

SCIENCE EDUCATION NEEDS AN UPDATE

Most states based their current K-12 science standards on reports dating back nearly twenty years! Since that time, we've made major advances in science and technology and gained a better understanding of how students learn these subjects.

HOW CAN U.S. STUDENTS RECEIVE A HIGH-QUALITY SCIENCE EDUCATION IF STATES' STANDARDS ARE STUCK IN THE '90S?

1995



TEXT MESSAGING becomes more popular with T9 or "predictive" typingⁱ

1996

DVDS CHANGE HOME ENTERTAINMENT WITH DIGITAL OPTIC STORAGE.ⁱⁱ



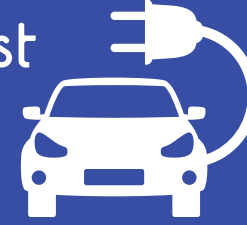
1997



NASA lands first successful Mars roverⁱⁱⁱ

1999

Toyota unveils Prius, the first **HYBRID** on the market^{iv}



Wavefront analysis makes **LASIK** corrective eye surgery more popular^v



2000

Endemic **MEASLES** are eliminated from the US^{vi}



2001

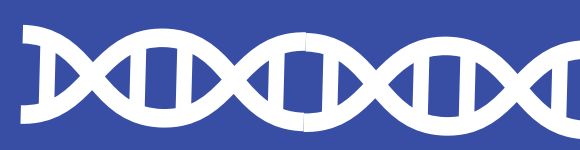


Apple releases the **IPOD**^{vii}

AN AMPUTEE USES THE FIRST ROBOTIC LIMBS OPERATED BY NERVE SIGNALS^{viii}

2003

HUMAN GENOME Project is complete^{ix}

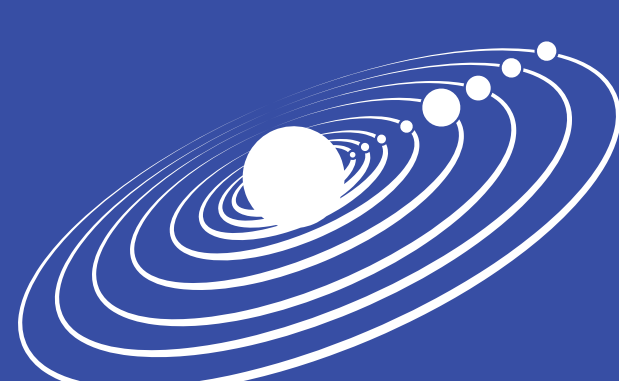


2005

French doctors perform the first successful **FACE TRANSPLANT**^x



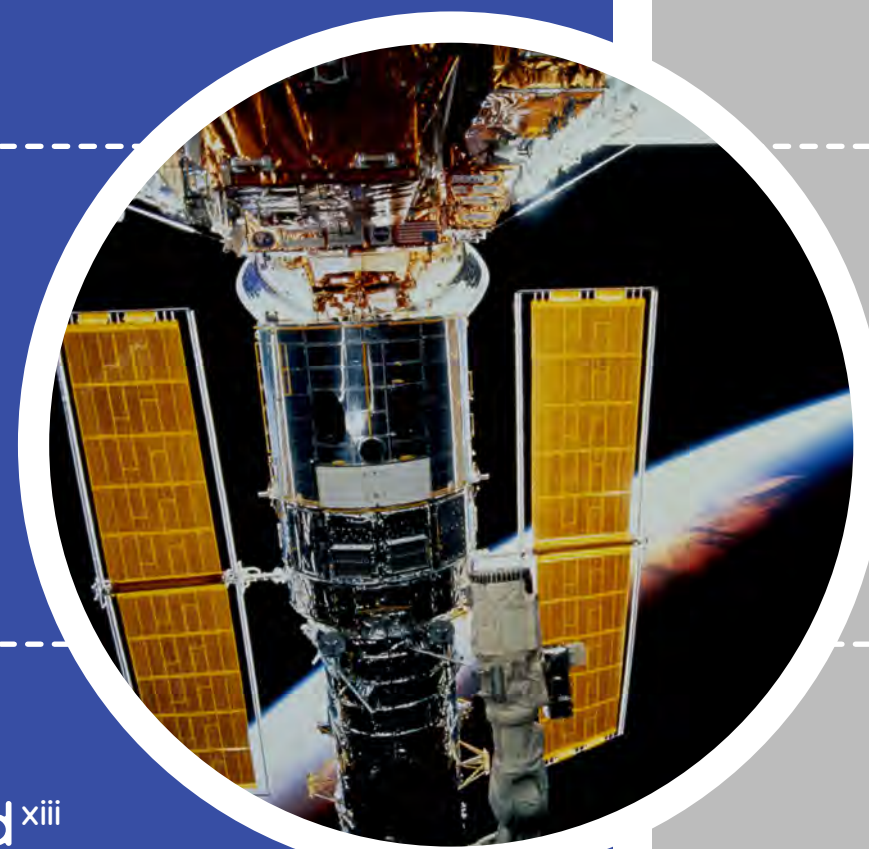
2006



PLUTO is reclassified as a dwarf planet^{xi}

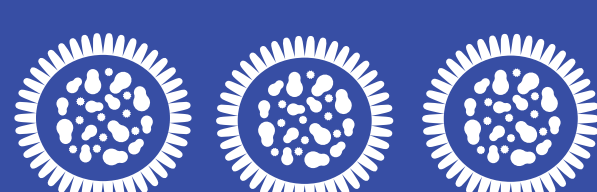
2008

HUBBLE SPACE TELESCOPE OBSERVES FIRST PLANET OUTSIDE OF OUR SOLAR SYSTEM^{xii}



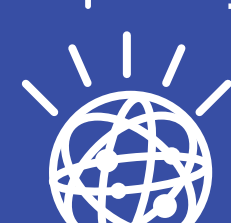
2010

The first **SYNTHETIC GENOME** for a bacterial cell is created^{xiii}

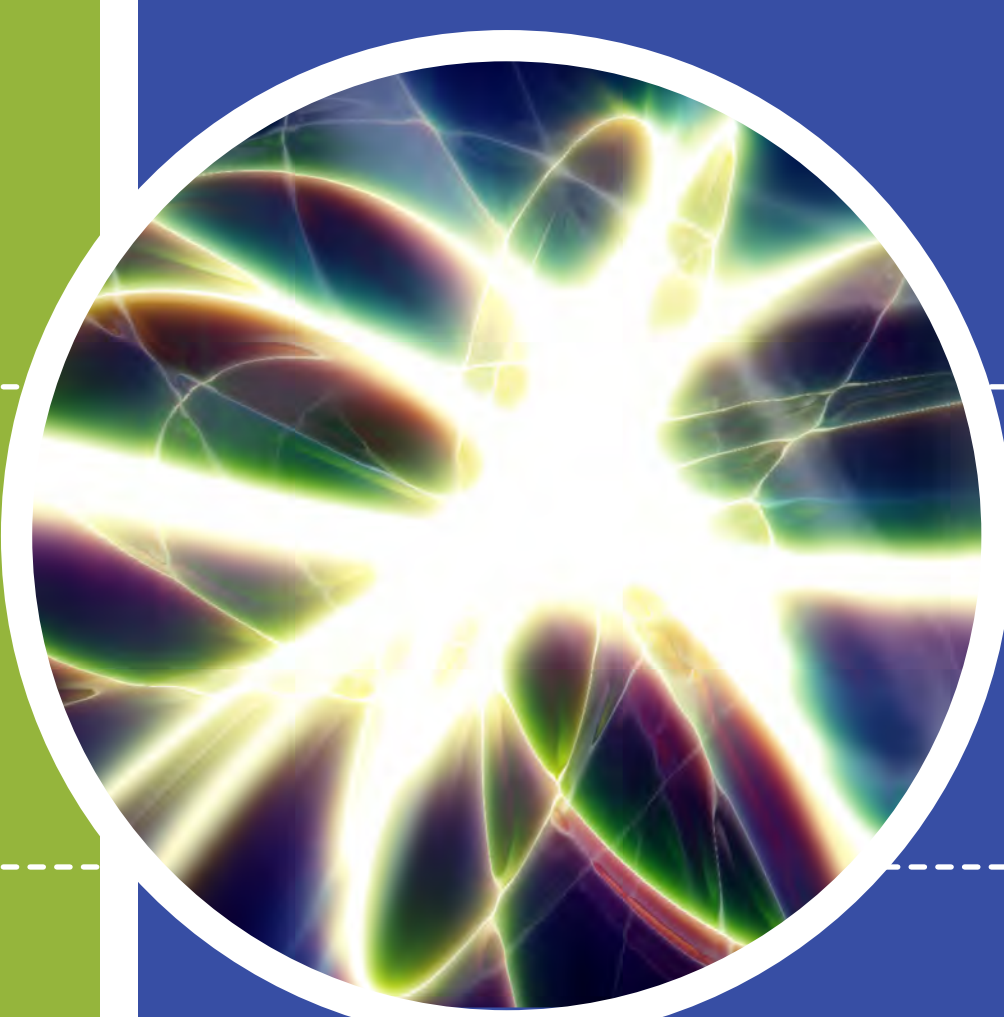


2011

IBM'S **WATSON** wins Jeopardy!^{xiv}



2012



CERN DISCOVERS HIGGS BOSON^{xv}

