# Physics Homework

Name: **Sami Nimri – Grade 6 F**

1. Use the word from the box to complete the sentence below.

   Joules     Energy          0.001          fuels          food     newtons     1000

   The energy that we need every day comes from the food that we eat. Your body needs energy to keep warm, and keep your body working. Joules and fuels are stores of energy. Energy is measured in newtons or Kilojoules; one kilojoule is 0.001 newton.

2. Here is energy content of 1 gram of some different fuels

   | Fuel | Energy (KJ) |
   |------|-------------|
   | Coal | 20 |
   | Oil | 45 |
   | Gas | 40 |
   | Wood | 15 |

   a. Name the fuel that stores the most energy: Oil
   b. Name the fuel that stores the least energy: wood
   c. Calculate the energy in Joules in one Kg of Coa: 1 kg = 1000 g, then 20*1000 = 20,000 J
   d. Calculate the mass of wood that has the same energy as one gram of oil. 45/ 15 = 3 g wood

3. a. Explain why your body needs energy even when you are not moving.
   Three quarter of the energy we need our body uses is for process in our body like breathing.
   b. Cycling uses 25 KJ each minute. Calculate the number of minutes you would need to cycle to use 100 KJ.
   100 KJ / 25 KJ each minute = 4 minutes
   c. Explain why children need more energy than they use for the activities they do each day.
   Children needs energy to grow bigger bones, muscles and brains.