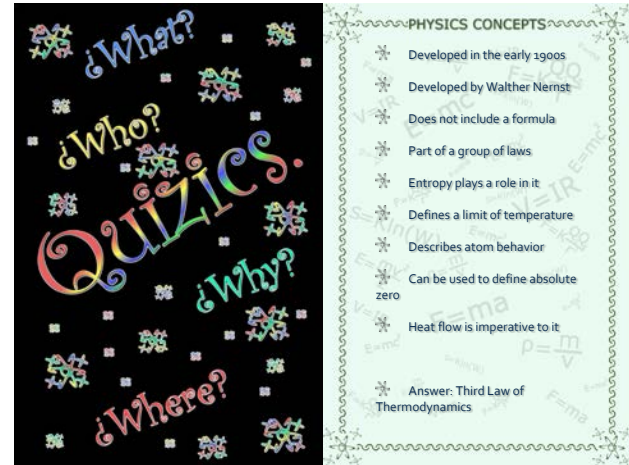


“Quizics”: A Dynamic Technique for Physics Outreach

By Francisco Ayala Rodriguez
APS Public Outreach Intern

Outreach: Bringing Physics to the Public

- + Develop an informational education project
- + Out of the box mindset
- + Communication skills
- + Imagination and creativity



Quizics: Why? How? and What?

- + Board game culture
- + Portable trivia game



PHYSICS CONCEPTS

- ✧ Developed in the early 1900s
- ✧ Developed by Walther Nernst
- ✧ Does not include a formula
- ✧ Part of a group of laws
- ✧ Entropy plays a role in it
- ✧ Defines a limit of temperature
- ✧ Describes atom behavior
- ✧ Can be used to define absolute zero
- ✧ Heat flow is imperative to it

✧ Answer: Third Law of Thermodynamics

PHYSICS TOOLS

- ✧ Invented in the early 17th century
- ✧ Created by William Gilbert
- ✧ Made from conductive materials
- ✧ The original model included gold
- ✧ It demonstrates polarization
- ✧ It also demonstrates electrostatic induction
- ✧ You can find it in laboratories
- ✧ It's an electromagnetism demo
- ✧ It includes two thin metallic films
- ✧ Answer: Electroscope

Content Development



Laws of Physics

1. It was developed by the chemist Walther Nernst.
2. Developed at the beginning of the 1900s.
3. You will hear about it at both an introductory and an upper division course.
4. This law does not include a formula with it.
5. It talks about a limit of temperature.
6. It talks about atom behavior and randomness.
7. To understand it you need to understand how heat flows.
8. It is part of a sequence of laws.
9. An important keyword is absolute zero.
10. The other important keyword is entropy.

Answer: Third law of Thermodynamics. "As a system approaches absolute zero of temperature, all processes cease and the entropy of the system approaches a minimum value."

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- ★ An important keyword is absolute zero.
- ★ The other important keyword is entropy.
- ★ It refers to the Dynamics of heat.
- ★ If the laws raced, this one would have gotten a bronze medal.

Answer: Third law of Thermodynamics. "As a system approaches absolute zero of temperature, all processes cease and the entropy of the system approaches a minimum value."

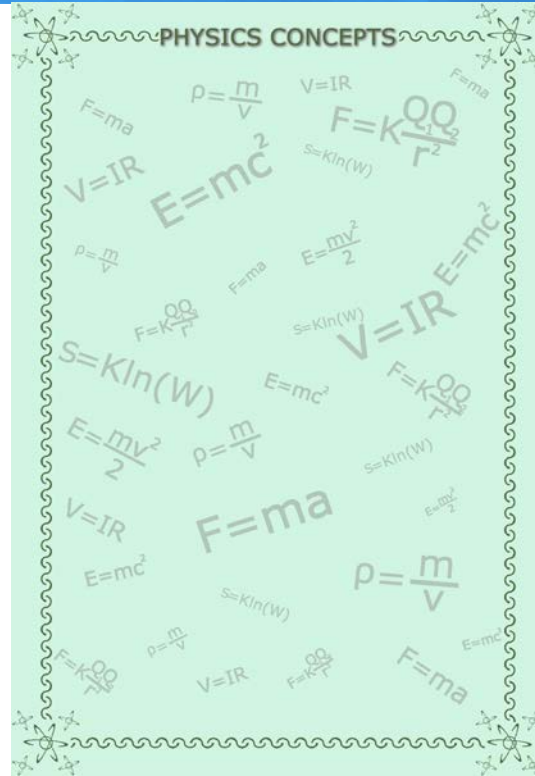
PHYSICS CONCEPTS

1. It was developed by the chemist Walther Nernst.
2. You will hear about it at both an introductory and an upper division course.
3. It explains a specific case on the dynamics of heat.
4. It does not include a formula.
5. To understand it, you need to understand how heat flows.
6. It is part of a sequence of laws.
7. It talks about absolute zero.
8. Entropy is also mentioned.
9. If the laws raced, this one would have gotten a bronze medal.

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- + Physics Guidebook
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Podcasts

Bring Racing Cubesats with the NASA CubeQuest Challenge
December 23, 2016
In the edition of the PhysicsCentral podcast, we hear from a few teams who are still in the running for the CubeQuest Challenge: a contest for nonprogen teams to build their own small satellites—cubesats—and compete against each other by communicating technological feats. Five million dollars in prize money will be divided among teams who can get into orbit around the moon, maintain a stable orbit for a long time, or make it almost all the way to Mars' orbit while still communicating with Earth.

PhysicsQuest

PhysicsQuest's Sonic Surprise
Suggestion to new spin for PhysicsQuest: Spectra's Sonic Surprise!
Spectra and her gang are in for some big surprises this year leading up to the Big Celebration Day dance. [Read More](#)

Acknowledgements

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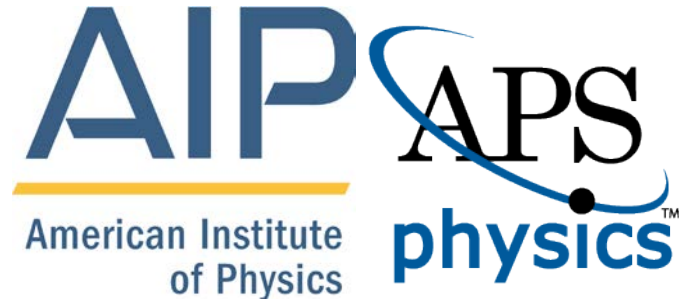
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Thank you!

Any questions?