

# Why Take Physics



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## What is physics?!?

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- ✗ The study of the patterns observed in nature and the universe around us
  - ✗ Why are seatbelts important?
  - ✗ Why is it only possible to travel forward in time?
  - ✗ Why can't you lift yourself into the air?
  - ✗ What are rainbows?
  - ✗ Much much MUCH more!





## What Physics ISN'T:

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### ✗ HARD

- ✗ No harder than any other science

### ✗ MATH

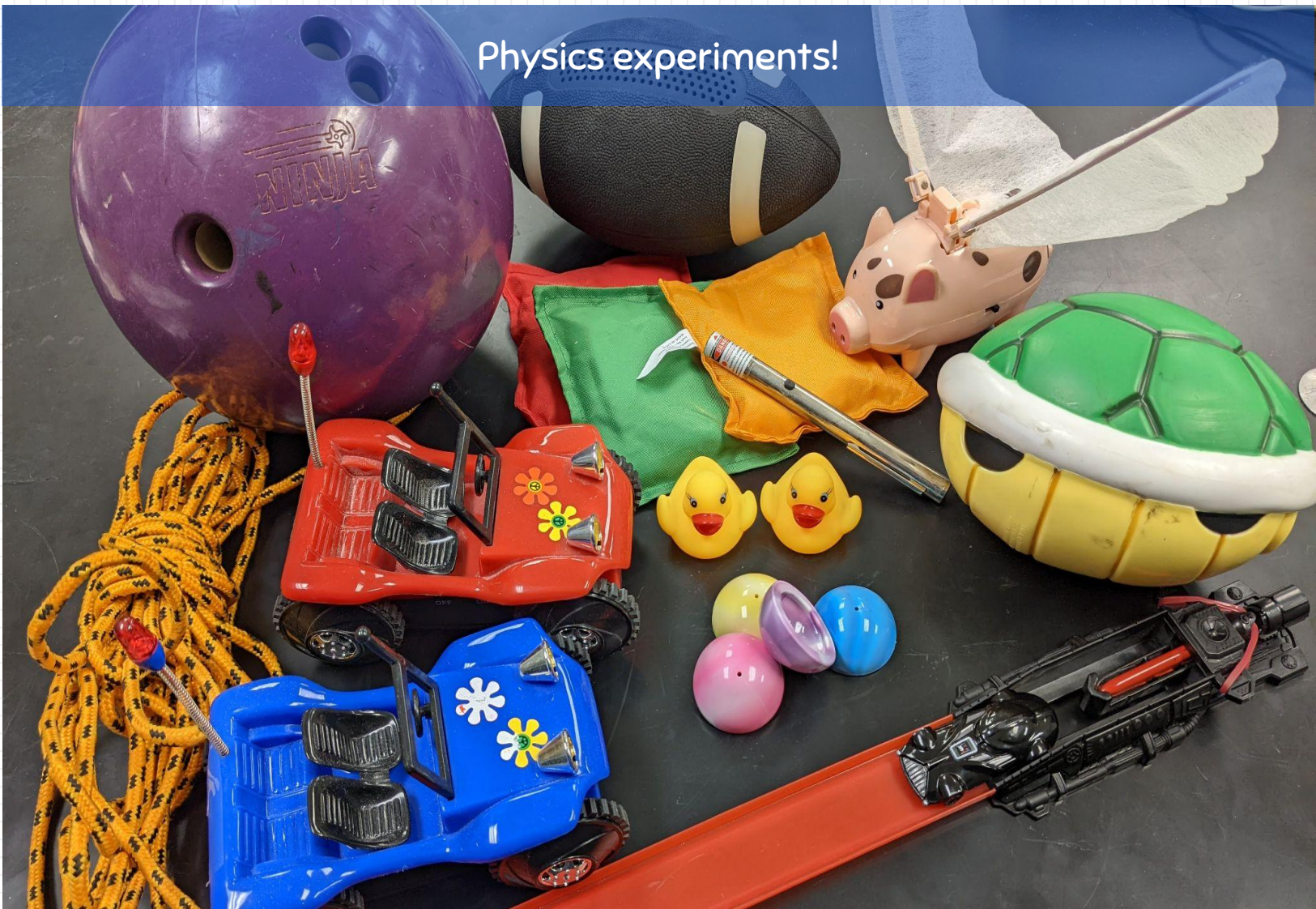
- ✗ There is math involved, but it mostly gives context to the math you are already learning

