensure you paraphrase in your own words rather than transcribe, and if you do transcribe, use quote marks and note reference details (**Ch 27–28**). Alongside the points you have noted from the text, jot down your own ideas that may have occurred to you during your reading. Add any links between this text and others so that you are forming a wider understanding of the topic.
- **Invest time in creating your notes.** Notes have to be readable, memorable and accurate. They could be an essential resource for your future studies, so never throw them away. In particular, notes taken for specific coursework assignments may prove useful for exam revision. They can help by refreshing your memory on difficult concepts; and they can provide examples, detail or 'colour' for your answers. The skills that you develop in creating notes will prove to be an asset for your future in many different roles as an employee; it is worthwhile spending time developing them.