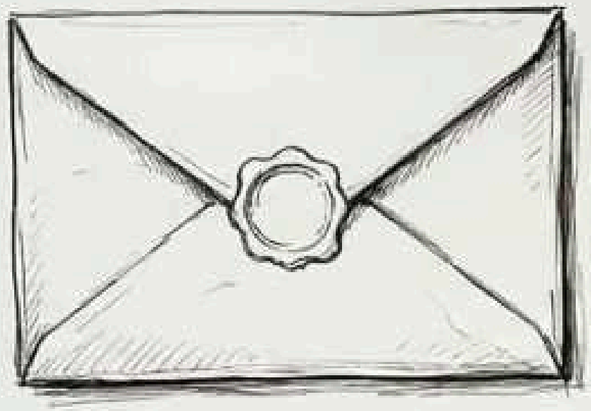


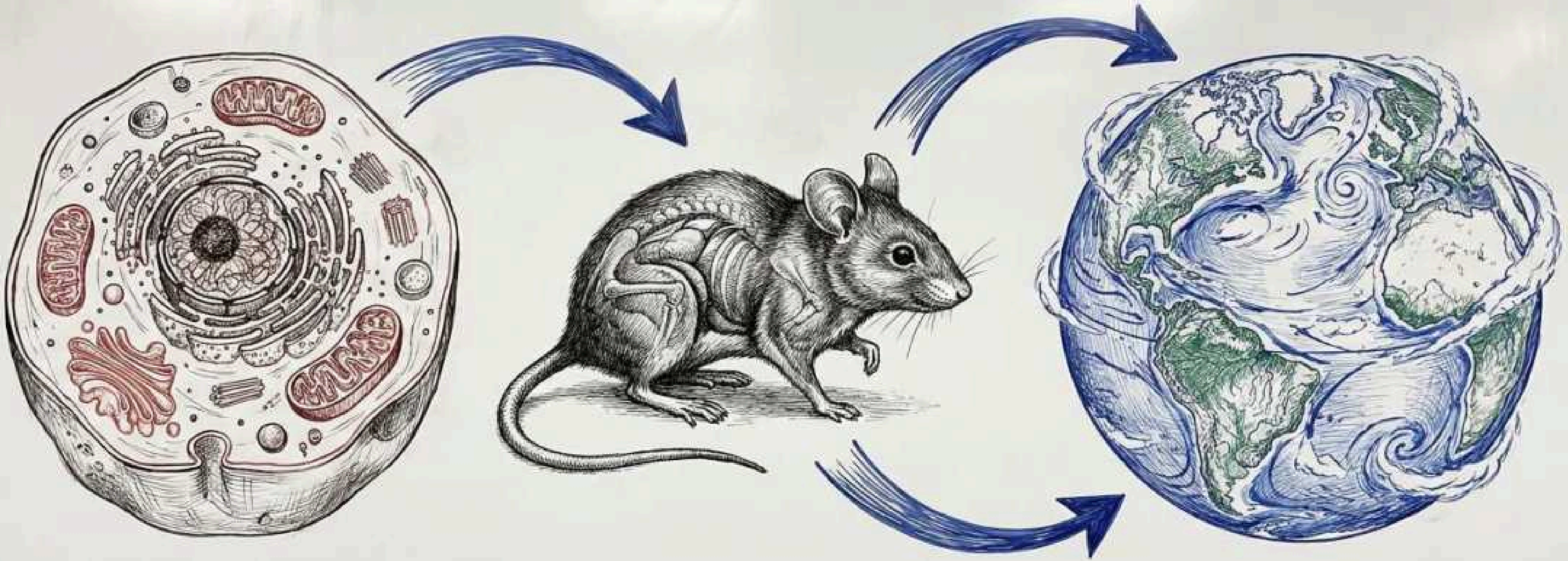
Questions or feedback are always welcome.

