

## THE ATOM

www.muslimeducators.com  
Lesson # 22

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### PART 1: READ

وَمَا تَكُونُ فِي شَأْنٍ وَمَا تَتْلُو مِنْهُ مِنْ قُرْآنٍ وَلَا تَعْمَلُونَ مِنْ عَمَلٍ إِلَّا كُنَّا عَلَيْكُمْ شُهُودًا إِذْ تُفِيضُونَ فِيهِ وَمَا يَعْزُبُ عَنْ رَبِّكَ مِنْ مِثْقَالِ ذَرَّةٍ فِي الْأَرْضِ وَلَا فِي السَّمَاءِ وَلَا أَصْغَرَ مِنْ ذَلِكَ وَلَا أَكْبَرَ إِلَّا فِي كِتَابٍ مُبِينٍ (يونس)

10:61 (Asad) AND IN whatever condition thou mayest find thyself, [O Prophet,] and whatever discourse of this [divine writ] thou mayest be reciting, and whatever work you [all, O men,] may do -[remember that] We are your witness [from the moment] when you enter upon it: for, not even an atom's weight [of whatever there is] on earth or in heaven escapes thy Sustainer's knowledge; and neither is there anything smaller than that, or larger, but is recorded in [His] clear decree.

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### PART 2: LEARN

- 1) Atom, in simple English, refers to anything extremely small; a minute quantity.
- 2) This lesson focuses on this word "atom". In Arabic, it is pronounced somewhere between "tharra" and "zarr". It is a quranic word too. This word has recently attracted the attention of scientists particularly in physics.
- 3) According to [www.dictionary.com](http://www.dictionary.com), atom in physics is the smallest component of an element having the chemical properties of the element, consisting of a nucleus containing combinations of neutrons and protons and one or more electrons bound to the nucleus by

electrical attraction; the number of protons determines the identity of the element.

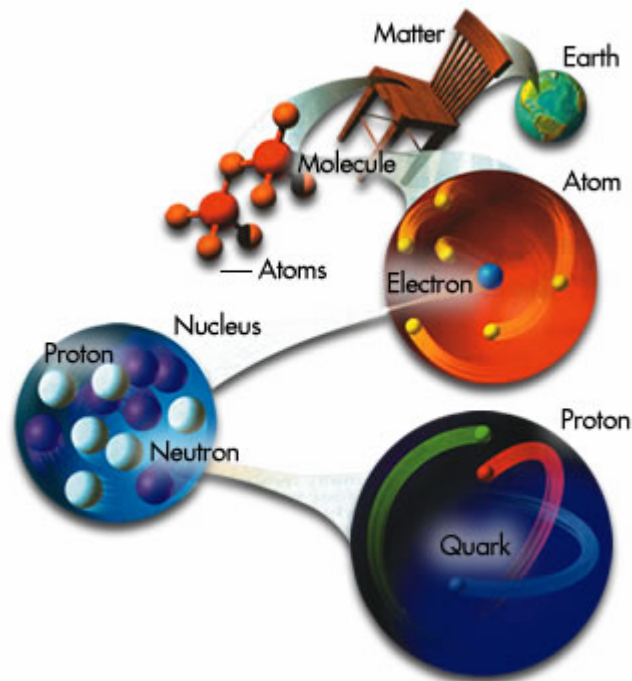
4) The debate was about whether the atom is indeed the smallest thing and whether it could be divided further into smaller particles?

5) Science found that the atom does contain smaller particles called protons and neutrons. Very recently, a new branch of physics called "particle physics" found out that protons and neutrons consist of yet smaller particles, extremely small particles called "quarks".

6)

The size of the quark is  
 $1 / 1,000,000,000,000,000,000$   
of a meter.

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Source: [www.miraclesofthequrn.com](http://www.miraclesofthequrn.com)

7) "Ordinary matter consists of atoms bound together by electromagnetic force to form molecules.

8) The molecules come together to form solids, liquids and gasses.

9) Atoms consist of a dense nucleus surrounded by a cloud of electrons.

10) Electromagnetic force holds the nucleus and electrons together.

11) The nucleus consists of protons and neutrons held together by a powerful nuclear force.

12) Protons and neutrons consist of three quarks each and are held together by powerful nuclear force."

REFERENCES:

[www.dictionary.com](http://www.dictionary.com)

[www.miraclesofthequrn.com](http://www.miraclesofthequrn.com)

[www.harunyahya.com](http://www.harunyahya.com)

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### **PART 3: THINK & CONNECT**

Was the Quran correct in introducing the idea of atom splitting into smaller particles?

Which source came first: the Quran or Particle Physics?