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Lesson 5: 3RC (Reduce, Reuse, Recycle and Compost) – 3RC Math Challenge Homework

I. Instructions

Each of the following problems is based on real-life data. Use a separate piece of paper to solve the problems. *Show your work* and include labels on your answers.

1. It takes 26 recyclable plastic soda bottles to 6. Every hour Americans throw away 2.5 make one polyester suit. (Did you know million plastic bottles. How many plastic this is possible? ②) How many bottles will bottles are thrown away in one day? be needed to make one dozen suits? 7. Approximately 240 million tires are 2. Americans throw away about 18 million disposable diapers per year. How many discarded per year in the U.S. How many diapers are thrown away each month? tires is that per month? 3. One 15-year old tree makes enough paper for only 700 grocery bags. A busy grocery 8. Recycling about 120 pounds of newspaper store can hand these out in about 1 hour. will save one tree. If a community recycles How many bags will this busy store hand 200 tons of newspaper per year, how many out in 8 hours? How many 15-year old trees are they saving? trees will it take to make all these bags? 9. The amount of energy that it requires to make 2 brand new aluminum cans is the 4. About 70 billion beverage cans were used same amount of energy required to make in 1985, 94% of those cans were 20 recycled aluminum cans. If a company aluminum. What is the actual number of has enough energy to make 500,000 brand aluminum cans that were used? new cans, how many recycled cans can they make instead? 5. One hundred fifty-four million tons of trash 10. One hundred fifty-four million tons of trash is produced in the U.S. in one year. Half of is produced in the U.S. in one year. Only this trash is recyclable. How many tons of about 13% of this trash actually gets trash is possible of being recyclable in one recycled. How much trash is actually year? recycled in the U.S. each year?