Email: garyanderson@mail.grokbot.com

X: @garyanderson

¶ 0.2

Anderson Academy: BIO 101 B — Basics of Biology

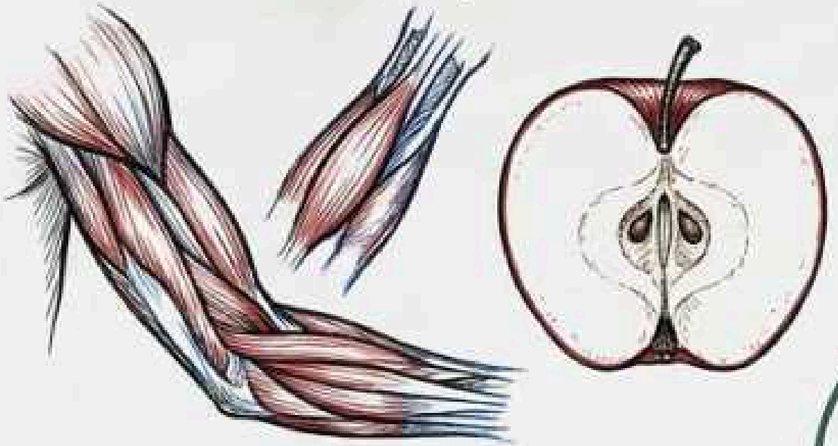


A tour of the science of life: from a single cell to the whole living planet—in about an hour.

¶ 0.3

Why study biology?

Your Body & Food



Medicine & Disease



The News



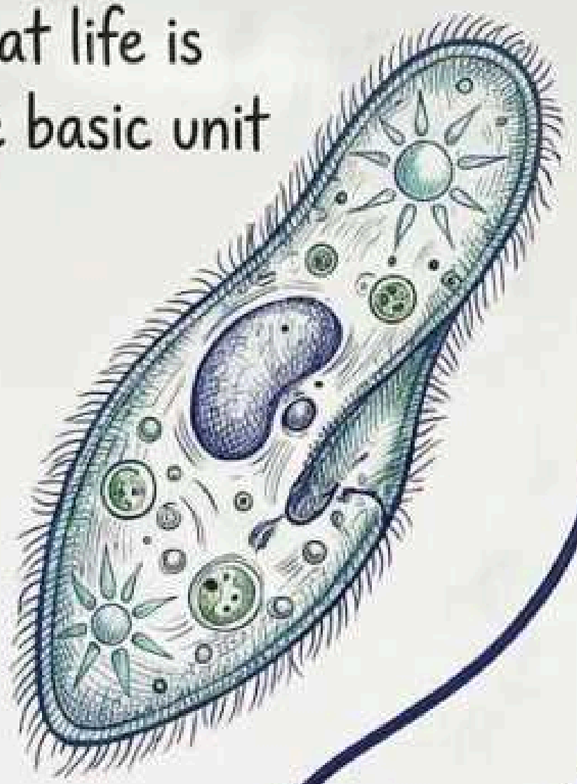
Critical Thinking



A little knowledge makes you a harder person to fool.