### ✗ BORING

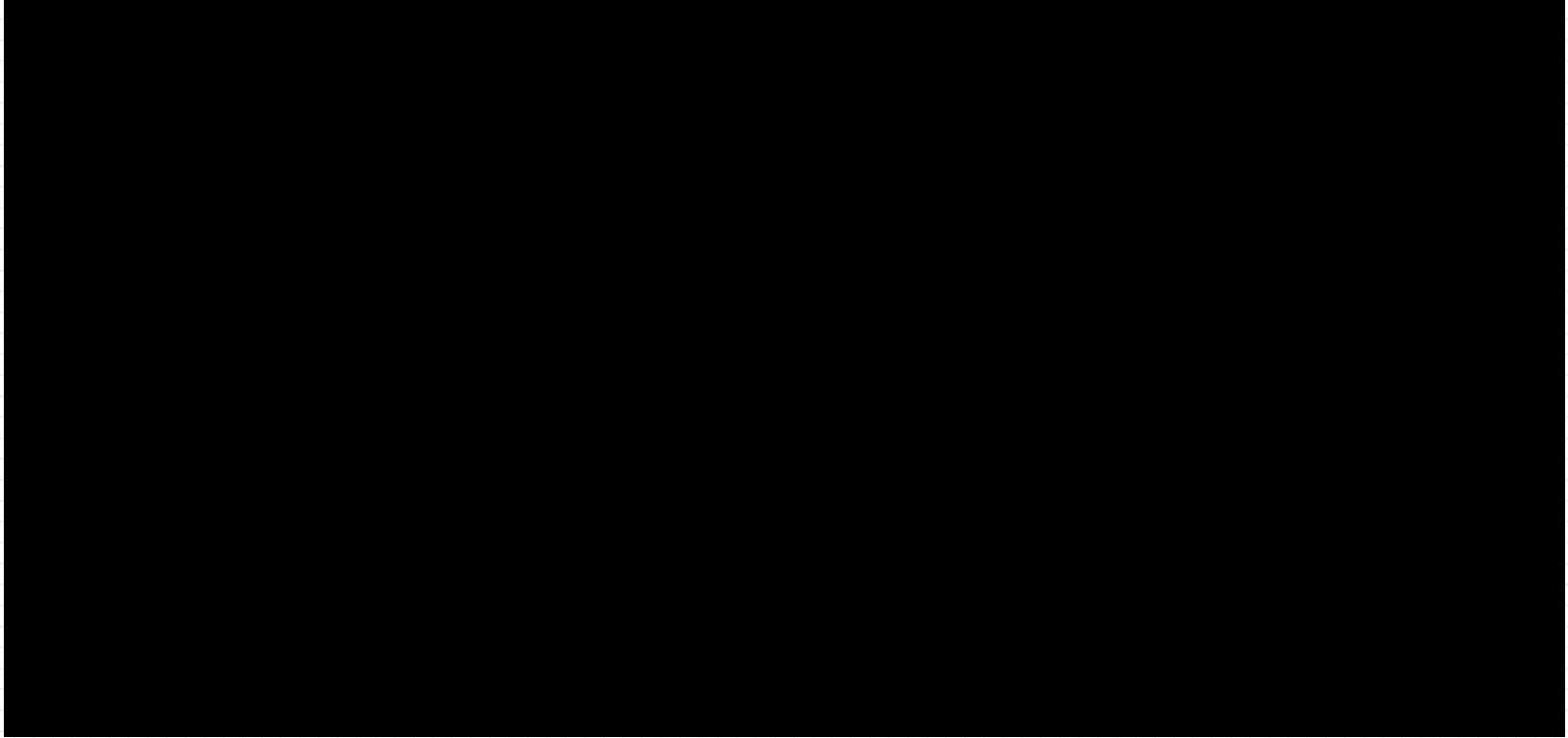
- ✗ The one science where all the labs are just excuses to play with TOYS!



