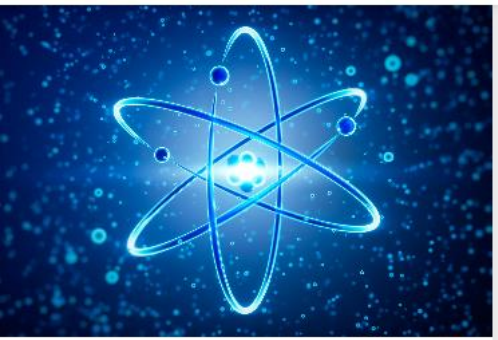
Kahoot!



QUANTUM WORLD PART 1

4 plays · 4 players

A public kahoot

KAHOOT__DONN159
Updated 6 days ago

New to Kahoot!?

Welcome! You can play this game as a guest without an account. Sign up to save game results, search millions of awesome kahoots, create your own or duplicate and edit existing ones!

Sign up | Play as guest

Already a user? Log in

Questions (7) Show answers

1 - Quiz

WHAT BEST DESCRIBES THE TERM "QUANTUM"?

2 - Slide

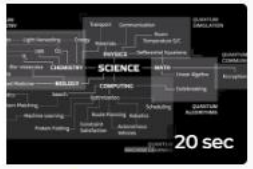
QUANTUM MECHANICS

3 - Quiz

WHY WAS QUANTUM THEORY DEVELOPED?

4 - Quiz

WHICH FIELDS ARE BEING IMPACTED BY QUANTUM MECHANICS?



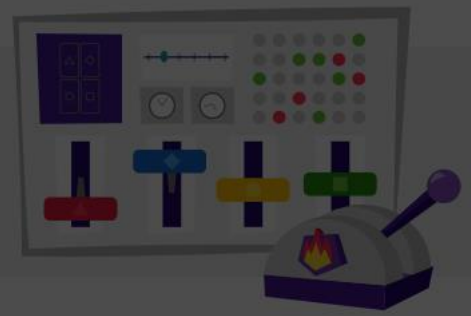
5 - Quiz

QUANTUM WORLD PART 1

Choose a mode for this kahoot

Log in

Live kahoot settings are here



Want to change the language or lobby music, turn on personalized learning, or randomize the question order? Do all of this and more while you host from the settings panel.

Got it

Log in to save results

Sign up or log in to view a kahoot report after the game. You will not be able to view the report if you continue as a guest.

Sign up

Log in

Continue as a guest

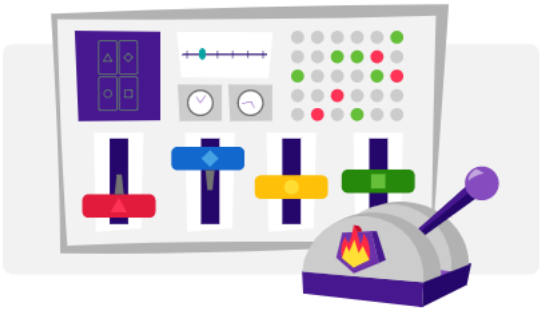
Kahoot!

QUANTUM WORLD PART 1

Choose a mode for this kahoot

Log in

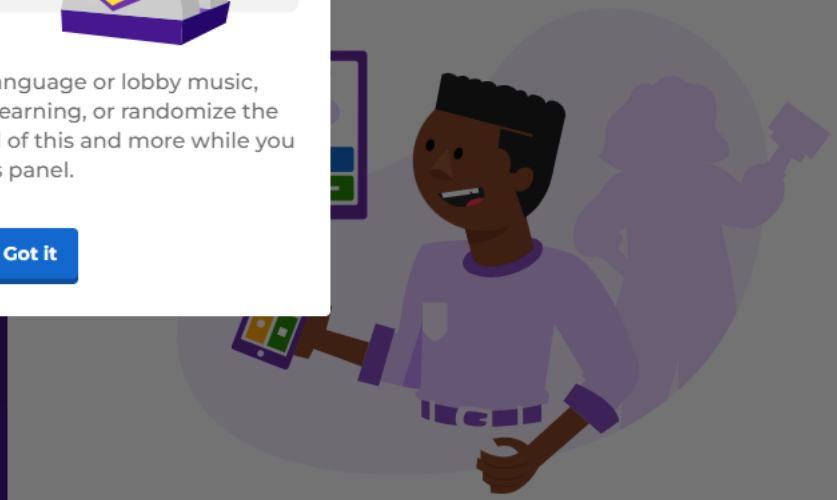
Live kahoot settings are here



Want to change the language or lobby music, turn on personalized learning, or randomize the question order? Do all of this and more while you host from the settings panel.

Got it

Start



Team mode

Kahoot!

QUANTUM WORLD PART 1

Choose a mode for this kahoot

Log in

Choose classic mode

Classic mode Start

Team mode

Kahoot!

