



Weak of the week

Simplify your notes!

SIMPLIFY



How

Take your sub-topic, put it into fewer words and draw simplified diagrams.

Why

It makes you read through the sub-topic in detail so you can decide how to simplify it. You get more of the subject into your head than if you just read it through.

Start with the right stuff

- 1) A revision guide gives you a fantastic starting point — whole sub-topics are often on a single page.
- 2) If you need to, you can add in notes from your class book, before simplifying it.

The Use and Abuse of Resources

The growing population and increasing standard of living is putting greater demands on the world's resources. A rising global population needs more resources — at the very least people need food and water supplies. Increasing standards of living uses more goods and services causing resources to be used up faster.

Quarrying means Digging for Land Resources



- 1) Quarries spoil the landscape, and the land over always be reclaimed.
- 2) Rock, coal and gravel are important resources, but to get at them a lot of unusable material has to be removed first.
- 3) Metal ores make up only a tiny fraction of the rocks in which they are found — the rest is waste. Other waste is dumped in quarries.
- 4) Some disused quarries have become very important habitats for wildlife — they are also useful places for learning about geology.

Conservation and Recycling Provide for the Future

- 1) Reducing demand for fossil fuels means they'll last longer, and reduce the harmful effects of using them — eg. smaller cars with more efficient engines use less fuel. Installing the bits of house reduces the use of heating fuel.
- 2) Conserving the soil by preventing erosion will provide food for future generations.
- 3) Recycling metals and paper means using less raw material and using energy less — eg. metals and glass can be reclaimed from scrap; some papers can be reprocessed into paper bags and toilet paper.



Managing Resources is a Balancing Act

- 1) Some resources aren't always available where they're most needed — the fossil-fuel demand for water in the UK is in the south-east, the highest rainfall is in the north and west.
- 2) These aren't always easy to go round — although LEDCs produce most of the world's resources, most are used by MEDCs. LEDC development means they need more resources.
- 3) Multinational companies use that reduction in consumption will reduce profits — eg. BP, which is involved in the search for new oil supplies off the Yukon islands.
- 4) Invest into alternative materials and energy resources to use conserving and expensive.

Sustainable Use of Resources Relies on Good Stewardship

Stewardship means using resources responsibly so some are left and no damage caused is minimal.

- 1) Resource conservation — Using resources carefully to slow our consumption of them, eg. making cars and power stations more efficient so you use less fuel.
- 2) Resource substitution — Changing resources for more sustainable ones, eg. using recyclable materials instead of steel for making cars, or using wind power instead of coal.
- 3) Pollution control — Limiting pollution to reduce problems like global warming and acid rain.
- 4) Recycling — Used to reduce the amount of waste produced and as part of resource conservation.

The resource problem is ticking — so conserve your energy.
The tricky thing about this page is making sure you can fit it all together. All you really need to know is what they are, how they're used and the difficulties of managing them. Five mini-essays there, please.



Get it all on to one page or less

Sub-topics from books or from your class notes will be more wordy.

They'll need more work, but you should be able to get each one on a single page.



The use and abuse of resources

Growing pop. + increased standard of living - greater demands on worlds resources.


Quarrying (digging for land resources)

- 1) **Spoil** landscape sometimes for good.
- 2) **Rock**, sand, gravel - unusable material removed first
- 3) **Metal ore** - loads of waste rock, dumped
- 4) **Disused quarries** - geology education, important wildlife habitats



Conservation / recycling

- 1) **Reducing demand** - last longer, reduce harmful effects eg  **Efficiency**
- 2) **Conserving soil** - preventing erosion - future food  **less heating**
- 3) **Recycling** (metals, paper) - use less raw material - use less energy to reprocess

Managing Resources

- 1) **Resources aren't always where they're needed** eg water demand London but most water in north west of the UK. 
- 2) **Not always enough to go round.** LEDCs produce most, MEDCs use most. LEDCs will need more as they develop.
- 3) **Multinationals** fear reduction in consumption will reduce profits. eg BP Oil in Falklands.
- 4) **Research into alternative materials / energy resources** - time consuming, expensive

Sustainable use of resources - good stewardship

- 1) **Resource Conservation** - careful use eg efficient cars, power stations
- 2) **Resource Substitution** - change to more sustainable resources eg  
- 3) **Pollution control** - limiting to reduce global warming, acid rain
- 4) **Recycling** - reduce waste and use less resource

sustainable = kept at a steady level without running out

DON'T JUST COPY IT OUT Copying it out bypasses your brain. If it doesn't even go into your brain it's got **CENSORED** all chance of staying there. If you want to copy, use a photocopier; if you want to revise, use your brain.