# Physics experiments!



Play with trains!



# WHY TAKE PHYSICS?

Many Jobs/Careers require knowledge of physics

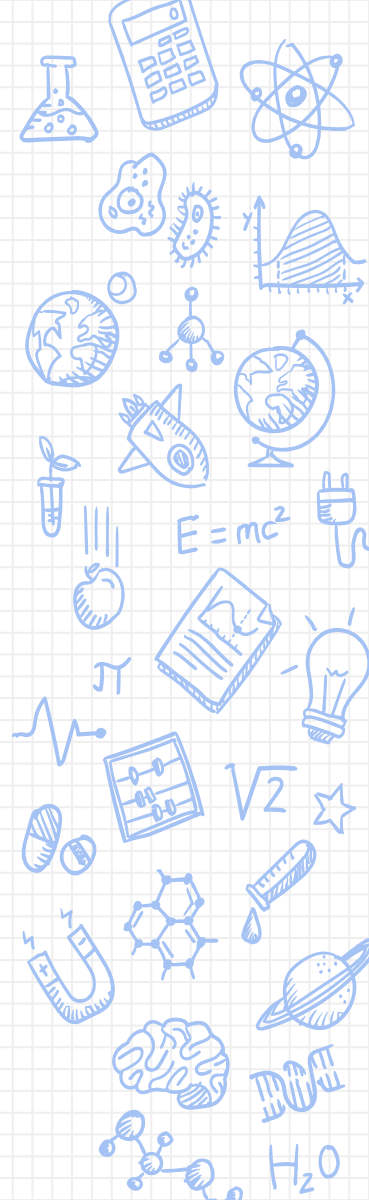
- Mechanical Engineering
- Medicine
- Auto Mechanic
- Electrician
- Chemical Engineer
- Physical Therapy
- Architecture
- Construction
- Plumber
- Military
- Pilot
- Sports Physiologist
- Ergonomic Engineering
- Bio Engineering
- Sports Medicine
- Music and sound technician
- Data Analytics
- Economics
- **(And more! Some of which we don't even know!!!)**



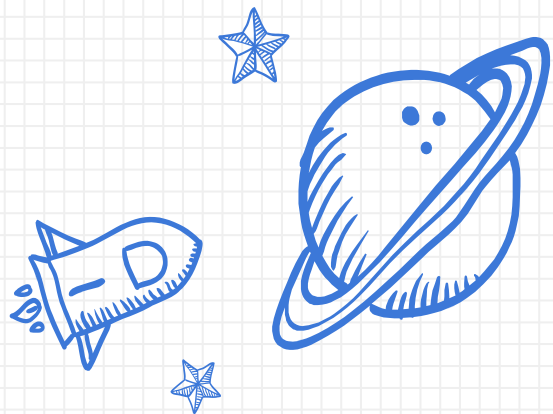
# What if I like other sciences?

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- All sciences overlap with physics!
  - Ex: Biophysics; physical chemistry; computer science
- Physics can give you a deeper understanding of what you learn in chem and bio
- Biology and chemistry majors at most colleges/universities also require at least a year of physics classes







# WHAT CLASSES ARE THERE?

# Physics 1

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- Prereqs:
  - Grade 10-12
  - Min. B- in Algebra I and Geometry,
  - Co-enrolled in Algebra II
- The basics of physics
- Emphasis on conceptual understanding, limited math
- Grades based on scientific and problem solving skills
- Group project based learning
- Hands on labs and activities, minimal lecture



