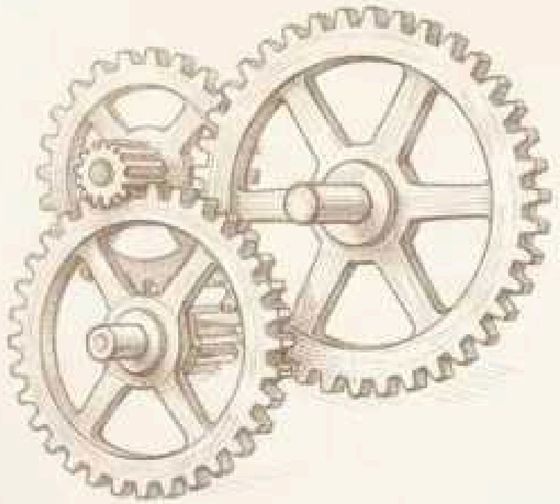
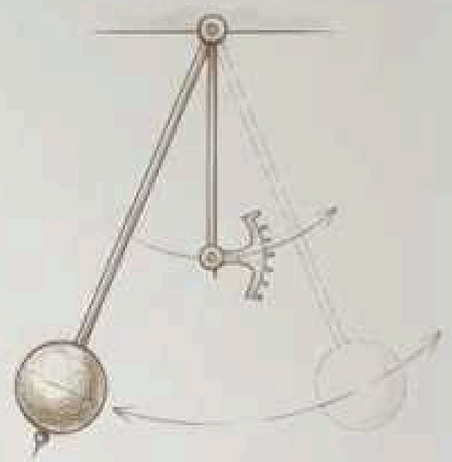
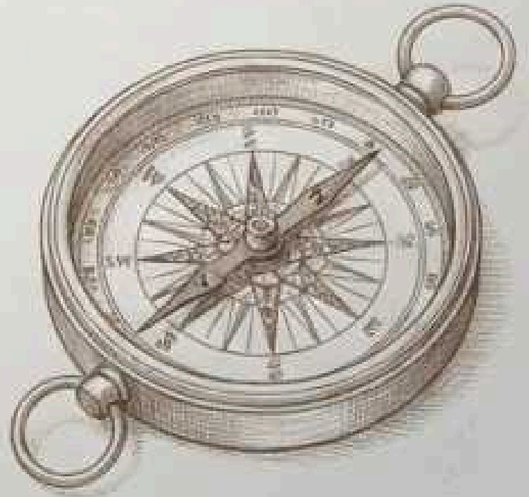




Introductory Physics 101 B: Mechanics

Lecture 0 – Course Overview





Questions or feedback are always welcome.

Email: garyanderson@mail.grokbot.com
X (Twitter): @garyanderson

Welcome to Anderson Academy: A free library of university-level courses (about 1 hour each).

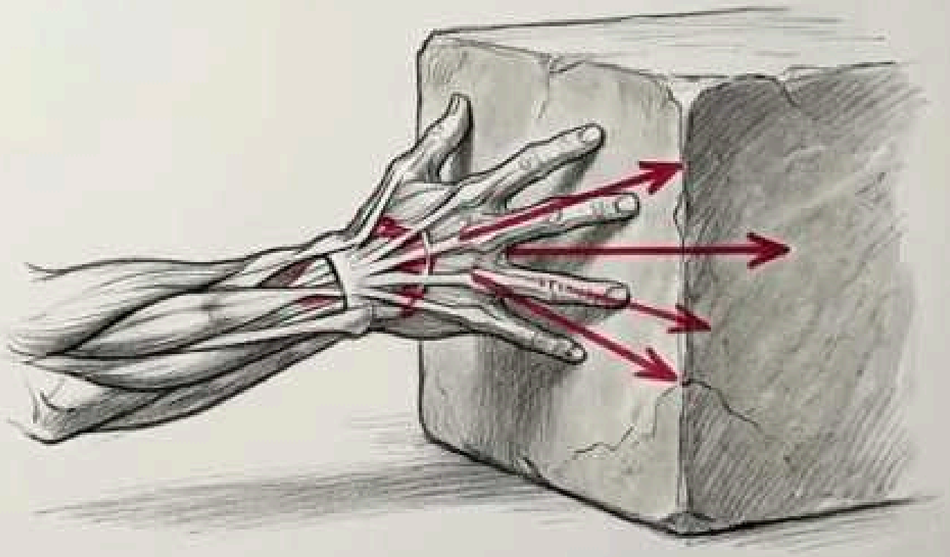
[¶0.2]

