

Name _____ Date _____

5G – The New Wireless Technology.

3 points each. Do your best. All academic factors will be considered when grading. Sheets must be turned in at the end of class.

5G

What does 5G stand for?

What year and month did 5G start to become available?

5G is divided in 3 bands or parts. What are they?

How fast can data be downloaded and in which 5G band are those download speeds reached?

What is a problem with millimeter(mmWave) waves?

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Which 5G band is most widely deployed?

The download speed in the most widely rolled out 5G band is usually between?

Which companies in the U.S. launched 5G low-band in 2019?

Overview

All 5G wireless devices communicate by?

Cell phone towers are connected to the internet by?

How many streams of data in the 5G mmWave band will be transmitted to and from a wireless device simultaneously?

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What is beamforming?

5G Mid-band networks can transmit further. What does this mean for those companies using that band since they won't have to build/upgrade so many towers?

What capabilities will new 5G cell phones have so remote areas without 5G access aren't left without service?

Why will self-driving cars not require 5G?

What is the fastest 5G band called and how fast is it's download speeds?

What does LTE stand for?

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How many **MORE** devices per square kilometer can 5G support over 4G?

What does the future look like in terms of disaster recovery efforts and smart cities?

What does 5G mean for doctor's performing remote surgeries? Why?

Speed

When 5G is fully developed how much faster is it expected to be over 4G?

What is 4G's top speed?

5G mid-band will usually deliver speeds between what ranges?

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Implementation/Rollout

Besides mobile phone providers, where else is 5G expected to be used?

What country was the first to adopt 5G on a large scale?

Swedish telecoms Ericsson predicted what percentage of the world's population will use 5G by the end of 2025?

Which of the 9 companies listed that sell 5G radio hardware and 5G systems also make mobile phones?

Looking at the spectrum diagram, the 5G spectrum operates in what frequencies?

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5G Devices

In March 2019, what 7 forms could 5G devices come in?

In just 6 short months from March 2019 to October 2019, the number of total forms a 5G device could come in grew to how many forms in October 2019?

In just 6 short months from March 2019 to October 2019, the number of vendors selling 5G devices grew to how many?