This number changes each time the game is played.

Waiting for players...

Join at **www.kahoot.it**
or with the **Kahoot! app**

Game PIN:

203 6588

1

Kahoot!

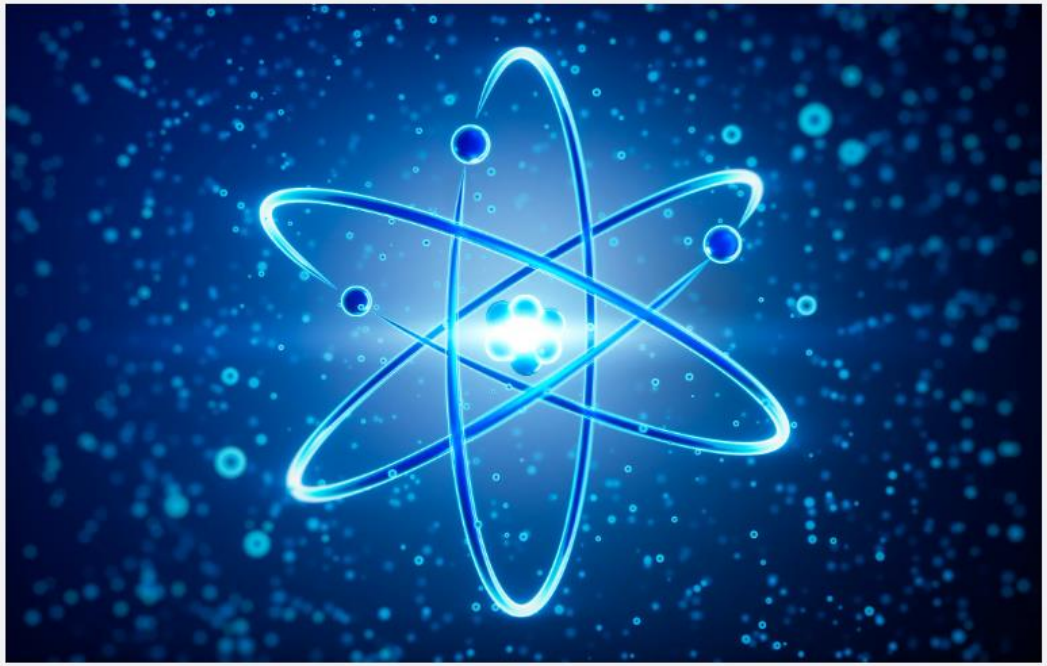
Start

Donn S

Example screen shot of Kahoot quiz question.

Skip

WHAT BEST DESCRIBES THE TERM "QUANTUM"?