MECHANICS

MOTION



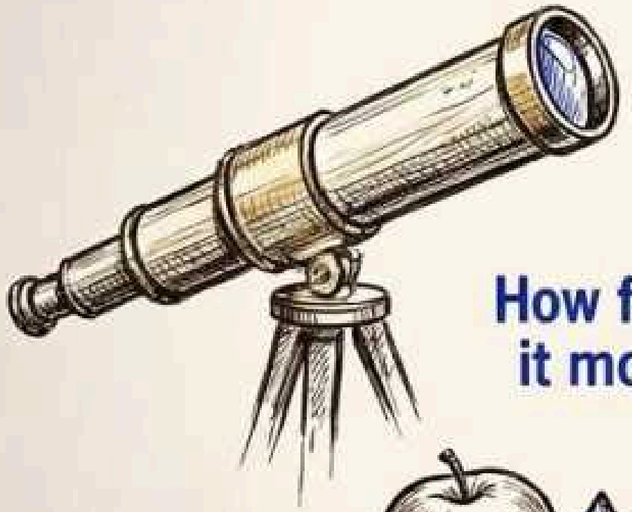
CAUSES



Mechanics is where physics began.
It is the foundation for almost everything else.

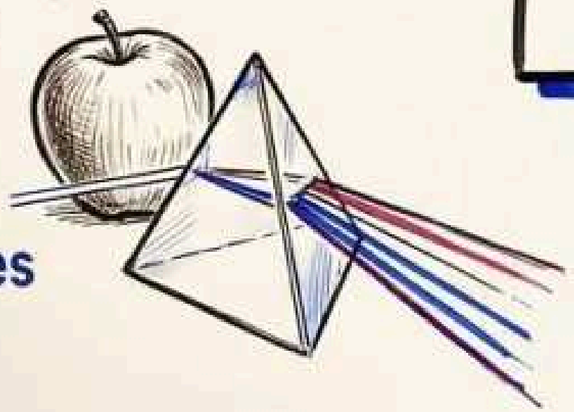
Why start here?
Mechanics asks the simplest questions.

1600s/1700s



Where is a thing?

How fast is it moving?

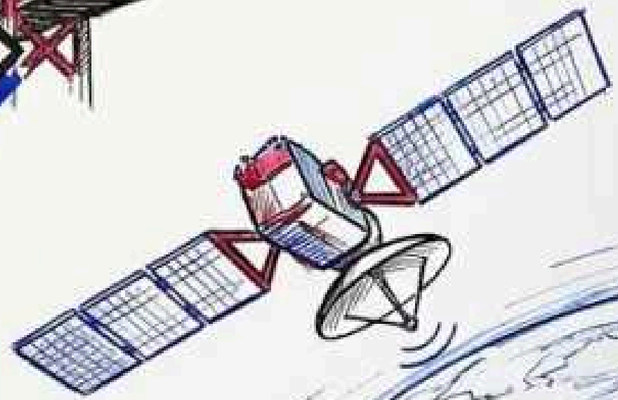


What makes it turn?

Answers from Galileo & Newton still design bridges, cars, and spacecraft today.

