How To Read a Science Text
Simple and Very Effective Strategies

This presentation is not brain surgery or rocket science although you may be reading about these topics.

The suggestions given here are simple yet highly effective if you actually put them into practice.
Reading Science Is NOT Like Reading a Novel

Most reading for pleasure is at 4<sup>th</sup> grade level. Most academic reading is at a 9<sup>th</sup> grade level. A science text is at college reading level.
It takes a different approach than reading for pleasure.

It takes **Patience**

It takes **Commitment**

Most of all it takes **Time**
Slow **Way** Down When Reading Science

- Science writing is an information-rich environment.
- Seems there is a new idea every sentence.
- It is important to understand each new idea.
Science writing is linear

Science writing is cumulative

Therefore, you have to understand one concept before you can understand the next one

The key is:
Don’t turn the page in your reading if you don’t understand the previous concepts.
How Do You See the Page?

You may also have difficulty with visual tracking

This will slow down your reading speed

You can spend so much energy keeping your place on the page you won’t comprehend what you are reading.

Try using a magnifying device, moving your finger along the page, or covering most of the page with a white piece of paper. Move the paper as you read each paragraph.
Recommendation #1

Read slowly.
Read thoughtfully.
Be prepared to stop...and think.
Reading just to “get through the material” is

A waste of time.
Recommendation #2
Skim and Scan

• Pre-read a section at a faster pace.

• Get a sense of the overall picture.

• Then return to the beginning and re-read at least once in a more meticulous fashion.
Read and Re-read!

• Only the brightest folks read material only once.

• If it was easy there would be a lot more scientists.

• You are probably at this workshop so that you can get out of what I will tell you next but...

• Read and re-read.

• Persistence and tenacity are the keys to succeeding.
Find a Way to Personally Connect to the Reading

This is a 10x magnification of a cross-sectioned pedicel of a rose.

- You may have a hard time connecting with what you are reading. Try SPUNKI in order to get excited about what you have to read. In this week’s reading:
  - What surprised you?
  - What puzzled you?
  - What was most useful?
  - What was new to your way of thinking?
  - What did you already know but now know better?
  - What was most interesting?
Reading Science is Not Just Reading Words

It is understanding:

Equations

Tables of Data

Graphs

Pictures
Recommendation #3

Read with pencils and highlighters in hand.

Use sticky notes.

Outline the chapter.

Take notes.
Do Make...

Diagrams

Word webs

Charts
Recommendation #4
Read the text with a subject specific dictionary close by.

Figure out the meaning of any word you do not understand before continuing.

Check the text glossary of terms.

If you read quickly without comprehension your study will be easy...and worthless.
Recommendation # 5
Read what you understand best first

- First choose material that is of more interest
- First choose material you can relate to best.
- First choose material that is easiest to understand.
- Then once your foundation of understanding is solid and you have found interest in what you are studying, move on to harder material.
- Always do all the reading though.
Recommendation # 6

Choose the appropriate study environment

Library?

Café?

Bedroom?

Park?

Know your learning style and what kind of environment you need.
Recommendation #7

Reading out loud really helps!
It uses more parts of your brain.
Also try standing and walking while reading which utilizes kinesthetic learning.
A few more tips

• Practice, practice, practice.

• Now is the time.

• You have well-written texts.

• Later, you may have to read things that are terribly written.

• Now is the time to train yourself in this skill.
What are your recommendations?

Share what has worked for you.