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CLASS _____

WEB & WIRELESS TECH

Vint Cerf

A Father of the Internet

The Man Who Wrote the Rules of the Internet

Vint Cerf is an American computer scientist. He was born in 1943. Along with a scientist named Bob Kahn, he helped invent the rules that make the Internet work. Because of this, people call him a "Father of the Internet."

In the 1970s, Cerf and Kahn designed something called TCP/IP. A protocol is a set of rules. TCP/IP lets different computer networks connect and share information. It breaks a message into small pieces called packets, sends them across the network, and then puts them back together in the right order at the other end.

On January 1, 1983, the whole Internet started using TCP/IP. In 2004, Cerf and Kahn won the Turing Award, which is the top prize in computing. Today Vint Cerf works at Google as its "Chief Internet Evangelist." Remember: the Internet is not the same as the World Wide Web. The Internet is the network, and the Web is the pages that run on top of it.

WORDS TO KNOW

- **protocol:** a set of rules that computers agree to follow so they can talk to each other
- **packet:** one small piece of a message that travels across a network
- **TCP/IP:** the rules Vint Cerf and Bob Kahn made that let networks connect and send packets

Part 1 • Reading Comprehension

1. Who worked together with Vint Cerf to design TCP/IP?

2. What is a protocol?

3. What does TCP/IP do to a message before it is sent?

4. What is Vint Cerf's job at Google today?

Send a Message in Packets

TCP/IP cuts a message into packets and numbers them so they can be put back in order. You will be TCP and sort the packets out.

- 1 A message was cut into 4 packets. They arrive all mixed up: 3, 1, 4, 2. Write them in the correct order.

- 2 A message is cut into 5 packets. How many packets must arrive so that nothing is missing?

- 3 TCP puts packets back in order. Which packet number comes right after packet 2?

Part 3 • Think About It

Why do you think TCP/IP breaks a message into small packets instead of sending the whole thing as one big piece?