15

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Answers

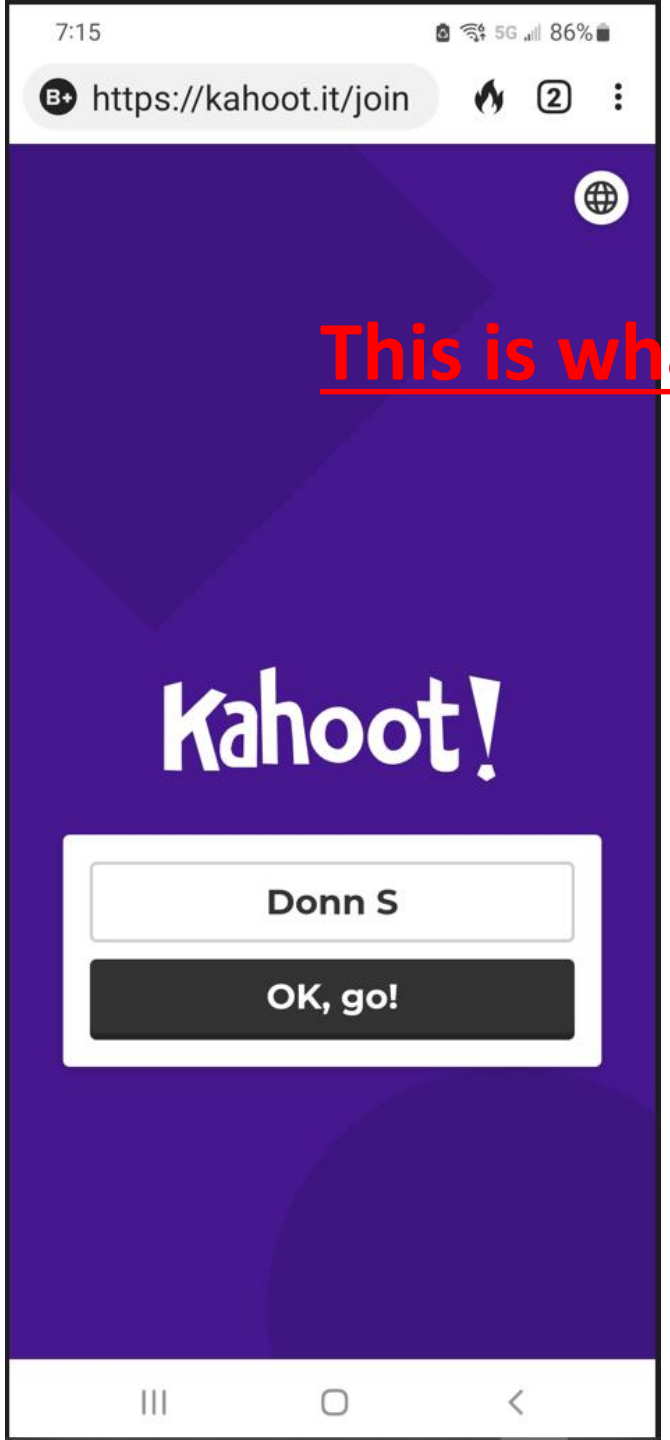
▲ A PARTICLE OF LIGHT

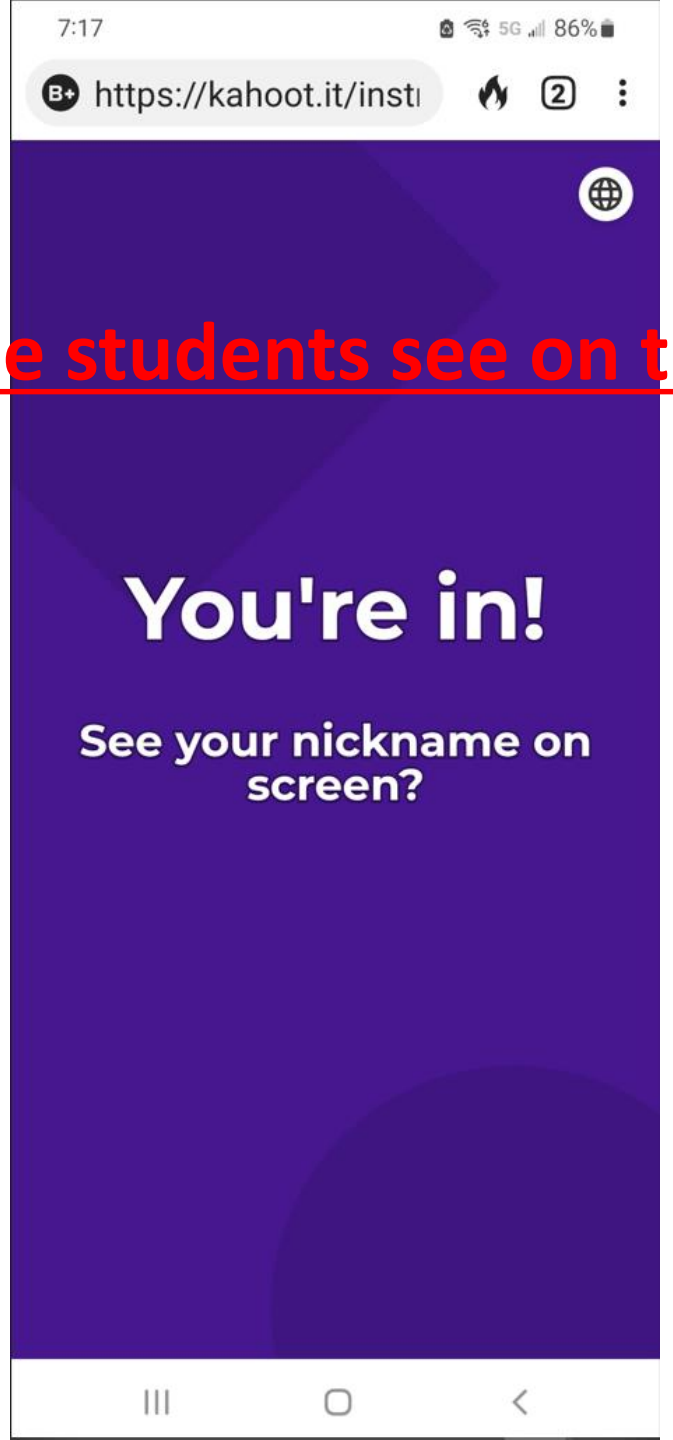
◆ AN ELECTRON

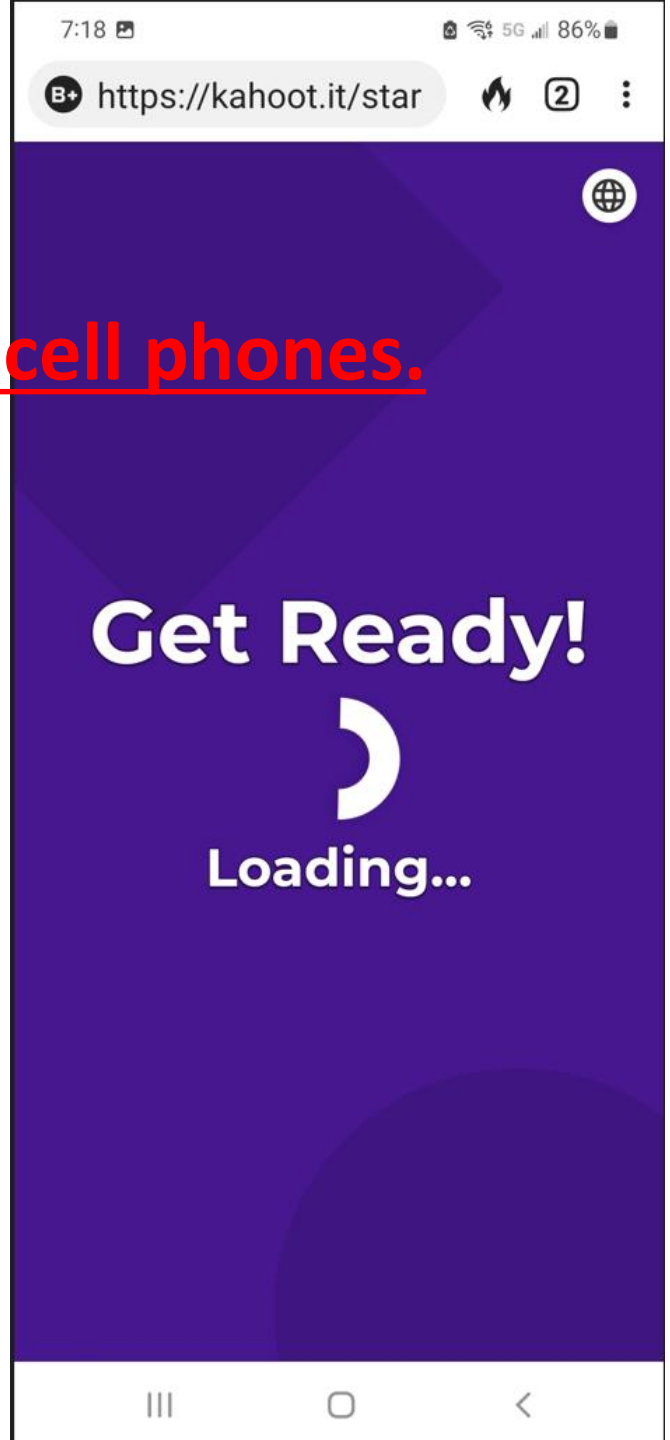
● A PHYSICAL ENTITY THAT HAS ONLY DISCRETE VALUES.

■ VERY SMALL THINGS AT THE SUBATOMIC LEVEL.

