

Name _____

Modern Marvels: Measuring

All questions must be answered off information presented in the accompanying video. The questions are in order.

1. What does NIST stand for?
2. How was the Baltimore fire of 1904 made worse by measurements?
3. Why was the Meter bar proved to be impractical?
4. What is now defined as the distance light travels in a vacuum in $1/299,792,458$ of a sec?
5. Why are the Stanley tape measures heated or tempered?
6. The Samarians based their measurement off of what?
7. What is the ancient definition of a mile (a foot is a human foot, a yard is from nose to finger tip)?
8. How do you measure the distance of something really far away?
9. What did Eratosthenes do that was special for ancient Greece?
10. What is a light-year?
11. Why did NIST move from Washington DC to Maryland?

12. Why is the atomic clock not a clock in the sense that we know a clock?
13. Why did religion push for major developments of time technology?
14. Why did sailor need a different type of clock than the rest of the world?
15. Why are the touch pads in swim meets necessary?
16. What is a $1/100$ or a sec, $1/60$ of a second or the time it takes for an electron to travel around an atom depending on who you are talking to?
17. How does a speedometer measure the speed of the vehicle?
18. How does RADAR calculate speed?
19. What is a zeptogram?
20. How does a chicken (or turkey) thermometer work?
21. What do thermometers use today instead of mercury?