Aired August 12, 2019 - 04:00:00   ET

CARL AZUZ, CNN 10 ANCHOR: And the lights go on. Welcome to the very first show of a brand new season of CNN 10. We are a 10 minute down the middle

explanation of world events and we welcome viewers from around the world to our 2019 Fall season. My name is Carl Azuz. I`ll be your "explainer-in-

chief" and the first place we`re going this August 12th is Kashmir. This is a region of southern Asia and according to the U.S. Central Intelligence

Agency, Kashmir is the scene of the largest territorial dispute on the planet. India controls part of Kashmir but wants all of it to be Indian

territory. Pakistan controls part of Kashmir but wants all of it to be Pakistani territory.

China also controls a section of Kashmir. Since 1949, India has given the part of Kashmir it controls a special status. The Indian state has been

allowed to have its own constitution. It`s own flag and it`s own control over many parts of day to day life. But last week, Indian Prime Minister

Narendra Modi said the special status of Indian controlled Kashmir caused separatism, terrorism and corruption. So India`s government voted to

reorganize and reclassify Indian territory in Kashmir. The changes give India`s government more control over what happens there.

This angered Pakistan. It doesn`t want India to have anymore influence in any part of Kashmir and it called India`s decision illegal. China also

protested India`s decision concerning Kashmir. Relations between India and Pakistan have gotten worse as the tensions have climbed, though when it

comes to Kashmir that`s nothing new.

(BEGIN VIDEO CLIP)

UNIDENTIFIED MALE: Why is Kashmir such a big deal? Because nuclear armed rivals India and Pakistan have been fighting over it for more than 70

years. Both claim the region in its entirety. India currently controls around 45 percent of Kashmir`s territory and Pakistan controls about 35

percent. China controls the rest. So how did we get here? The problems began in 1947, when India and Pakistan gained independence from Great

Britain. Kashmir initially remained independent but later its ruler signed a letter exceeding to India sparking a war with Pakistan.

War broke out again in 1965 and again in 1971. Even after both India and Pakistan became nuclear powers, border clashes continued including notably

in 1999 when violence stopped short of a full scale war. The flashpoint remains the heavily militarized align of control which divides the

Pakistani and Indian controlled regions of Kashmir. Relations between the two countries will continue to ebb and flow but Kashmir is sure to be a

thorn in the side of relations between India and Pakistan for the foreseeable future.

(END VIDEO CLIP)

AZUZ: 10 Second Trivia. On the Periodic Table, 17 elements are classified as what? Halogens, Noble gases, lanthanides or rare earth elements.

Seventeen of the chemical elements on the table are rare earth metals which are widely used in electronics.

Fun fact about rare earth elements. They`re not that rare but maybe somewhat available earth elements didn`t have the same ring. Scandium,

which is one of them, is used in many TVs. Lanthanum is in camera lens. Your watch may have artificial promethium. Many rare earth elements are

produced or processed in China and that could factor into an ongoing trade dispute between the United States and China if higher tariffs or taxes

effect the costs of rare earth metals. Everything from magnets to car engines could get more expensive.

(BEGIN VIDEO CLIP)

UNIDENTIFIED FEMALE: They are everywhere. You`ll find them in your phone, your car, even in wind turbines. Without rare earth elements, a lot of the

technology we have today wouldn`t exist in its current form. They`re mined in places like this and have been milled into a concentrate before being

processed into the pure metal. The global appetite for rare earth elements is surging. There`s actually about 50 percent rare earths contained in

this concentrate, but what are they? Well contrary to the name, they`re not actually that rare.

Rare earth elements are a collection of 17 metals that are found here on the Periodic Table with names that are almost impossible to pronounce. And

while they`re abundant, they`re not often found in quantities that make extraction economically viable. They`re known for having similar

properties and are mostly used in magnets, catalysts or in hybrid car batteries. Even some military equipment requires rare earth elements.