Today





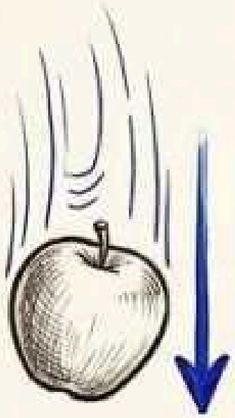


The Map of the Course

[¶ 0.4]

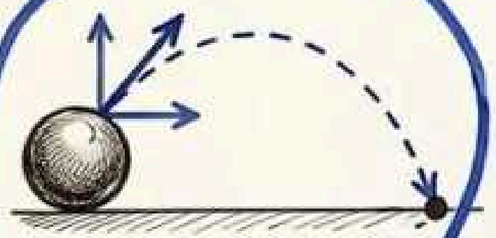
L1: Motion

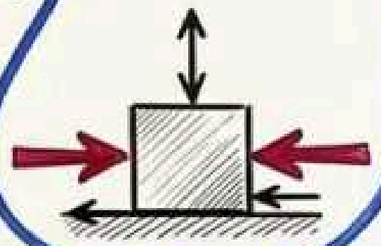
$$v = \frac{\Delta x}{\Delta t}$$



L2: Constant Acceleration

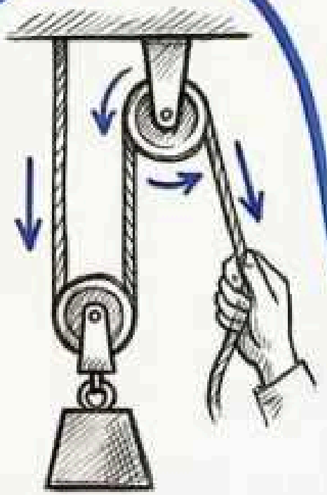
L3: Vectors & Projectiles



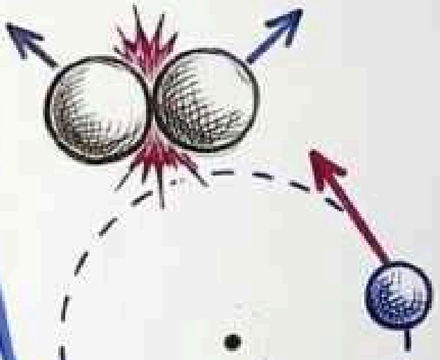


L4: Newton's Laws

L5: Work, Energy, Power



L6: Momentum & Circular



L6: Momentum & Circular

The Physics Translation Cycle

[¶ 0.5]



World Question



$F = ma$

Short Equation





Word Answer

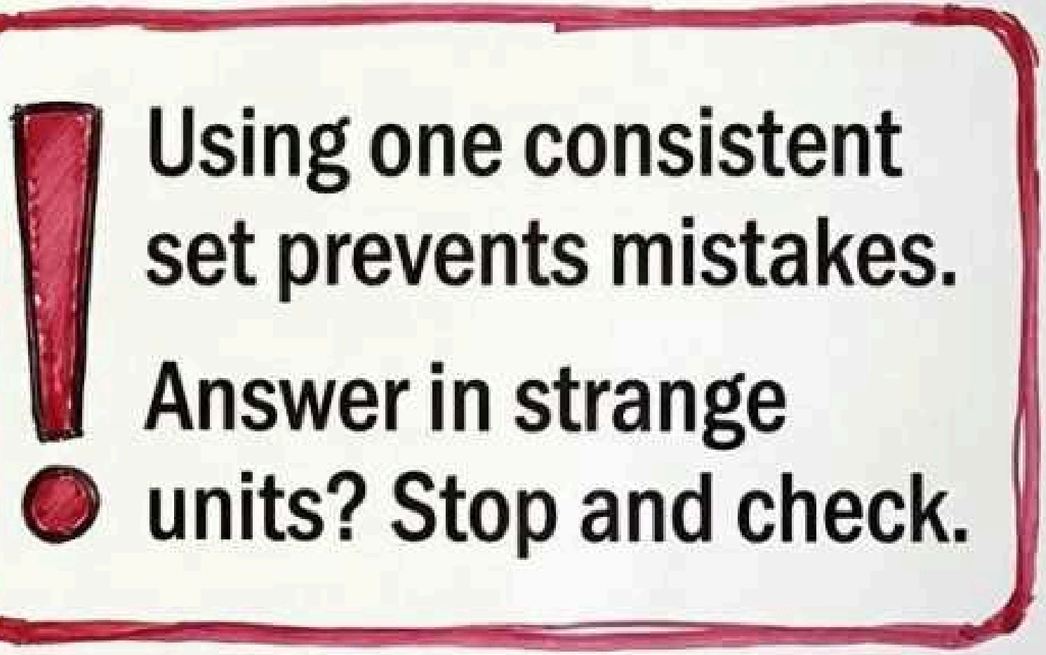
☒ Ordinary arithmetic. ☒ A little algebra.

