1. Tim Berners -- Lee invented the World Wide Web as a concept in 1989, made it into a simple server in 1990, and he invited people outside of his organization (CERN) to use his server in 1991.
2. Sr. Tim worked at a particle physics laboratory called CERN in a place near Geneva, Switzerland, as a software engineer.
3. The reason that he wanted to do this was because of difficulty accessing information because of it being on different computers at CERN, if an employee needed information they would have to go through a long drawn out process. Needing to go onto different computers that had different programs that one would have to learn, made accessing this information very slow and ineffective. This inspired him to create the WWW, to solve this issue.
4. The three fundamental technologies that he created were:

* HTML: HyperText Markup Language, the formatting language used on the web.
* URI: Uniform Resource Identifier, A type of address that is used to identify and is unique to each resource on the web, and is commonly called a URL.
* HTTP: HyperText Transfer Protocol, Allows users to retrieve linked resources from the web.

1. Tim and others at CERN decided that the code would be free for everyone to use forever, for no royalties and be easily accessible.

1. The five revolutionary ideas were:

* Decentralisation: No permission needed from a central authority to post or upload something on the web, no central node for control, no single point of failure or function, and no kill switch, which means freedom from censorship and surveillance.
* Non – Discrimination: If one service offers a certain quality, and another provides one with that or greater quality, users of each respective should be able to communicate at the same level, A.K.A: Net Neutrality.
* Bottom – Up design: Code developed in view of everyone rather than small group of experts to maximize participation and experimentation.
* Universality: Anyone can publish anything on the web and all the computers involved must speak the same language regardless of hardware used, where they live, or what political or cultural beliefs they have.
* Consensus: For universal standards to function as intended, everyone has to agree to use and work by them, which was done by CERN by letting everyone have a say in the creation of the standards.

1. With politics, they could give leeway and inspire the idea of open governments, with society they could inspire open access to scientific research, freedom of culture, and open access education.
2. First the computer must find the number of the computer (IP) you are looking for, which it does by sending a packet with the information of the computer it is going to, the number of the computer sending it, then the information about what the packet is about, then whatever is being sent through the computers. Then when it returns, it comes back with a copy of the web page over multiple packets carrying parts of information that patch together to tell the computer that the page is complete, if a piece is missing, or to show the web page.
3. No, many parts were already made before he began to work on it, TCP/IP, DNS, HTTP, were things that had already been created, which he just took and patched together to create the WWW.
4. **Vectors** – Can be used to define 3D shapes to make 3D visuals and to make them move as well.

**Transformations** – Use a set of linear equations in relation to the original set (Moving a point).

**Matrix** – Take a vectors and transformations and applying them together, making 3D shapes move and distort.

**Calculus** – About how things change and move.

**Eigenvectors** – Vectors that end up being stretched or shrunk but not changing direction.

1. **Bad:**

* Pictures of horrible, gruesome, violent, obscene things can be downloaded.

**Good:**

* People can find out about a disease they have from information on the web, and find out if there is a cure and what it is.