

Exemplar Informational Texts – About Time: A First Look at Time and Clocks

Koscielniak, Bruce. *About Time: A First Look at Time and Clocks*. Orlando: Houghton Mifflin, 2004. (2004)

Sometime around 1440, the spring-powered clock was invented. Instead of depending on the pull of weights for power, this type of clock used a flat metal spring wound tightly into a coil. The escapement allowed the spring to unwind by turning one gear tooth at a time. With the use of a spring, smaller, truly portable clocks could be made.

The first well-known watches, made in Germany around 1510 by Peter Henlein, were so named because guards or “watchmen” carried small clocks to keep track of how long to stay at a particular duty post.

Many different skills went into making a clock, and new tools and methods were constantly being invented to make ever smaller, more complicated mechanisms that worked with greater precision.

Founders melted and poured metal into a mold to make clock parts.

Spring makers hand-forged (heated and pounded into shape) and polished steel clock springs.

Screw makers cut screws used to fasten clocks together by using a small lathe devised by a German clockmaker in 1480. Earlier, only wedges or pegs were used.

Gear-tooth cutting had been done by hand until the mid-1500s, when Giannelo Torriano of Cremona, Italy, invented a machine that could cut perfect gear teeth. Brass replaced iron for clock making.

Engravers, gilders, and enamellers decorated clock cases and dials.

Glass -making shops made and cut glass.

Woodworkers made clock cases.

Excerpt from ABOUT TIME: A First Look at Time and Clocks by Bruce Koscielniak. Copyright © 2004 by Bruce Koscielniak. Used by permission of Houghton Mifflin Harcourt Publishing Company. All rights reserved.