This is what the students see on their cell phones.



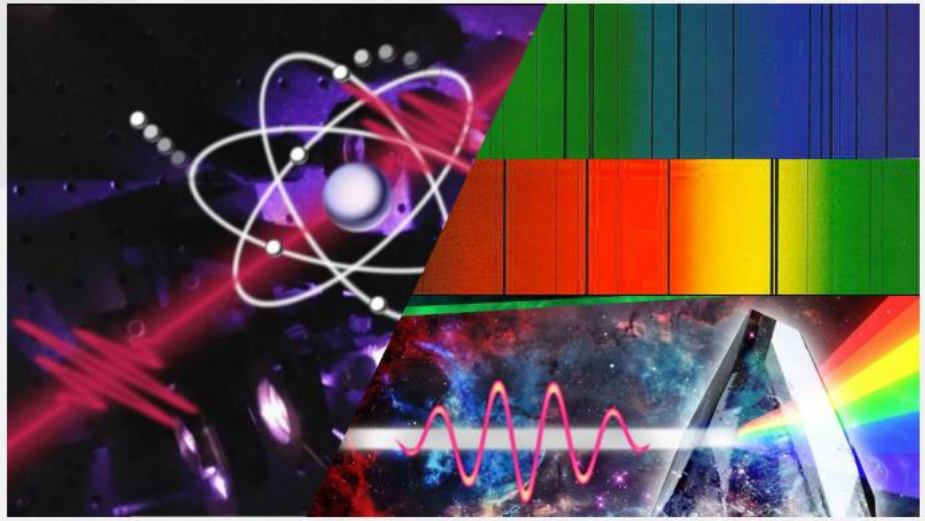




Example screen shot of Kahoot definition.

Next

QUANTUM MECHANICS



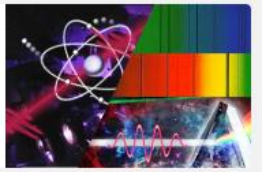
QUANTUM MECHANICS IS A BRANCH OF PHYSICS THAT PROVIDES A DESCRIPTION OF THE PHYSICAL PROPERTIES OF NATURE AT THE SCALE OF ATOMS AND SUBATOMIC PARTICLES.

Kahoot!