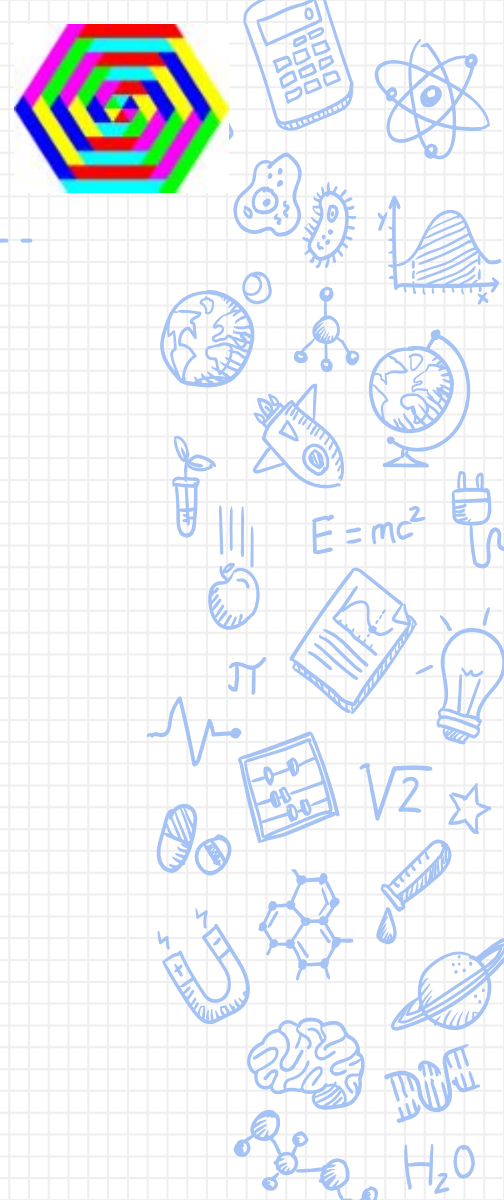
# AP Physics 1

- Prereqs:
  - Grades 10-12
  - Min. B+ in Bio Accel or A in Bio
  - B+ in Chem Accel or A in Chem,
  - A- in Algebra II
  - Co-enrolled in Pre-Calculus
- Can be taken as a FIRST TIME physics class
- Algebra based
- In depth study of Mechanics (motion, forces, energy, etc)
- Heavy focus on experimental design and Mathematical skills



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# Innovation Engineering Physics



- Prereqs:
  - Grades 10-12 and one of the 3 following courses:
  - AP Physics C
  - AP Physics I
  - A in Physics 1
  - Previous CAD/Coding experience recommended but not required
- Teaches Research & Development Protocols:
  - Technical Innovation Process
  - Strength Calculation & Analysis
  - Material Science
  - Intellectual Property Law
  - Ergonomics
  - Error Analysis and Reverse Engineering
- Recommended for anyone considering a career in STEM, and R & D in particular.

# TOP 10 REASONS YOU SHOULD TAKE WHY PHYSICS

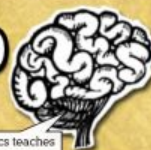
[www.compadre.org/careers](http://www.compadre.org/careers)

#10

SOMEONE  
CALL A  
PHYSICIST!

If you get stuck  
inside of a black  
hole, you'll know  
how to **get out**

#9



Physics teaches  
you how to  
**THINK!**

Give Physics a Chance

PHYSICS PAYS YOU DIVERSE  
COLLECT BONUS

Community Class of Physics

GET OUT OF RECURSION  
FREE CARD

The laws of  
physics are  
**100%**  
recession-proof,  
and the jobs  
you can get  
with physics  
are pretty darn  
secure too.

#7 SAT LSAT

Physics will get you a **better score**  
on any test whose name  
has three or four capital letters—  
**SAT, ACT, MCAT, LSAT or GRE**

#8

Physics explains:  
-Why the sky is blue  
-Why the world  
goes round  
-Why global warming  
will have the Alaskans  
trading in their **snow**  
boots for **flip-flops**.

ACT GRE MCAT

#5

$F=ma$

Ever wonder why  
you're learning all  
that math?  
**TRY PHYSICS!**

$\pi$   
 $\infty$   
 $E=mc^2$

#4

If you study engineering, you can do  
engineering. If you study physics,  
you can **still do engineering...**

#3

or Explore the **mysteries of the universe**

Use **lasers** to develop new medical techniques

Become an **international rap sensation**

Help solve the  
**world's energy problems**

#2

Without  
**physics** there  
would be **NO**:  
grocery laser  
scanners, space  
rockets, light  
bulbs, digital  
cameras, cars,  
cell phones,  
airplanes, solar

panels,  
fiber  
optics, DVD players, computers, MP3 players,  
flat-screen TVs... **get the picture?**

NUMBER 1 REASON

Physics makes you **more attractive** to  
university recruiters, future employers, and

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