**Growing Energy: Interpreting the Units Worksheet**

Below are the data you will use to answer the scientific questions.

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| **Crop** | **Type** | **Harvest yield (Mg DM ha-1)** | **standard error** |
| corn | annual | 14.2 | 0.6 |
| prairie | perennial | 3.3 | 0.2 |
| switchgrass | perennial | 6.5 | 0.3 |
| miscanthus grass | perennial | 14.0 | 0.9 |
| poplar trees | perennial | 8.5 | 1.4 |
| weed field | perennial | 2.7 | 0.2 |

The amount of dried plant material (biomass) is measured in “megagrams of dry matter per hectare (Mg DM ha-1).” Answer these questions to help make sense of these units.

1. What is a megagram?
2. The average person weighs about 150 pounds or 68 kg. How many people would it take to weight a megagram?
3. What is a hectare?
4. The area of a football field is 120 yards by 53.3 yards or 5351 m2. How many football fields would it take to make a hectare?
5. What is 1 Megagram per a hectare (Mg/ha) in people per a football field (people/fbfield)?
6. Express the average corn harvest weight in “people per a football field.” How many people per a football field is 14.2 Mg/ha?