Name_____per. _____date_____

APES   Aluminum Can Recycling Math

Data:

       Number of cans per grocery sack   164

       Weight of the sack in pounds 5.5 lbs

       Energy required to produce one aluminum can = 1.60 kWhr/can

Calculations: Show work in blank provided.

   a. Calculate the weight of one can

   b. The redemption center pays $1.05 per pound of cans. Calculate how much money the grocery sack of cans is worth.

   c. A family of four may consume four six packs of beverages in aluminum cans per week. Calculate how many weeks it would take them to fill the sack.

   d. Calculate how many kWhr of energy went into the production of the cans in the sack.

   e. Calculate how much energy is saved by recycling the cans assuming that 95% of the energy is saved by recycling.

   f. Calculate how many days of home electrical use is represented by the energy saved assuming that the average home uses 18kWhr/day.