These are the rest of the slides in Kahoot #1

2 - Slide

QUANTUM MECHANICS

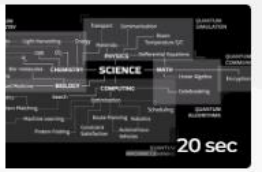


3 - Quiz

WHY WAS QUANTUM THEORY DEVELOPED?

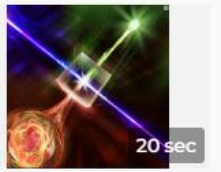
4 - Quiz

WHICH FIELDS ARE BEING IMPACTED BY QUANTUM MECHANICS?



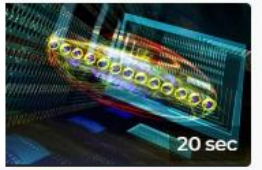
5 - Quiz

WHY ARE LASERS IMPORTANT TO QUANTUM MECHANICS?



6 - Quiz

HOW DOES QUANTUM COMPUTING DIFFER FROM REGULAR (CURRENT) COMPUTING?



7 - Quiz

WHY CAN QUANTUM COMPUTERS BREAK CURRENT DATA ENCRYPTION TECHNOLOGIES?

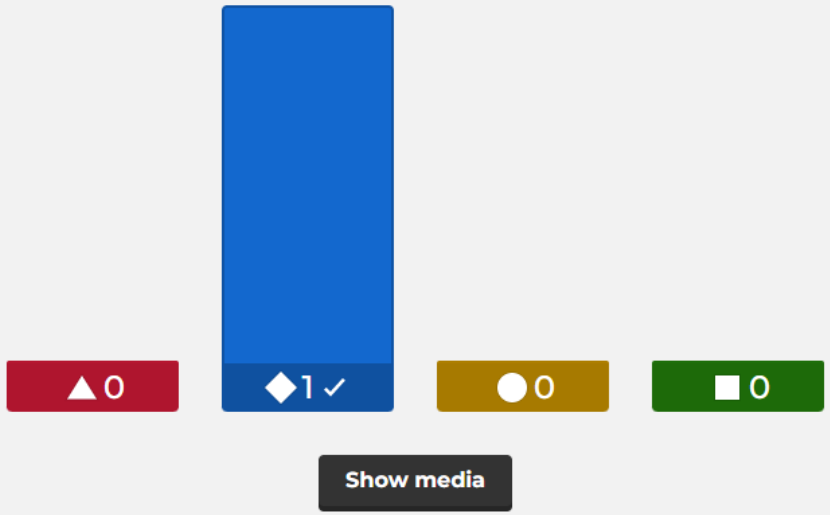
Resource credits

Description: peterschreiber.media/iStock/Getty Images

WHICH OF THE FOLLWOING STATEMENTS ARE PROBABLY NOT TRUE?

Next

Example of a slide showing the correct answer and how all the students answered.



▲ QUANTUM COMPUTERS CAN BE USED TO IMPROVE MEDICINES. ✖

◆ SOME DAY QUANTUM COMPUTERS WIL REPLACE REGULAR COMPUTERS. ✔

● QUANTUM COMPUTERS WILL IMPROVE ARTIFICIAL INTELLIGENCE & MACHINE LEARNING. ✖

■ SOME DAY THERE WILL BE A QUANTUM INTERNET. ✖

Next

Scoreboard

Donn S	607

WHY SHOULD YOU CARE ABOUT QUANTUM TECHNOLOGIES?

