**Main Problem #7**

Topic: *Divide a Unit Fraction by a Whole Number*

Problem: Your grandparents are creating a will and they plan to divide their entire land amongst their children. Your grandparents decide to give: your dad half of the land, your uncle Ben a fourth of the land, your aunt May an eighth of the land, and your aunt Jemima the remaining fraction. Each family will divide their portion of the land amongst their children.

Q1. If your dad gives you and your twin sister an even share of his land, how much will you get? Model the fraction.

Q2. If your uncle Ben plans to divide his land amongst his 3 sons, how much will be given to each son? Model the fraction.

Q3. If your aunt May has only 1 daughter, how much land will she be given? Model the fraction.

Q4. If your aunt Jemima has 3 sets of twins, then how much land will each child get? Model the fraction.

\*\*For all these questions, students are asked to divide the unit fraction by the number of children (whole number). The process is shown in the table below. For the modeling process, students need to show create equal shares of small lands whose total size equals that of a parent’s portion of the land.

Note: Aunt Jemima’s portion of her parent’s land can be found by subtracting 1 from the sum of the other fractions. Her portion is equal to $\frac{1}{8}$of her parent’s land. Also, a set of twins is composed of 2 people. Therefore, 3 sets of twins equals 6.

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| Your Dad | Uncle Ben | Aunt May | Aunt Jemima |
| $$\frac{1}{2}÷2=\frac{1}{4}$$ | $$\frac{1}{4}÷3=\frac{1}{12}$$ | $$\frac{1}{8}÷1=\frac{1}{8}$$ | $$\frac{1}{8}÷6=\frac{1}{24}$$ |

\*\*Models displaying portion of land for each child is shown in clockwise order.