

















 $100^{\rm o}{\rm C}$ can represent high or low energy depending on the system described.

For example, separate systems of water and gold at $100^{\rm o}{\rm C}$ each having the same mass.

A. True

B. False



Web	Assign Homework			
https://www.webassign.net/v4cgi/selfenroll/classkey.html Class Key: dvc 2938 8431				
http://chemconnections.org/general/chem108/Student_Quick_Start_Guide_SE.pdf				
	1. Ourston Datails			
	Enter each number in scientific notation.			
	4060 m = 4.06 x 10 m			
	20000 g = 2.03 × 10 g			
	0.0036 mL =			
	55000 cm =			
	, 0.00071 kg = x 10 kg			
	Convert the following to regular or standard notation.			
	2.71 × 10 ¹¹ 9 271000000000 9			
	1.8 × 10 ⁻⁴ ms.			
	3.455 × 10 ⁸ kg			
	8 × 10 ³ cm			

Dr. R. walks into class and claims, "It is very cold in here today. It feels like 242 K." If that were the temperature, would you agree that you would feel cold? What would that be in Celsius degrees?

- A. I agree, that would be 31°C.
- B. I agree, that would be -31° C.
- C. I do not agree, that would be 31°C.
- D. I do not agree, that would be 515°C.









Coincidentally, a U.S. nickel has a mass of approximately 5 grams. If you had one dollar's worth of nickels in your jean's what would be the mass of the nickels in milligrams?

- A. 100 milligrams
- B. 50 milligrams
- C. 1,000 milligrams
- D. 100,000 milligrams

1000 milligrams (mg) = 1 gram (g)



QUESTION

An array of multilayer mirrors compresses ultrabroadband laser pulses (orange beam). The attosecond x-ray pulses allow the realtime observation of atomic-scale electron motion. The previous spectroscopic method was on a femtosecond scale, which was too slow to capture the movement.

How many times faster is attosecond spectroscopy compared to femtosecond methods?

A. 10x B. 100x C. 1,000x D. 1,000,000x















	Q	UESTION		
	In which of th not significan	ese measured valu t figures?	es are the zeros	
r	l) 0.0591 cm II) 504 g III) 2.70 m IV) 5300 L			
Г.	A) I and II	B) II and III	C) I and IV	
	D) I, I	II, and IV E) II	, III, and IV	













If you were unloading a 23.50 kg box of books from your car and a "friend" added two more 482 gram chemistry books, how much in kg using the rules for significant digits, would you be lifting?

- A. 23.98 kg
- B. 24.464 kg
- C. 24.46 kg
- D. 24.5 kg









The average mass of a certain brand of vitamin C tablets is 253 mg. What is the mass of three such tablets rounded to the proper number of significant digits?

- A. 0.760 grams
- B. 0.759 grams
- C. 0.7590 grams
- D. 0.253 grams



