

Were Galileo's inventions all about the cosmos?

by Thomas Moore

You probably already know Galileo Galilei was one of the first major scientific figures to support Copernicus' idea that the Earth revolved around the sun. In early 1600s Italy, that was a pretty bold position, and one that got him in a lot of trouble. You may also know that Galileo created a particular telescope -- though he wasn't the inventor of the telescope -- which he used to reach his controversial conclusion [sources: Potter, inventionpop]. But what most people aren't aware of is that many of Galileo's inventions weren't focused, literally or figuratively, on the stars above.

Galileo lived during the Renaissance, a time marked by innovation and discovery in Europe. One of the primary fascinations of the period's great thinkers was on understanding the natural world. That focus led to the creation of at least two of Galileo's inventions. The first is one you've undoubtedly used before -- the thermometer. Before Galileo, all people knew was that some things were hot and others cold, but they had no tool to determine just how hot or cold. Another of his inventions used to quantify an unknown is the hydrostatic balance. It's a machine that measures the weight of an object based on the amount of water it displaces. It could, for example, help determine the amount of gold or silver in an object.

Galileo was also very keen on creating mechanical devices that could help people better do their jobs. Take the pendulum clock, a water pump that literally relied on horsepower. In addition, he created a tool called a sector. A sector is like a compass with two arms that hinge in the middle. Each arm functions as a ruler, with markings to indicate the exact position of a plumb hanging from the center. The sector had a variety of uses, one of which was to increase the accuracy of gunners who would use the tool to line up a cannon in battle [source: The Galileo Project].

Yes, Galileo had his head in the clouds much of the time, but it's hard to imagine a world without his practical and Earthly inventions.