

## **How Confident Are You About Your Ability to Make Good Decisions?**

For each of the following items, provide a low and high guess such that you are 90% sure the correct answer falls between the two (Guessing "between zero and a billion" is inappropriate because this would give you a 99.999% confidence interval).

You want to be neither too narrow (overconfident) nor too wide (underconfident). Should you successfully follow these instructions and display an appropriate level of confidence, you will have 90% correct answers – that is, no more than 2 incorrect answers out of 20 questions.

It is OK to divert participants (not lie) by asking questions or suggesting assumptions that might not direct them to the right answer.

	90% Confidence Range		Place "√"
	Low	High	if Correct
1. Year Joan of Arc was burned at the stake			
2. Length of the Nile River			
3. Total length of a body's blood vessels			
4. Number of flowers a bee visits to make a pound of honey			
5. Diameter of the moon (in miles)			
6. Number of debris objects in space larger than a marble			
7. Number of official James Bond movies			
8. Gestation period of an African elephant			
9. Estimated number of Americans over 65 in 2040			
10. Year of the first moon landing			
11. Year of first unmanned aerial vehicle			
12. Year in which Attila the Hun died			
13. Number of nuclear weapons detonations since 1945			
14. Average population density of the US (people/sq mi)			
15. Deepest known point in the ocean			
16. Year the ball point pen was invented			
17. Number of items in the Library of Congress			
18. Number of cups of coffee consumed per day			
19. Number of prescriptions filled in the US per year			
20. Percent of functionally illiterate US adults			

Bonus question: What is the world's greatest mountain?



## How Confident Are You About Your Ability to Make Good Decisions? Test of Overconfidence Answer Sheet

Test of Overconfidence	Correct Answers (2024)	
1. Year Joan of Arc was burned at the stake	1431	
2. Length of the Nile River	4132 miles	
3. Total length of a body's blood vessels	60,000 miles	
4. Number of flowers a bee visits to make a pound of honey	2 million	
5. Diameter of the moon	2160 miles	
6. Number of debris objects in space larger than a marble	500,000	
7. Number of official James Bond movies (as of 2023)	25	
8. Gestation period of an African elephant (days)	660 days	
9. Estimated number of Americans over 65 in 2040	80 million	
10. Year of the first moon landing (Luna 2)	1959	
11. Year of first unmanned aerial vehicle	1849	
12. Year in which Attila the Hun died	453	
13. Number of nuclear weapons detonations since 1945	2,056	
14. Avg. population density of the US in 2017	92 pers/sq mi)	
15. Deepest known point in the ocean	35,876 feet	
16. Year the ball point pen was invented	1888	
17. Number of items in the Library of Congress (as of 2023)	173 million	
18. Number of cups of coffee consumed per day	517 million	
19. Number of prescriptions filled in the US per year	6,500 million	
20. Percent of functionally illiterate (<6 <sup>th</sup> grade) US adults	54%	

At a 90% confidence interval, everyone would answer 18 of 20 questions correctly (20\*90%=18)

Answer to bonus question ("it depends"):

- Mauna Kea (Hawaii) at 10,210 meters above its base (which is under water) is the <u>tallest</u> mountain
- Everest (Nepal) at 8,848 meters above sea level is the <u>highest</u> mountain
- Chimborazo (Ecuador) at 6,263 meters but 2 km farther from earth's center is the highest above earth's center

Mark Twain: "It's not what we don't know that's the problem, it's what we know that just ain't so."