

Adventure Book Challenge Questions Plus some Bonus Questions:

Important Facts: (Use these facts to help you solve the questions.)

- 1 Ton = 2,000 lbs
- Population of Minnesota = 5,080,000
- Population of Blue Earth County = 57,500
- Every Year each Minnesotan produces over 1 ton of Garbage!
- 32 Aluminum Cans weigh one pound.
- By recycling ONE aluminum can, you can save enough electric energy to watch 3 hours of television
- 8.5 pounds of poisonous gas is released into the air for every ton of garbage burned in a burn barrel or burn pit.

Junky Questions:

1. How many tons of garbage are produced in Blue Earth County every year?
2. How many tons of garbage are produced in Minnesota every year?

Tricky Challenges:

1. If you recycle 20 lbs of aluminum cans, how many cans did you collect?
2. If the scrap yard gives you \$0.50 for every pound of aluminum you collected, how much money did you make?
3. How many hours of Television can you watch if you recycle 20 lbs of aluminum cans.
4. If you watched TV for 2 hours a day, how many months would it take to use that much energy?

Try This One:

1. If a family of 4 burned all the garbage they produce in a year, how many pounds of poisonous gas is released each year near their home?
2. If half the garbage produced in Blue Earth County were burned in a barrel or a pit, how many Tons of poison gas would be released into Blue Earth County's air?

(Remember that burning garbage in a burn barrel or in a pit is much more harmful than burning it in an industrial incinerator. A full-sized industrial garbage incinerator may burn the garbage for many thousand homes, and produces less poison gas than a single burn barrel. In addition, most industrial incinerators also produce electricity, which save the pollution caused by burning coal to produce the same electricity. Burning garbage in a burn barrel or burn pit is harmful to the environment, but burning garbage as a fuel to produce electricity actually benefits the environment by replacing coal!)

Super Challenge Questions:

(Important Information: When garbage is packed into a landfill, about 1,500 lbs of garbage can be packed into 1 cubic yard of landfill space.)

1. If all the garbage produced each year in Minnesota were packed into a landfill, how many cubic yards of landfill space would it take?
2. If all the garbage produced in Minnesota in one year were packed into a football field, how many football fields would it fill 3 feet deep? (figure a football field is 100 yards long and 50 yards wide)
3. If a garbage truck can carry 10 tons of garbage, and can drive 5 miles on a gallon of diesel fuel, how many gallons of diesel fuel would it take to haul all of Minnesota's garbage 10 miles to a landfill?