

A History of the Slide Rule

Backdrop: Turn of the century ca 1600

Elizabeth I is Queen of England.

Shakespeare is writing plays and poetry.

New World: Jamestown 1607. Plymouth, MA 1620.

Copernicus had proposed the sun-centered solar system.

Tycho Brahe is charting the stars at his observatory.

Kepler is analyzing large quantities of astronomical data.

The problem:

Tedious multiplication for astronomy & navigation!

The solution:

1614 "A Description of the Wonderful Canon of Logarithms" is published by John Napier, a Scottish baron. His lifelong work: to simplify multiplication. Logarithms substitute addition for multiplication.

Mechanical improvements:

- 1620 Edmund Gunter invents the Gunter scale: a logarithmic scale engraved on wood. A pair of dividers is used to measure a length and transfer it along the scale.**
- 1630 Invention of the slide rule by William Oughtred. A pair of Gunter scales slide along each other.**

Replaced by the pocket calculator

- 1960's** Up until now, the slide rule has changed very little and is still in use by engineers, scientists, architects, accountants, etc. for routine calculations. Middle school students learn to use slide rules in school.
- 1968** Hewlett-Packard produces its first pocket calculator.
- 1980's** Calculators are now inexpensive, convenient to use.
- 2000+** Calculators are more powerful than early computers. Use of the slide rule is a dying art.