- 1) Read through each section, pick out the important bits and reduce down the words.
- 2) Use numbered points — they're great for organising info into chunks.
- 3) Have a go at using pictures to show bits of info. They don't have to be good, just as long as you know what they are. Coming up with them helps you remember stuff.
- 4) If you don't understand any words, look them up and write out what they mean in your own words, at the bottom of the page.

When you've simplified a topic — test yourself

- 1) Cover everything up.
- 2) Get a blank sheet of paper and write out as much of the sub-topic as you can.
- 3) Use your simplified notes to add things you missed and correct things you got wrong.
- 4) You won't remember everything yet, probably just the headings and a few details.

The Cell Cycle



The length of the cycle varies considerably. It can take less than 24hrs or it can take several years, depending on the cells involved and the stage of life of the organism. The cell cycle is short as a baby develops during pregnancy when new cells are made all the time. It remains fairly rapid during childhood but the cell cycle slows down once puberty is over. However, even in adults there are regions where there is continued growth for a regular replacement of cells. They include the hair follicles, the skin, the blood and the lining of the digestive system.

Biology

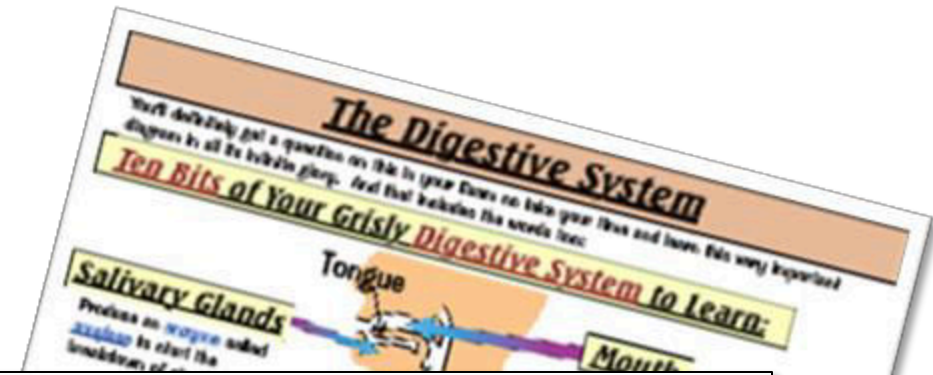
Your turn

Read the information above and simplify.

Next slide is for independent use if students are accessing the TEAM files at home.

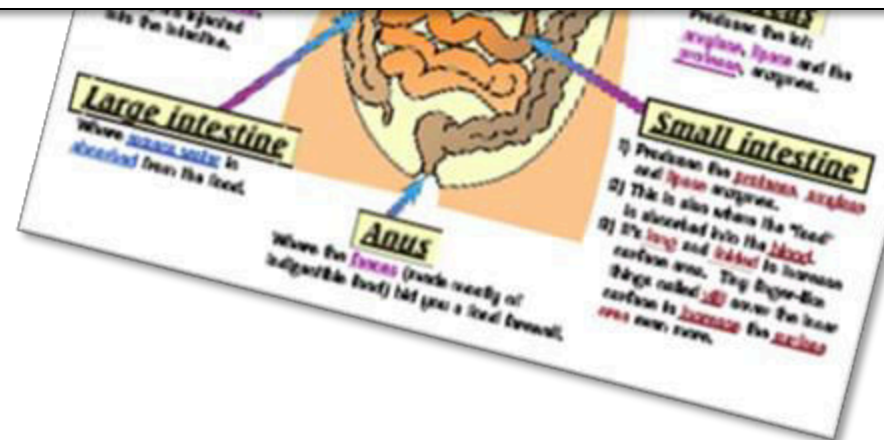
Please don't attempt to teach this section during the tutor period

The last example showed you how to simplify sub-topics that are mostly words. How do you tackle sub-topics based on diagrams?



Have you learned the Whole Diagram?

The one thing they won't ask you to do in the Exam is draw the whole thing out yourself. **BUT** they will ask you about any part of it, e.g. "What is the position of the liver?", or "What does the pancreas produce?", or "What is the function of bile?" So in the end you have to learn the whole thing anyway. And that means being able to cover the page and draw it out, words and all. If you can't draw it all out from memory — then you haven't learnt it. Simple as that.