2014

SIX FLAGS AMERICA'S GOLIATH becomes the fastest wooden roller coaster in the world at 72 mph^{xvi}



WANT TO GET A CLOSER LOOK AT HIGH-QUALITY SCIENCE STANDARDS? LEARN MORE HERE: NEXTGENSCIENCE.ORG

To continue this progress and ensure our students can think critically and address 21st-century global challenges in manufacturing, medicine, technology, the environment and space exploration, we need modern science standards. That's why 26 states led the development of the Next Generation Science Standards (NGSS), a set of education benchmarks released in April 2013, establishing what K-12 students need to know and be able to do. As of November 2014, twelve states and the District of Columbia have adopted the NGSS.



REFERENCES

- ⁱ The Telegraph, "Text messaging at 20: how SMS changed the world"
- ⁱⁱ Did You Know, "History of DVD"
- ⁱⁱⁱ NASA, "A Chronology of Mars Exploration"
- ^{iv} Green Car Reports, "Toyota Prius: A Brief History in Time"
- ^v EyeNet Magazine, "A Look at LASIK Past, Present and Future"
- ^{vi} CDC, "Measles"
- ^{vii} Apple Press Info
- ^{viii} RIC, "Jesse Sullivan: First 'Bionic Man'"
- ^{ix} National Human Genome Research Institute
- ^x New York Times, "French, in First, Use a Transplant to Repair a Face"
- ^{xi} Everyday Mysteries, "Why is Pluto no longer a planet?"
- ^{xii} Hubble Site, "Hubble Directly Observes Planet Orbiting Fomalhaut"
- ^{xiii} J. Craig Venter Institute, "First Self-Replicating Synthetic Bacterial Cell"
- ^{xiv} IBM, "What is Watson"
- ^{xv} CERN, "The Higgs boson"
- ^{xvi} Mashable, "Six Flags Unveils Tallest, Fastest and Steepest Wooden Roller Coaster"