

Mrs. and Mr. Rabbit are Running Out of Space¹

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A single female rabbit can have from 1 to 14 babies per litter. Let's be conservative and say that the average litter size is six. She can also have as many as 12 litters per year.

What is the maximum number of litters of rabbits a female rabbit can have in one year?

How many rabbits can one female rabbit produce in 3 months, 6 months, and 1 year?

Show your work. What strategy did you use? Did you skip count, use fingers, draw a diagram, or estimate first? Explain.

3 months:

6 months:

1 year:

Since you may be asked to multiply in your job, teachers teach multiplication so that you will be prepared. Careers requiring multiplication include:

- **cooks** who multiply fractions to make larger servings of food,
- **carpenters** who must purchase the right amount of material,
- **tile layers** and **painters** who work based on the area of a floor or wall,
- **builders** who must know area before buying materials,
- **cashiers** and **managers** who multiply to estimate costs, and
- **bakers** who multiply to figure serving sizes for large audiences.

Did you know that some employers will not hire people who cannot do basic arithmetic?

¹ Suggested Grades: 3 – 4 Skills: 4.0A.A.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

How do your parents use multiplication in their daily lives or work? Interview them and explain their answers to share with your classmates. Make a bulletin board showing the ways your parents use multiplication in their jobs or at home.

Dogs can have litters of puppies every 6 months, although breeders usually breed their female every other 6 months for healthier female and pups.



If a large female dog has 7 to 8 puppies every 6 months, how many puppies would she have in 1, 2 and 3 years?

Explain your strategy. Could you have used Exploding Dots? Could you count by 10 at a time and then add the extra 4 rabbits over 3 months, 6 months or 1 year?

1 year:

2 years:

3 years:

When and how often do birds multiple? What about cats, deer and wolves? What other animals are you curious about? Look up 2 other animals and find out how often they multiply and how many offspring the animal can have in 3 months, 6 months and 1 year. Share your findings with your classmates.

Animal:

3 months:

6 months

1 year:

How does what you have learned in this lesson impact our home environments, and outside environments?