

Leonora plans to save for a new bike. Imagine her income from pocket money and extra chores is \$2,000 per year. She has worked out her budget and knows that after expense she can afford to save 10% of her income each year.

1. Show how 10% can be represented as a fraction and decimal.

Percentage	Optional - colour the squares	Fraction	Decimal
10%			

2. Check you have the same answers as other classmates.

3. How much will Leonora save in 1 year? Show your working.

4. The answer is \$200. Circle the strategy you used to find the answer.

- a) $\$2,000 \times 0.10$
- b) $\$2,000 \times 10/100$
- c) Another?

5. Which strategy will you use next time? _____

6. How much will Leonora save in 5 years? _____

7. Leonora's friend, Diamantina is also saving. She wants to buy a new tablet in the next two years. She decides to save 5% of her income. Her income is \$1,500 each year.

8. Show how 5% can be represented as a fraction and decimal.

Percentage	Optional - colour the squares	Fraction	Decimal
5%			

9. If Diamantina saved 5% of her income, how much would she save in one year? Show your working.

10. See how Diamantina's savings change if she varies the percentage of income she saves. Assume her income remains at \$1,500 each year. Use a calculator to work how much money Diamantina will save in each scenario below. Read the tip below first.



EXAMPLE

If your calculator has a percentage button, the calculation is as follows:
 $1,000 \times 10\% = 100.$

If your calculator does not have a percentage button, you must first divide the percentage by 100:
 $10 \div 100 = 0.10.$

You can then multiply this answer by the whole to determine the part: $0.10 \times 1,000 = 100.$

Percentage saved	Amount of saving each year	Total savings in 2 years
2%		
5%		
10%		
15%		

11. The tablet Diamantina wants to buy is \$800. What percentage of her income will Diamantina have to save to reach her savings goal in 2 years? _____

12. Write a number sentence.

13. Diamantina has two options:

- a) Save more to reach her goal in two years
- b) Save the same amount but wait longer to reach her goal.

14. How long will it take for Diamantina to reach her savings goal if she saves 5% of her income? _____

15. Diamantina works out that she can reach her goal in two years if she gives up the following:

- ▶ tuck shop once a week
- ▶ going to the movies each fortnight
- ▶ buying her favourite magazine each week.

16. What are the costs and benefits of Diamantina's decision to save for the purchase of a tablet in two years?

17. What percentage of income do you think Diamantina should save? _____