☒ Patience to solve for one unknown.

The Reference Matrix Table

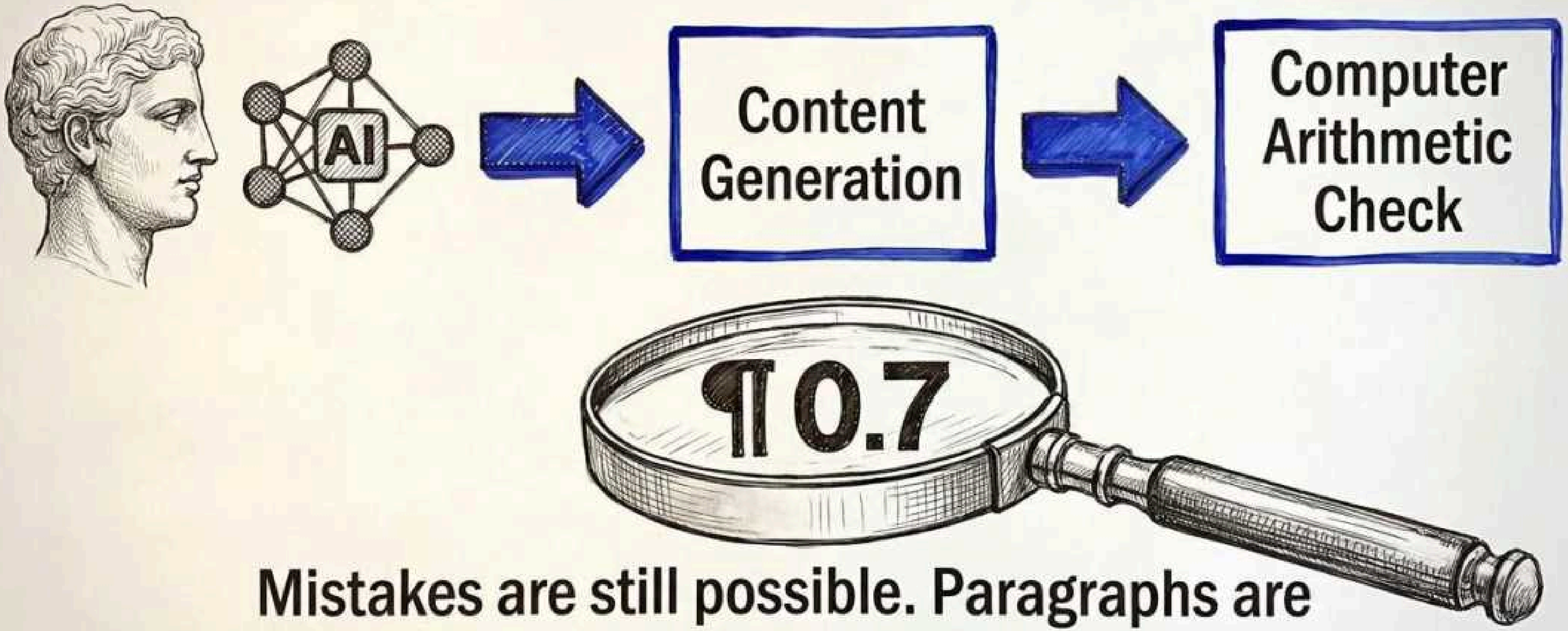
[¶ 0.6]

Physical Property	Metric Units
Distance →	**Meters (m)**
Time →	**Seconds (s)**
Mass →	**Kilograms (kg)**
Force →	**Newtons (N)**



[¶ 0.7]

Developed with AI under human direction.



