

Pet Particle Activity

Before beginning this activity review the information at:

Particle Adventure,

<http://particleadventure.org/particleadventure/frameless/startstandard.html>

Some helpful websites include:

Boson, <http://en.wikipedia.org/wiki/Boson>

Elementary Particles,

<http://sol.sci.uop.edu/~jfalward/elementaryparticles/elementaryparticles.html>

Fermion, <http://en.wikipedia.org/wiki/Fermion>

Lepton, <http://en.wikipedia.org/wiki/Lepton>

List of Particles, http://en.wikipedia.org/wiki/List_of_particles

Model of Elementary Particles, <http://universe-review.ca/R15-01-elementary.htm>

Particle Adventure Standard Model,

http://particleadventure.org/particleadventure/frameless/standard_model.html

Standard Model, http://en.wikipedia.org/wiki/Standard_Model

Standard Model, 1964-,

http://www.meta-religion.com/Physics/Quantum_physics/standard_model.htm

Standard Model, As It Stands, <http://superstringtheory.com/experm/exper2.html>

Standard Model of Particle Physics,

http://www-sldnt.slac.stanford.edu/alr/standard_model.htm

Standard Model of Particle Physics, <http://www.benbest.com/science/standard.html>

Subatomic Particle, http://en.wikipedia.org/wiki/Subatomic_particle

Subatomic Particles, <http://www.yourdictionary.com/images/ahd/jpg/A4partic.jpg>

You will create a particle cube for your pet particle. The particles from which you will select are

- fermions: electrons, quarks, protons, neutrons, neutrinos
- bosons: photons, W bosons, Z bosons, gluons, Higgs bosons, phonons

You will need to make sure that the information you print fits on each 6" x 6" side of each cube and all information must be **neatly typed**. The 6 sides of your particle cube will include the following:

1. name and symbol
2. mass, charge, and spin, and any other data that you can find
3. description
4. lifetime, carried force or forces which your particle is related to
5. history of discovery including when and by whom
6. other interesting information about your particle

You may include pictures and/or information obtained from additional sources, however you **must** include all references used, even those listed by the instructor, and **type** this assignment in order to receive credit!