Skip

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0
Answers

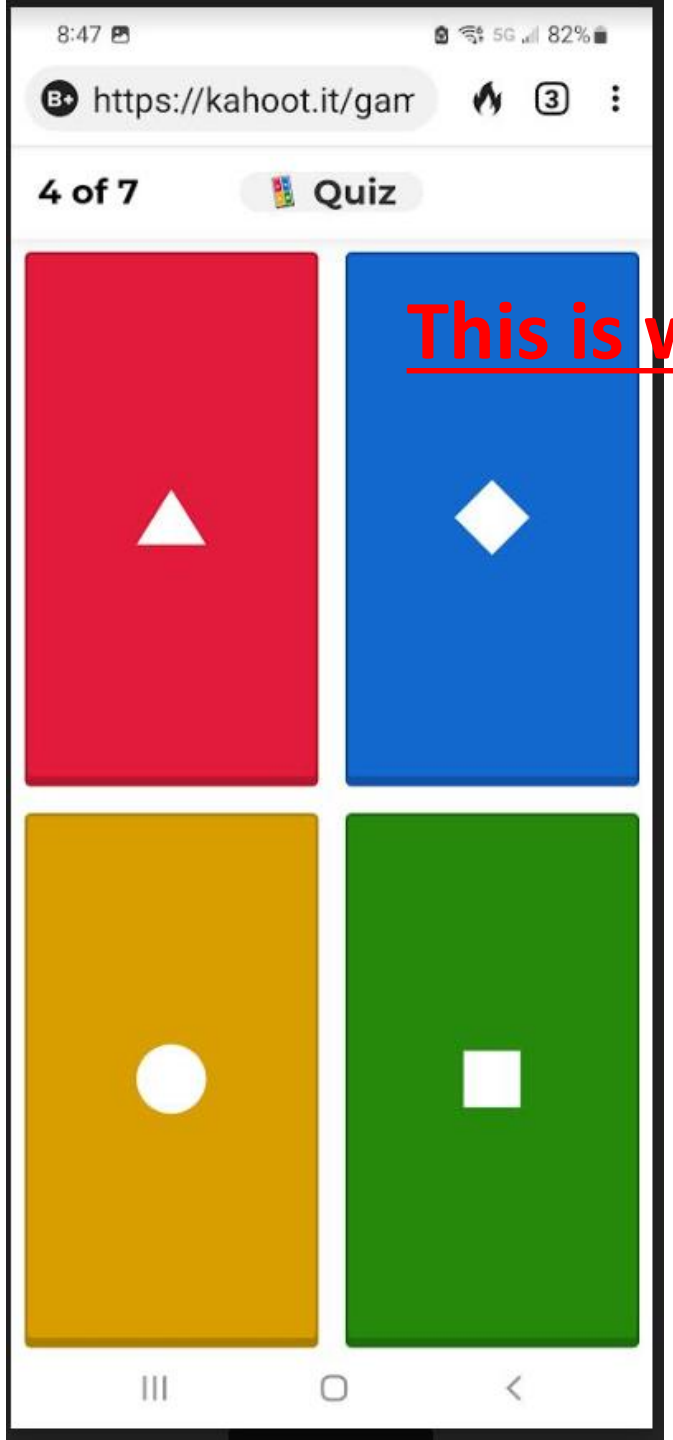
▲ ITR'S WAY COOL BECAUSE IT HAS "SPOOKY ACTION AT A DISTANCE"

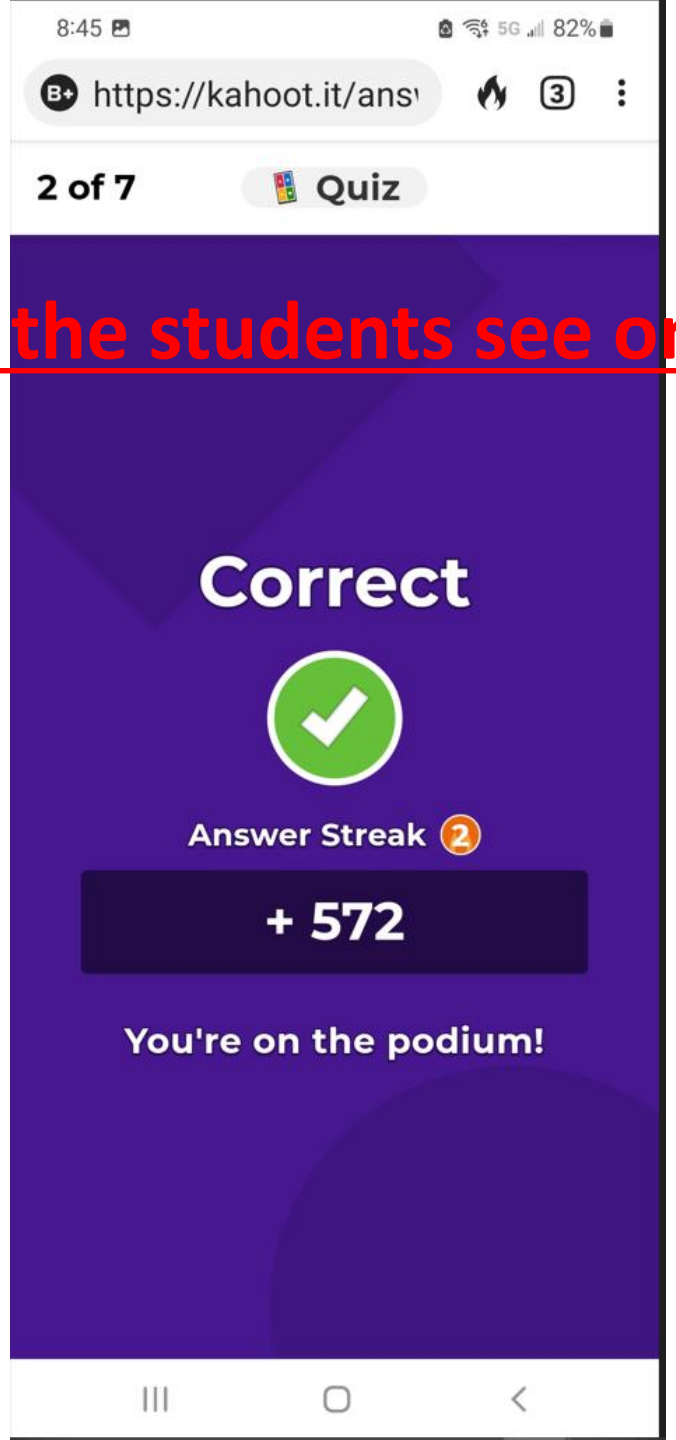
◆ THERE ARE LOTS OF COOL POSTERS, INFORMATION AND YOUTUBE VIDEOS AVAILABLE.