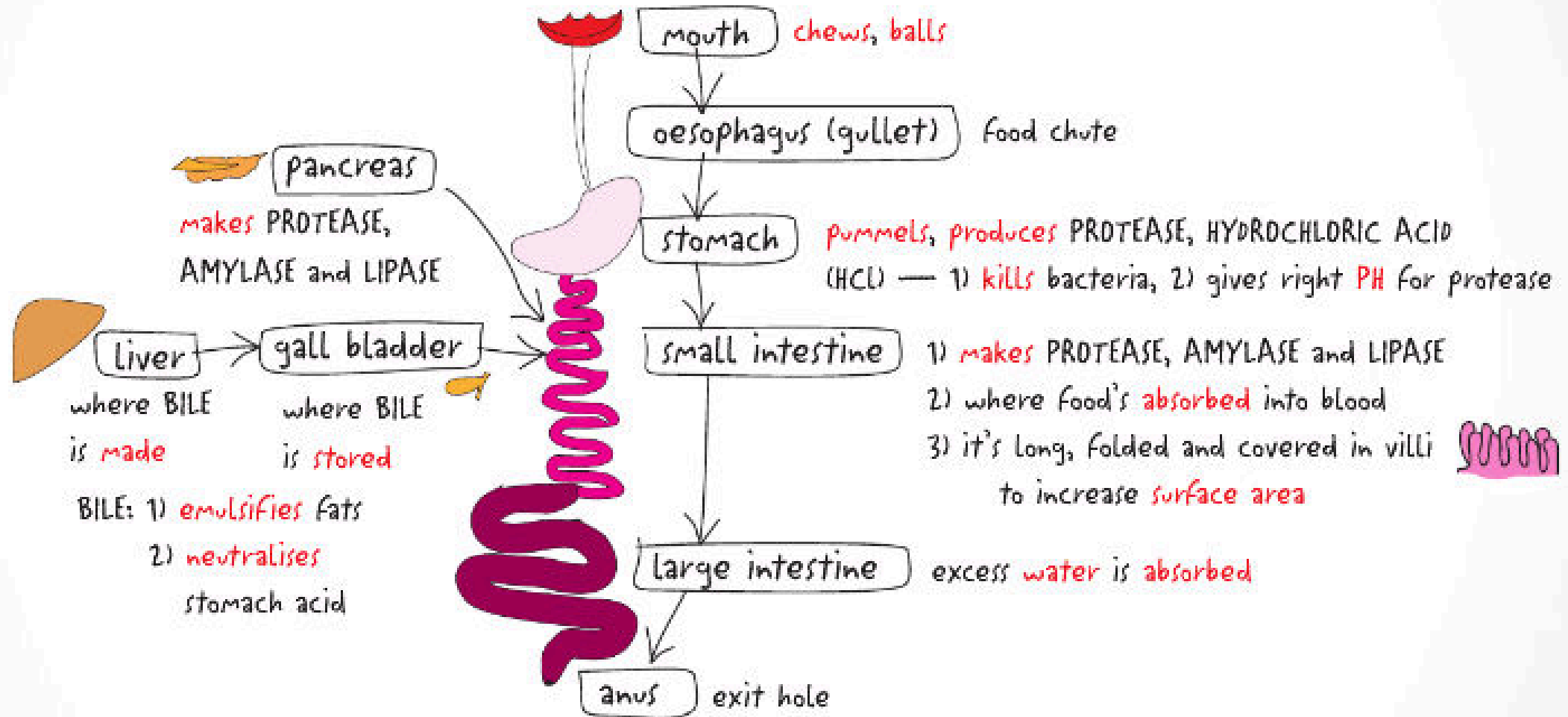


Simplifying diagrams

Simplifying for revision is all about showing all the important bits of a topic in a simple way — it DOES NOT mean just missing out bits at random.

- 1) Go over the diagram and decide which are the important bits.
In this case: the name, function and order of digestive organs are the important bits.
- 2) Draw simple but recognisable pictures to show what's going on.
In this case, show the organs that food travels through in the correct order and then added on the organs that provide or store digestive juices.
- 3) Label diagrams to show what the different bits do and how they fit together.

The Digestive System



Simplifying the words

- 1) Decide on some simple rules and stick to them, eg stick all the organs in boxes, capitalise all digestive juices and write important words in red.
- 2) Keep your writing concise, but don't miss anything out.
- 3) Add pictures (like the villi). Revision's all about keeping your brain engaged and if you have to think about what to draw, your head machine will be working hard.