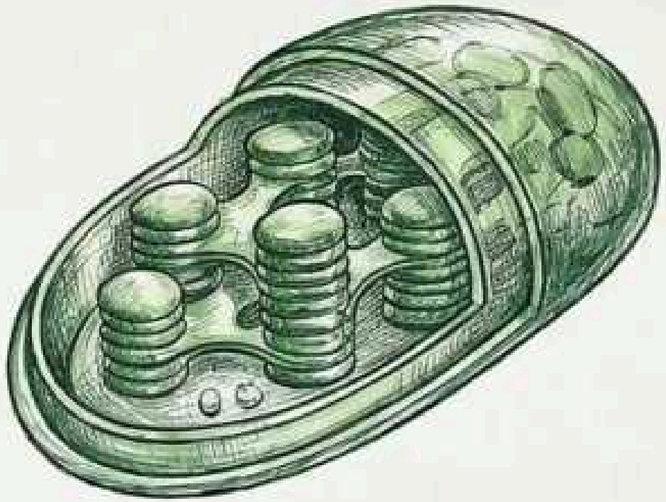
Lecture 1: The Cell

What life is
The basic unit

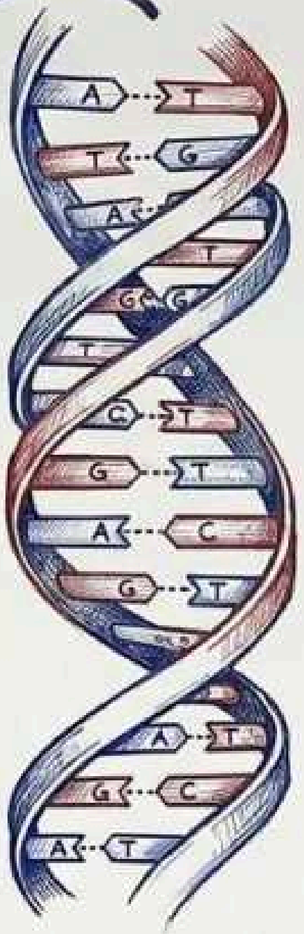


Lecture 2: Energy

Photosynthesis & Respiration



$$6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2$$



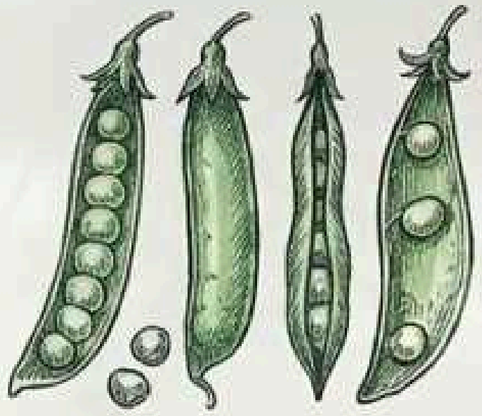
Lecture 3: DNA

Instructions for building
an organism

¶ 0.5

Lecture 4: Heredity

Gregor Mendel to modern genetics

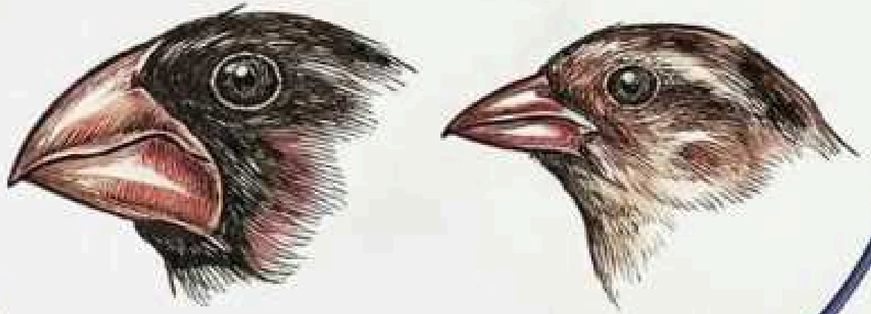


	AA	Aa
AA	AA	Aa
Aa	Aa	aa