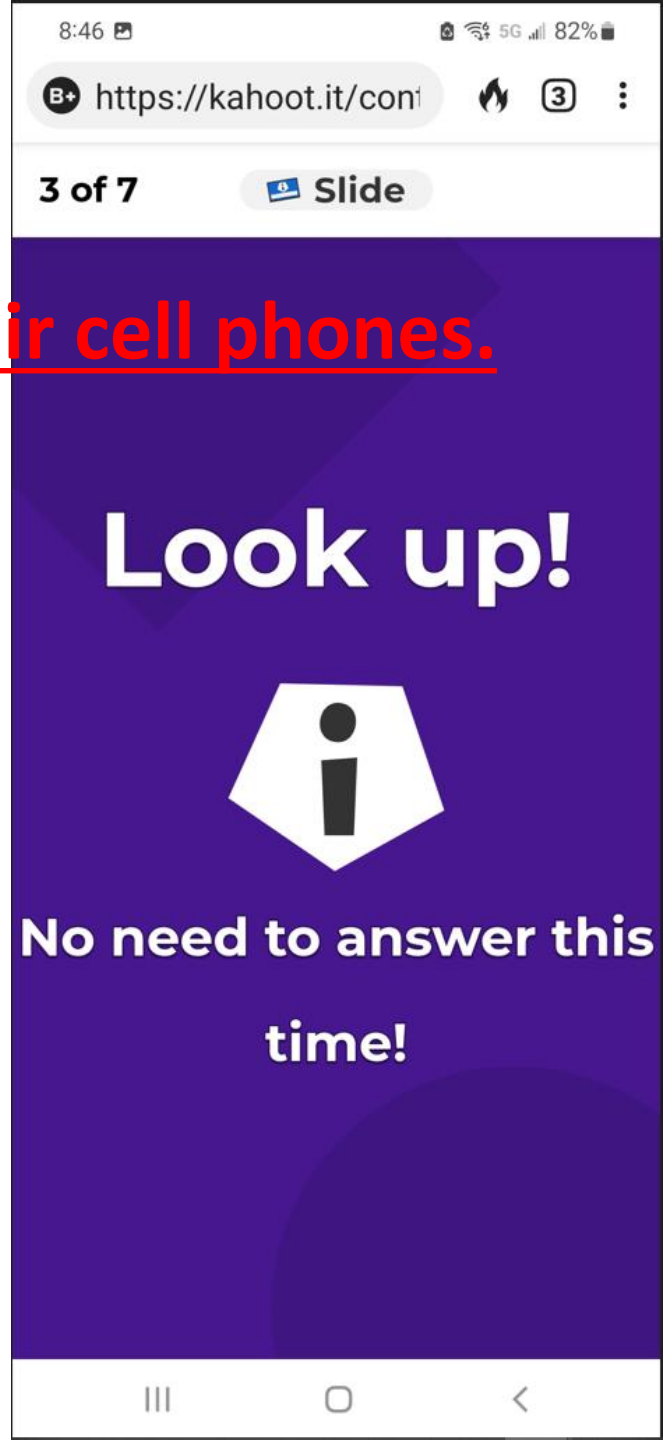
● IT'S VERY INTERESTING AND HAS LOTS OF GREAT CAREER OPPORTUNITIES.

■ I CAN BECOME A QUANTUM HACKER AND MAKE LOTS OF $$$

This is what the students see on their cell phones.

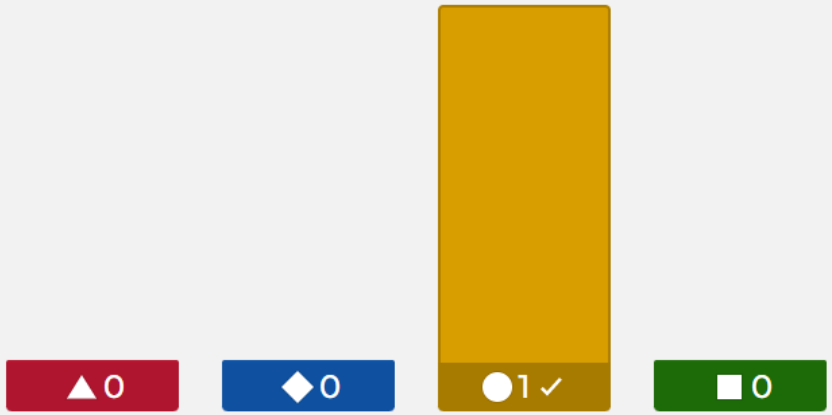






WHY SHOULD YOU CARE ABOUT QUANTUM TECHNOLOGIES?