China is by far the biggest producer. It has a third of the world`s deposits and it counts for more than 90 percent of global production and

supply.

While there are a handful of other countries with deposits, mining them is only half the battle. The bigger issue is processing, purifying. That`s a

dirty process and can involve handling radioactive waste. Up until now, most countries have been happy to leave that work to China. The U.S. has

one rare earth`s mine but its still exports its product to China for processing. As more and more technology appears that relies on rare earths

and demand for that technology grows, so does the dependency on China.

(END VIDEO CLIP)

AZUZ: Forty years after 1G or first generation wireless technology arrived, 5G is finally upon us, or is it? There`s a lot of excitement

about how faster wireless speeds could change our lives but even though 5G technology is now available in a few American cities, one analyst says

don`t hold your breath. It could take as long as eight years before its available in as many places as 4G right now is. CNN`s Samantha Murphy

Kelly tried to take 5G for a spin.

(BEGIN VIDEO CLIP)

SAMANTHA MURPHY KELLY, CNN BUSINESS EDITOR: So this is an actual 5G cell site location here in the East village. You can see that the 5G site is

sort of a small rectangle on top of a longer vertical rectangle and there are other 4G sites around it. The 5G T-Mobile site allows sort of this

high band millimeter wave to kind of cast a spectrum down and you`re able

to access these higher speeds if you`re in the vicinity around it. So what

is 5G anyway? It`s the next generation or G of cellular service. 2G was more focused on text messaging. 3G was sort of the boom of apps. 4G

introduced faster speed so it could handle Uber or FaceTime. Now 5G is supposed to be 10 times as fast and it will be able to support self driving

cars, robotic surgeries, even toothbrushes that can tell you when you`re sick.

T-Mobile`s 5G network is only in a few cities for now but it has an aggressive plan to roll out to the rest of the country by next year. AT&T,

CNN`s parent company is more focused on helping businesses and Verizon is all about speed. But I quickly noticed staying on its 5G network was a

challenge. Sprint had the most seamless coverage giving me a glimpse to what life with 5G can really look like but it also had slower speeds than

some of the other providers. You can see how close we are to the 5G cell site right there in the building above the Starbucks, but I can`t even get

on the network. I`m just only a couple 100 feet away. Oh wait, OK. I got it. We did a test on T-Mobile`s 4G and 5G connections in the park.

The 5G network was significantly faster but it didn`t quite hit the high speeds I saw on other networks. So I`m getting really great 5G service

right here at the Starbucks and the 5G cell site is right above me but let`s see what happens if I go inside. And there we go, just - - it just

dropped just now. Some people might think that their already using 5G. On my phone actually it says 5GE which stands for 5G Evolution. You`re using

a much faster network but you`re not actually using 5G. That`s actually because you need one of these phones. This is a Samsung 5G phone. It

costs $1,300. There are other options on the market too.

LG has one that is almost $1,000 and it`s still really expensive for a network that might not work that great for you, and you might not even have

access to it. So the hype for 5G is high and for good reason. There are so many different applications that`s really going to change probably the

way we live, but for now, service is super spotty. It`s really limited.

It`s expensive and it`s going to take so long for these companies to truly

put the equipment in all the different buildings and the lamp posts across the country. So, might just want to sit tight and wait for them to work

out the kinks.

(END VIDEO CLIP)

AZUZ: For 10 out of 10 today, Louisville may be famous, in part, for the Kentucky Derby but Chicago`s got an annual Ducky Derby, more than 63,000

rubber duckies dumped into the Chicago River that happened last week. This is a race. It costs $5 for a human participant to sponsor a duck.

Proceeds go to support the Special Olympics and if your duck is one of the first to float across the finish line, you could win a vacation, a wad of

cash or a new car. You`d feel pretty "duckie". It`d be your "duckie day" if your float floats "quackly" and you`re just five bills away from become

one "lucky duck". This is where we "duck" out for the day. I`m Carl Azuz. We`re happy to have you watching CNN 10.

END

</p>