P(AA) = 0.25, P(Aa) = 0.5, P(aa) = 0.25

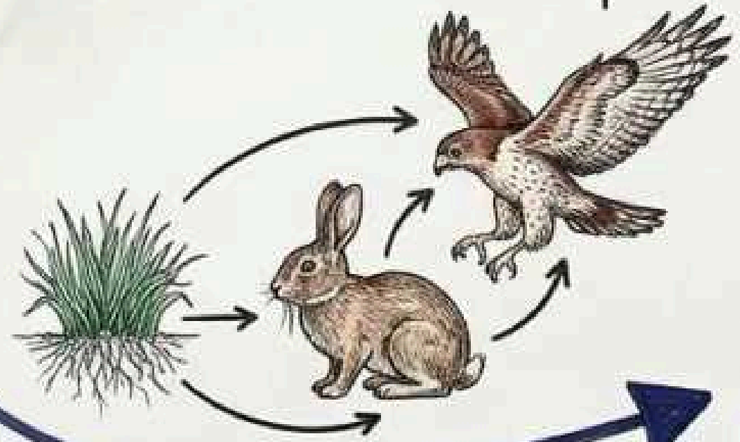
Lecture 5: Evolution

Natural selection



Lecture 6: Ecology

The web of relationships

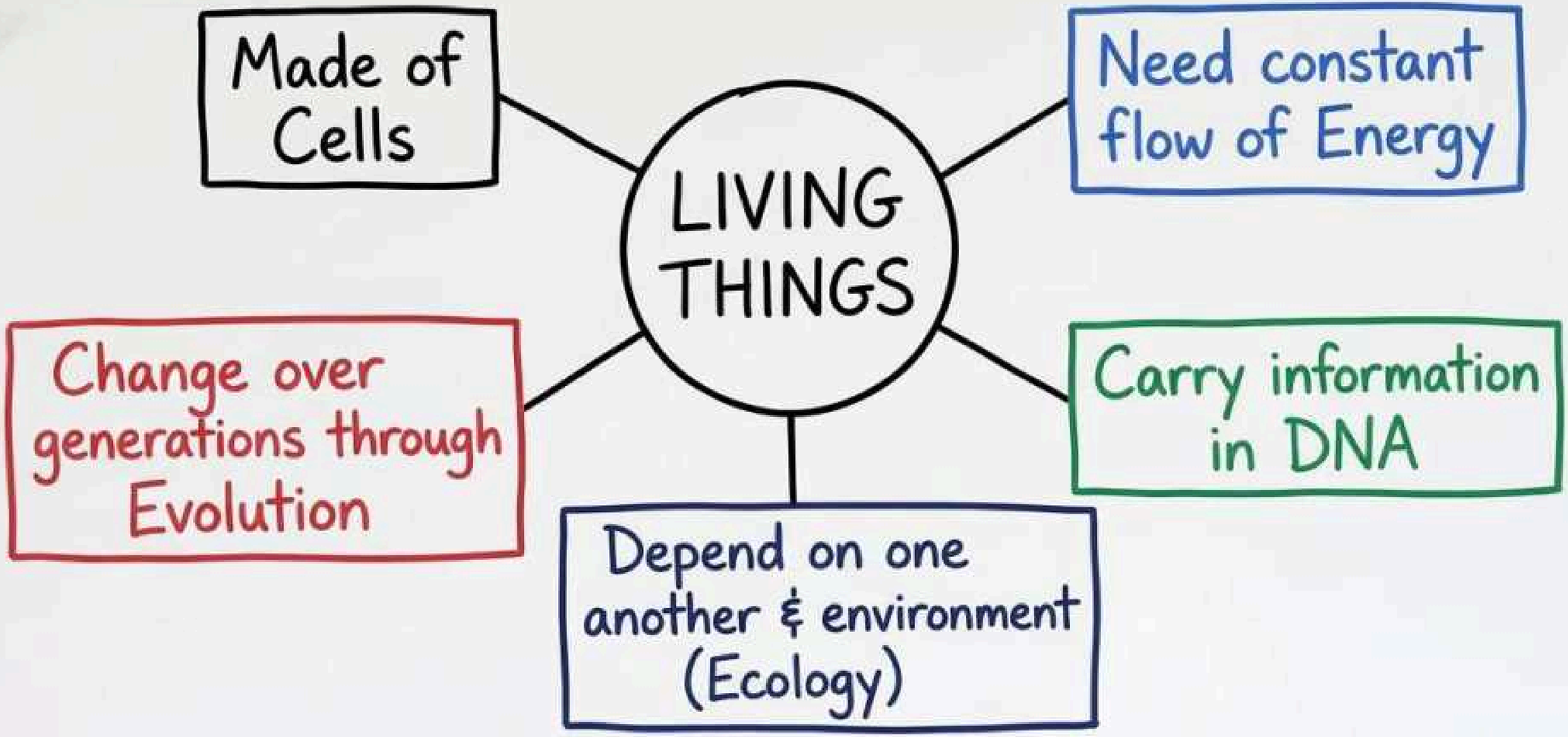


Goal:

Follow most basic biology you meet.

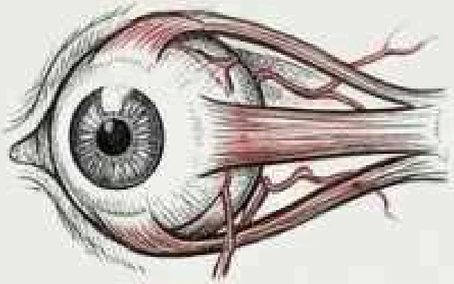
¶0.6

When a new fact seems confusing, ask which of these five ideas it belongs to:



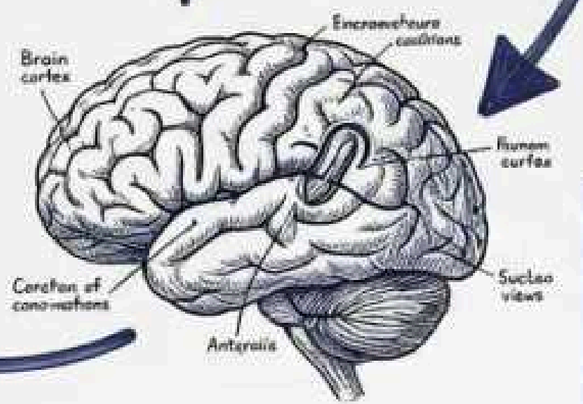
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Observe