Next



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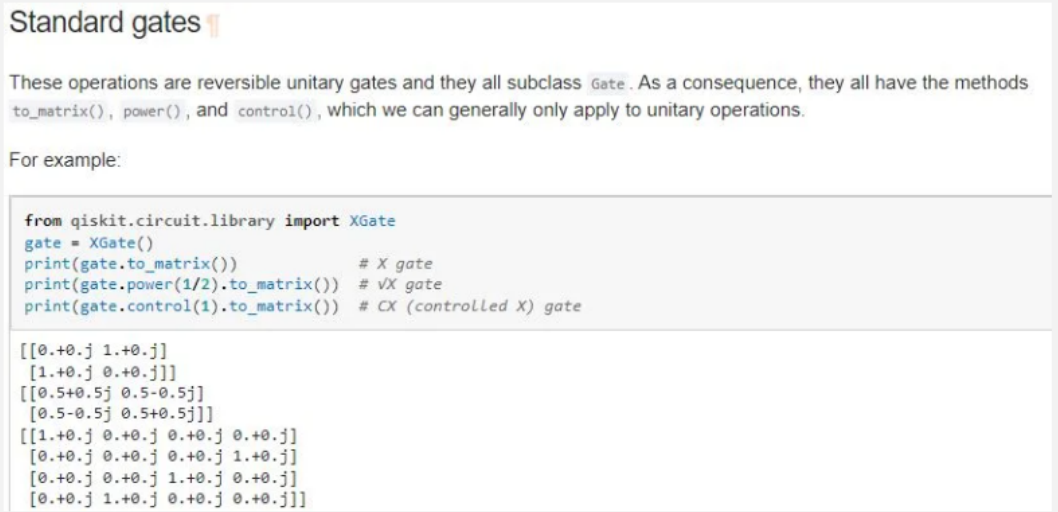
■ I CAN BECOME A QUANTUM HACKER AND MAKE LOTS OF $$$ ✖

HOW CAN YOU LEARN TO PROGRAM A QUANTUM COMPUTER?

Skip

7



Standard gates ¶

These operations are reversible unitary gates and they all subclass `Gate`. As a consequence, they all have the methods `to_matrix()`, `power()`, and `control()`, which we can generally only apply to unitary operations.

For example:

```
from qiskit.circuit.library import XGate
gate = XGate()
print(gate.to_matrix())             # X gate
print(gate.power(1/2).to_matrix())  # √X gate
print(gate.control(1).to_matrix())  # CX (controlled X) gate
```

```
[[0.+0.j 1.+0.j]
 [1.+0.j 0.+0.j]]
[[0.5+0.5j 0.5-0.5j]
 [0.5-0.5j 0.5+0.5j]]
[[1.+0.j 0.+0.j 0.+0.j 0.+0.j]
 [0.+0.j 0.+0.j 0.+0.j 1.+0.j]
 [0.+0.j 0.+0.j 1.+0.j 0.+0.j]
 [0.+0.j 1.+0.j 0.+0.j 0.+0.j]]
```

0
Answers

▲ PLAY QUANTUM COMPUTER GAMES ON-LINE.

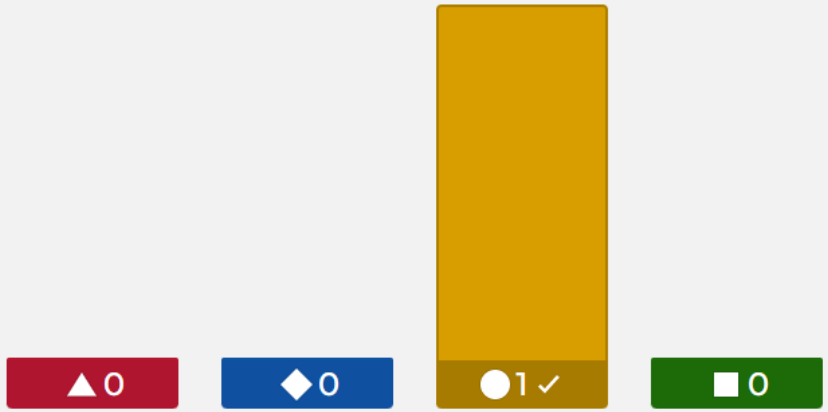
◆ TAKE A COMPUTER CLASS AT YOUR SCHOOL.

● CHECK OUT IBM'S QISKIT.ORG WEBSITE.

■ TAKE A PROGRAMMING COPURSE AT YOUR LOCAL COMMUNITY COLLEGE.

HOW CAN YOU LEARN TO PROGRAM A QUANTUM COMPUTER?

Next



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