Mistakes are still possible. Paragraphs are numbered—please report anything that looks wrong.

The Anatomy of a Lecture

[¶ 0.8]

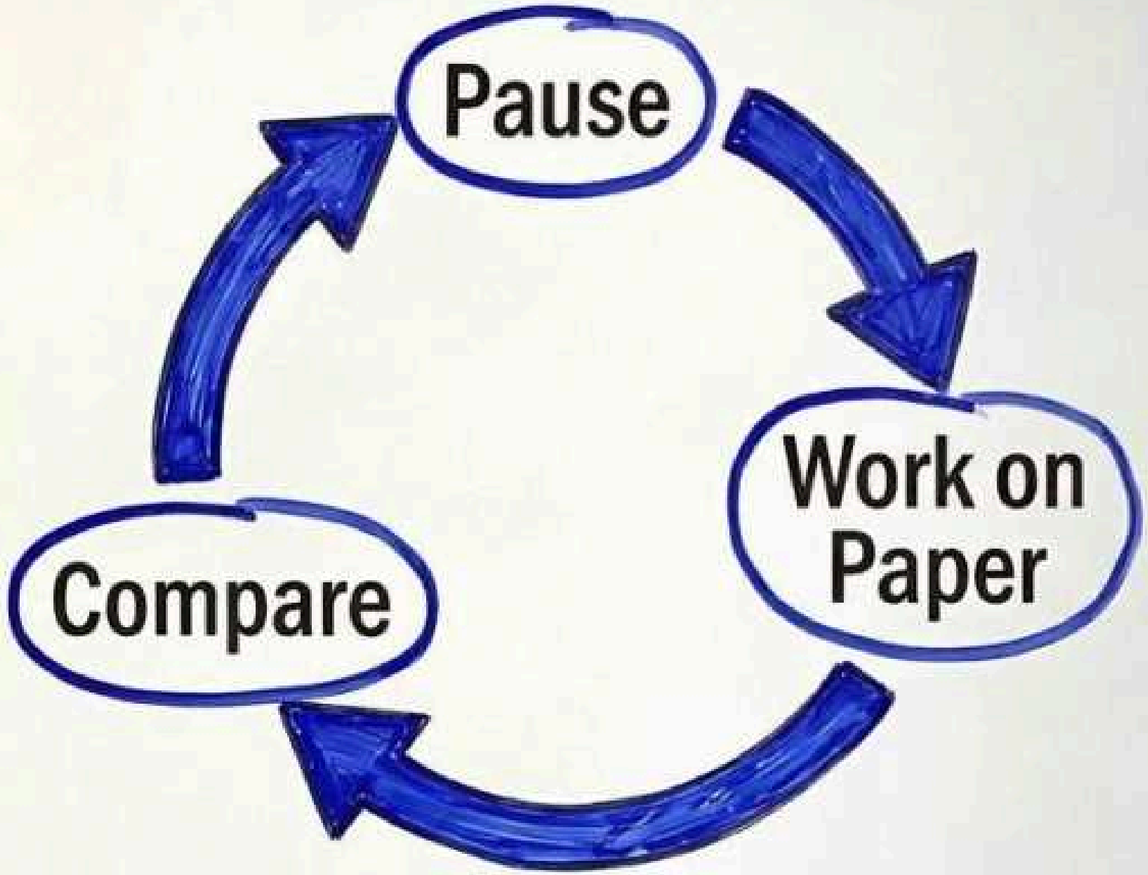
- ☐ Step 1: ☐ Watch video and/or read transcript.
- ☐ Step 2: ☐ Track numbered paragraphs (e.g., lecture 3, paragraph 5 = 3.5).
- ☐ Step 3: ☐ Take 5-question quiz (answers point back to specific paragraphs).
- ☐ Step 4: ☐ Ponder the final thought question.

Physics is a skill. You cannot learn by watching alone.

[¶ 0.9]







The struggle is where the learning happens.

[¶ 0.10]

Questions or feedback
are always welcome.

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X (Twitter): @garyanderson

Let us begin.
Lecture 1: Describing
how things move.