



IoT #2

5 plays • 42 players

 A public kahoot

Questions (10)

1 - Quiz

20 sec

If my IoT device never puts its radio to sleep, which of the following energy-depleting problems will I experience?



medium access control



energy harvesting



idle listening



error control coding



2 - Quiz

20 sec

Which of the following is NOT an ongoing IoT tech trend?



increasingly cheaper hardware



smaller form factors and weight



increasingly more abundant computing power



increasingly lower transmit power



3 - Quiz

20 sec

Which one of the following is not the responsibility of the Physical Layer?



how the bits go on the air



how the bits go on a wire



how the medium is shared



how to work with the hardware



4 - Quiz

20 sec

Which one of the following can never be a communication medium?



the air



a wire



a sensor node



outer space



5 - Quiz

20 sec

Why do we need a transport layer?



to regulate medium access



to achieve end-to-end connectivity



to ensure that goods are delivered



to route packets reliably



6 - Quiz

20 sec

Wired vs. wireless protocol stacks: which statement is true?

the whole protocol stack is different



only PHY and MAC are different



only MAC and IP are different



only MAC and transport are different



7 - Quiz

20 sec

What is spectral efficiency?

bits per second



bits per second per Hz



bits per second per node



bits per Hz



8 - Quiz

20 sec

According to the Shannon-Hartley theorem, the number of bits/sec that can be transmitted without errors grows...

linearly with the signal power



linearly with the SNR



linearly with the signal bandwidth



logarithmically with the signal bandwidth



9 - Quiz

20 sec

What's the order of magnitude of the antenna length at 2.4 GHz?



~ dm

~ μm 

~ cm



~ dam



10 - Quiz

20 sec

The simplest form of error-control coding is...



Turbo coding



Repetition coding



Python coding



Javascript coding