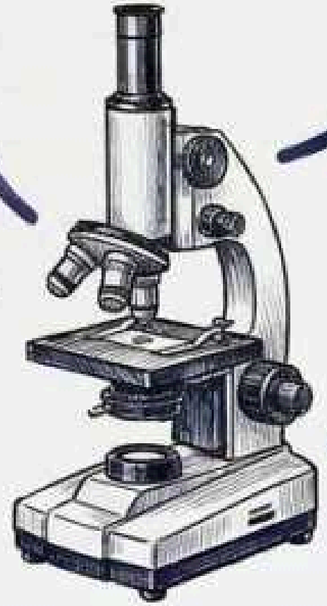


Ask a Question

Propose Explanation



Test

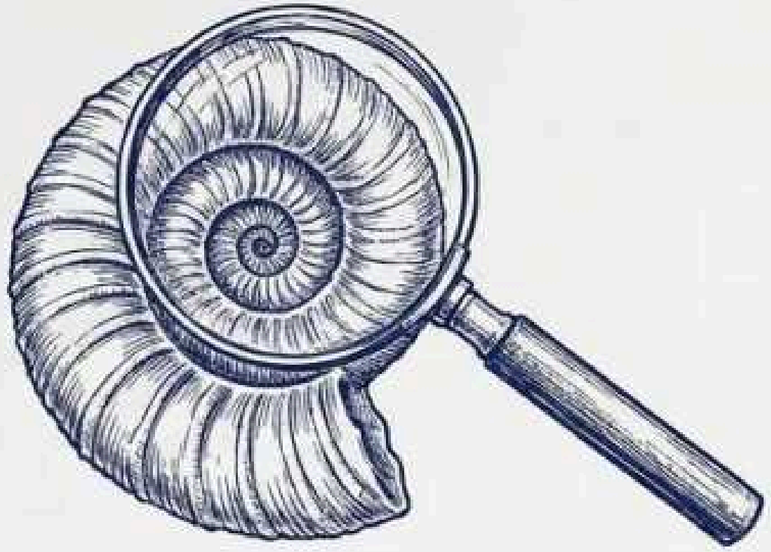


Revise

Biology is not a pile of facts to memorise. Some questions remain open (e.g., exactly how life began).

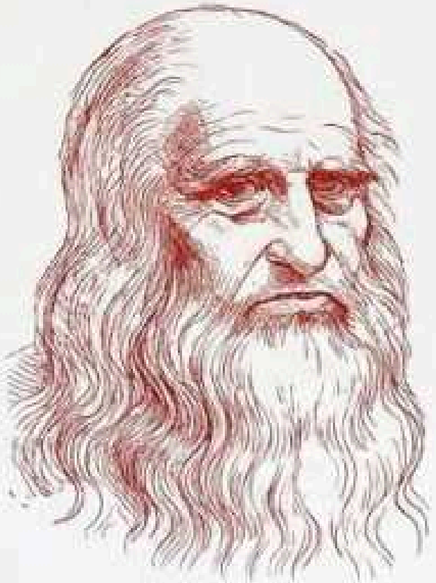
What Science CAN Do

- Describe how living things work & how they came to be.
- Use evidence that anyone can check.

