## **Encoding – Active Reading**

The following revision strategies focus on **encoding** your learning through **active reading** strategies. **Passive reading**, where you read without thinking about what you are reading is an ineffective revision technique. An example of this is reading your notes and just highlighting some key words and facts; highlighted words do not magically transfer into your long-term memory. When you are reading for revision you need to use **active encoding strategies**. The strategies below have a common theme, they all require you to **think** about what you are learning. The more you about what you are trying to learn, the more you will **remember**.

- (1) Explain it back Every few paragraphs you should explain back to yourself, aloud in your own words, what you have just learnt. When you say it in your own words it is more likely to become embedded into your memory. It is not enough to have a feeling that you have learnt what you have read, you need to prove it you could try explaining it to someone else.
- (2) Ask questions Every few paragraphs you should write down questions about what you have read. These might be questions that you need your teacher to help answer if you don't understand what you have read or they might be knowledge-recall questions that you answer later for retrieval practice. You should also always ask yourself two 'big questions': 'What is the main idea?' and 'How does it relate to what I already know?'.
- (3) Summarise Writing a summary of what you are reading and learning can be an effective revision strategy. If you are making summary revision notes you need to avoid just copying out what you are reading. You should aim to make brief notes based on what you have read. This is more effective if you try to do it from memory, then check what you remembered (and what you didn't) and explain your notes aloud.

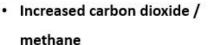
## Impact of human activity

Human activities are contributing to increased levels of **carbon dioxide** and **methane** in the atmosphere.

- Carbon dioxide is released by the burning of fuels and biological materials including wood and peat. It also results from the decay of peat in damaged peatlands.
- Owing to deforestation, less carbon dioxide is being absorbed by plants in photosynthesis.
- Methane is released from cattle and from flooded fields used to grow rice.

Carbon dioxide and methane are greenhouse gases. They trap heat from the sun in the earth's atmosphere, increasing the mean air temperature

## Impact 1



- CO2 > burning fuels (wood / peat)
- Deforestation > less CO2 absorbed plants
- Methane > cattle / rice fields
- CO<sub>2</sub> / CH<sub>4</sub> > greenhouse gases > trap heat in atmosphere

The example above shows how 94 words about the impacts of human activity can be reduced to 27 words. The next step could be to reduce this down to 10 words. It is important that you create these notes, they are personal to you using your own private code and language. An extension retrieval practice task would be to (i) write these notes out from memory and (ii) explain them aloud in full sentences.

