

## 52 - Time/Clocks

How did people tell time without clocks? And what is time anyway? How did they come up with hours/minutes and seconds?

The first mechanical clocks, which introduced the famous "tick-tock" sound, were developed in the 1300's. Using gears, weights and springs these clocks created a precise measurement of time, with every hour measuring the same length. Over the next few centuries, mechanical clocks would start displaying minutes... and seconds. Today clocks show a digital number with the hour and minute and sometimes two letters - "A.M." or "P.M." So what do those letters mean?

AM and PM have to do with midday: the point in time when the sun is directly overhead -- and when there's no shadow on the sundial. The middle of 24 is 12, so that's why midday is at 12 o'clock, or, rather, noon. "A.M." and "P.M." are abbreviations of words in Latin, the language of the ancient Romans, from a region that is now called Italy. "A.M." stands for the Latin words "ante meridiem" which means "before midday"... which is why the morning hours use A.M. "P.M." stands for "post meridiem" which means "after midday"... Which is why afternoon and evening hours are labeled P.M.

While many English-speaking countries use AM and PM, much of the rest of the world relies on the 24-hour clock -- also called "Military Time" because it was adopted by military forces to avoid any confusion between AM and PM times during battles. Military time involves continuing to count up past 12 and adding the words 'hundred hours' after the number. So instead of 1PM - it would be 13 hundred hours.

### What You'll Learn

1. Who were the first people to keep track of time? How did they do it before clocks?
2. Who came up with the concept of hours, minutes and seconds? And why are there 24 hours in a day; 60 minutes in an hour, and 60 seconds in a minute?
3. What do AM & PM mean -- and why is the day broken up into two 12-hour periods?

### Activities

1. Need to practice telling time? Check out [these](#) fun activities that can be done in a classroom or at home!
2. There are some great time telling games online as well! [Check](#) out this fun game that lets you work on your digital or analog time telling skills.

3. Do you have a clock with hands at home? You could make a play clock with these fun [instructions](#).

## Additional Resources

Have you ever heard a clock chime? Maybe you live in a big city that has a big clock or perhaps your grandparents have a smaller version in their home. The smaller home versions are often called Grandfather Clocks. You can see how they are made in this [video](#). If your home has a clock with gears, perhaps an adult can help you watch them turn.

## Kid News

What is your favorite holiday? Is it a religious, national or cultural holiday? Nearly a billion people in China and millions globally celebrate the Lunar New Year, also known as Chinese New Year. Usually, people travel all over China in order to be with their families. They clean their houses to get rid of bad luck, decorate with the color red and share special foods meant to increase their luck, health, and well being in the next year. Read more about [this](#) weeks long celebration and see if you can spot any traditions that are similar to your own.<sup>1</sup>

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<sup>1</sup> This activity guide is for the Who Smarted? podcast [www.WhoSmarted.com](http://www.WhoSmarted.com)