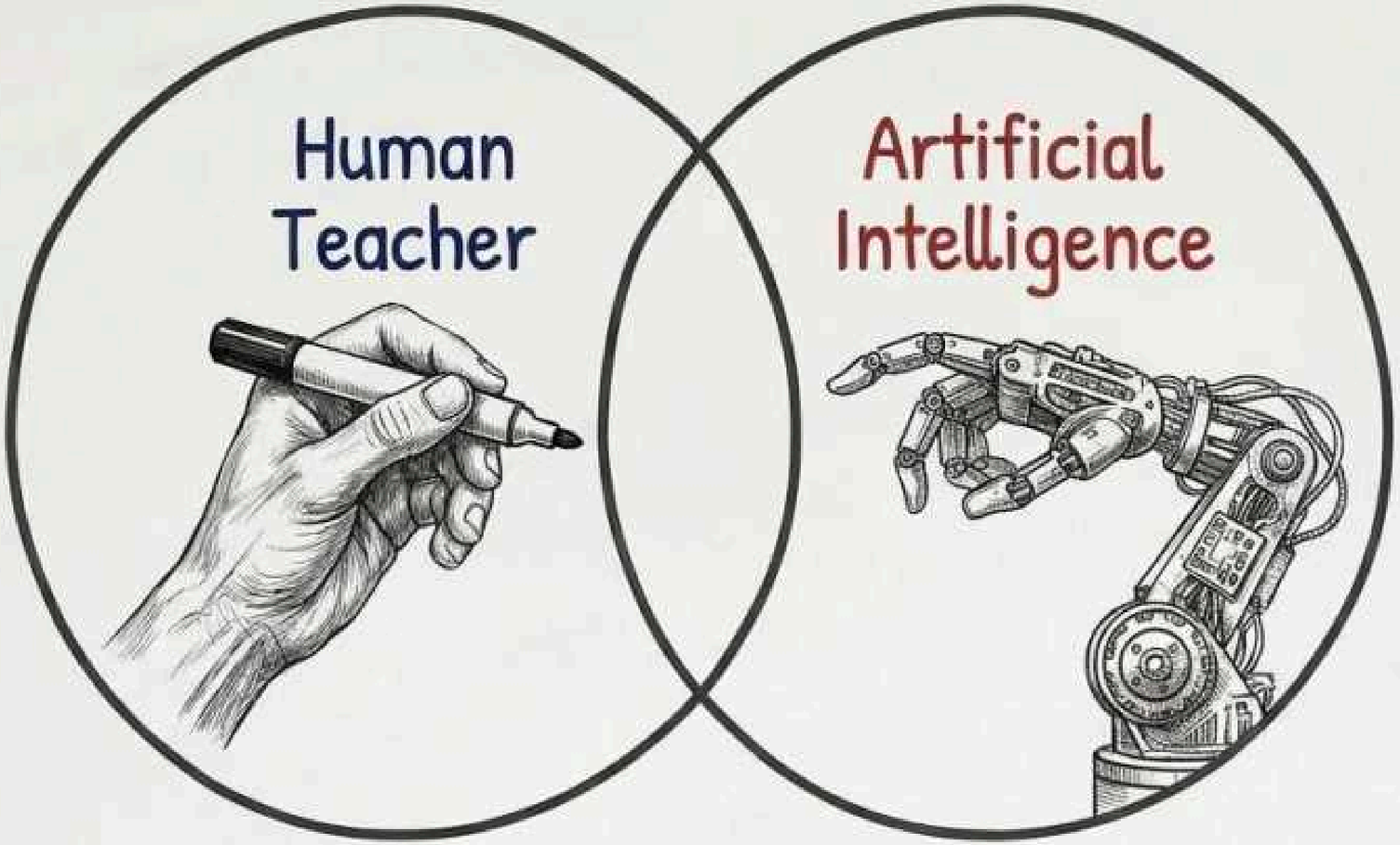


What Science CANNOT Do

- Settle questions of value (what is right or what gives life meaning).
- These belong to other fields, such as philosophy.







Scientific details can be wrong, and science keeps changing. Check anything that matters to you. If you find a mistake, please tell us.

¶ 0.10

Consume

Video or Transcript.
Every paragraph is numbered.

¶ 3.5

↓

Quiz

5-question quiz tied to paragraph numbers.

↓

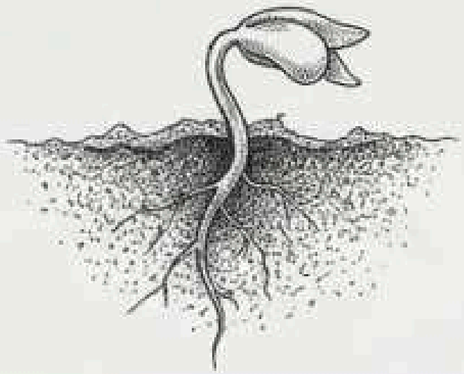
Conclude

50-question final exam +
Tripos paper (6 essay questions).



All for your learning, not for a grade.

garyanderson@mail.grokbot.com | X: @garyanderson



NOW BEGIN LECTURE 1: What is life?