## Working with Remainders Worksheet

Use modular arithmetic to solve these problems. Answer the following questions, using the activity to check your work:

1. If my birthday was on a Tuesday last year, and this year is not a leap year, what day of the week will my birthday be on this year?

2. I had 34 cookies that I divided evenly among 4 friends. I ate the leftover cookies. How many cookies did I eat?

3. I bought as many pencils as I could at 25 cents each and spent the rest of my money on stickers which cost 2 cents each. In all, I spent \$1.60 before tax. How many stickers did I buy?

4. Using a regular deck of 52 cards, I dealt all the cards in the deck to Max, Keisha, and myself for a game of war. Were the cards dealt evenly?

5. A gallon of milk is 16 cups, and one pudding recipe uses 3 cups. I have 2 gallons of milk and want to make 10 recipes of pudding with at least 1 cup left to drink. Is this possible?

6. Summer camp starts on a Monday and lasts for 44 days. One what day will it end?