

Chapter 4 Gifted and Enrichment

1. A medication contains 4.8 mg of chemical A, 6.2 mg of chemical B, 2.1 mg of chemical C, 0.78 mg of chemical D, and 0.92 mg of chemical E in each dose. What percent of the medication is composed of each of the five chemicals? Give your answers to the nearest tenth of a percent.

2. Before starting to train, an athlete's body mass is 64.8 kg. During training, she loses 2% of her *initial* body mass every 20 min through sweating. During her first hour of training, she consumes 2.5 L of water. At the end of 1 h of training, by what percent would her body mass be reduced? Give your answer to the nearest tenth of a percent.

3. A 1.5-L bottle of fruit drink contains 1 L of water, 200 mL of apple juice, 150 mL of pear juice, 100 mL of grape juice, and 50 mL of sugar syrup. Express the quantity of each of the ingredients as a fraction and as a percent of the full amount of liquid.

4. The chart below shows the amount of playing time Frank gets and the number of baskets he scores during five basketball games. Based on this data, how much time, on average, must Frank play in order to score a basket?

	Game 1	Game 2	Game 3	Game 4	Game 5
Baskets Scored	6	7	5	4	9
Playing Time	32 min 6 s	38 min 51 s	21 min 32 s	27 min 48 s	36 min 31 s

5. For six weeks, you track what you do with your weekly earnings.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Food	\$8.42	\$7.19	\$12.16	\$7.58	\$6.91	\$7.79
Entertainment	\$19.56	\$10.12	\$6.21	\$14.97	\$17.76	\$15.84
Clothes	\$32.06	\$0.00	\$0.00	\$57.21	\$0.00	\$22.27
Transportation	\$4.00	\$12.00	\$9.75	\$5.25	\$6.00	\$6.00
Miscellaneous	\$6.50	\$12.50	\$2.00	\$8.27	\$12.56	\$18.00
Savings	\$12.00	\$40.00	\$60.00	\$0.00	\$35.00	\$18.00

Your earnings vary each week and the information above accounts for your total earnings each week. On average, what percent of your earnings do you put into savings each week? Give your answer to the nearest hundredth of a percent.