

### Use or Make a Table Usar o hacer una tabla

**Content Strands:** Number and Operations, Algebra

Students may need counters.

Fran and Fred Frog love to skip rope! They jump and jump all day. Fran is older than Fred, so she jumps just a bit more slowly. For every 2 jumps of Fran's, Fred has jumped 3 times. Fran is getting tired. She just jumped her 12th jump. How many times has Fred jumped?

### FIND OUT

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- A. What question do you have to answer to solve the problem? How many times has Fred jumped? ●¿Cuántas veces saltó Fred?
- B. What do Fran and Fred Frog like to do? Skip rope Saltar la cuerda
- C. Who jumps more slowly? *Fran* How many times does Fred jump in the time it takes Fran to jump twice? 3
- D. How many times did Fran jump in all? 12

### CHOOSE A STRATEGY

Fred jumped 3 times for every 2 jumps of Fran's. Then how many times did Fred jump when Fran jumped 4 times? 6 Would it help us solve the problem if we could keep track of the number of jumps made by Fran and Fred? Yes

The little picture at the top of your paper means that you can make a table of numbers to help you solve the problem. Si Fred salta 3 veces por cada 2 veces que salta Fran, ¿cuántas veces saltaría Fred mientras Fran salta 4 veces? 6 ¿Nos ayudaría a resolver el problema si pudiéramos llevar la cuenta de las veces que Fran y Fred saltan? Sí

El dibujito en la parte de arriba de la página significa que pueden hacer una tabla para resolver este problema.

### SOLVE IT

#### TEACHING TIP

Allow the children to model the 2:3 ratio with counters. Encourage children to count by twos and threes, and to look for a pattern in the table.

Fran's Number of Jumps	2	4	6	8	10	12
Fred's Number of Jumps	3	6	9	12	15	18

- A. What are we going to keep track of in the first row of the table that has been started? Fran's number of jumps Las veces que salta Fran What number is in the first box of Fran's row? 2 What does that mean? Fran jumped twice. Fran saltó dos veces.
- B. What are we going to keep track of in the second row? Fred's number of jumps
  Las veces que salta Fred How many times did Fred jump while Fran jumped
  2 times? 3
- C. What number is in the second box of Fran's row? 4 What number belongs in the second box of Fred's row? 6
- D. If Fran jumped another 2 times, what number belongs in the third box of her row? 6 If Fred jumped another 3 times, what number belongs in the third box of his row? 9
- E. Continue until the children complete the table. Then have them record their final answer.

F. How many times has Fred jumped?

Solution: 18

### LOOK BACK

Let's look back at the problem to see if your answer fits with what the problem tells you and asks you to find. Listen to the problem again. Read the problem. Look at your table again to see if everything in it is right. Does your answer fit?

### **EXTENSION PROBLEM**

Fred can jump even faster now! Fred jumps 4 times for every 2 jumps of Fran's. Make a table to show this new pattern.

 ¡Fred puede saltar más rápido ahora! Fred salta 4 veces por cada 2 veces que salta Fran.
 Hagan una tabla para anotar estos nuevos datos.
 Solution:

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Fran's Number of Jumps	2	4	6	8	10	12
Fred's Number of Jumps	4	8	12	16	20	24

### TALK ABOUT IT

Ask questions like, Which parts of your table are the same as in the original solution? Which parts of your table changed? Why? • ¿Cuáles partes de la tabla son las mismas que había en el problema original? ¿Cuáles partes cambiaron en esta tabla? ¿Por qué?

### PRACTICE

Similar Practice Problem: 68



## Use or Look for a Pattern Usar o buscar un patron

# 31

On the first day, Mama Bear and her cub picked only 2 baskets of berries before the sun went down. On the second day, Mama Bear and her cub started out early. They picked 4 baskets of berries. On the third day, they picked 6 baskets of berries. Each day they picked 2 more baskets of berries than they picked the day before. Mama Bear and her cub kept getting faster in the same way. How many baskets of berries did they pick on the eighth day?

### FIND OUT

- A. What question do you have to answer to solve the problem? How many baskets of berries did Mama Bear and her cub pick on the eighth day? •; Cuántas canastas de bayas recogieron Mamá Osa y su osezno el octavo día?
- B. What were Mama Bear and her cub doing? Picking berries ● Recogiendo bayas
- C. How many baskets of berries did Mama Bear and her cub pick the first day? 2
- D. How many did they pick the second day? 4 How many baskets did they pick the third day? 6 How many more baskets did Mama Bear and her cub pick each day than they had the day before? 2
- E. Did Mama Bear and her cub keep getting faster in the same way? Yes Sí What do we call something that keeps happening again and again in the same way? A pattern Un patrón

### 2 CHOOSE A STRATEGY

The little picture at the top of your paper tells us that we can look for or use a pattern.

**Does the problem tell us what the pattern is?** Yes **What is the pattern?** *Each day, Mama Bear and her cub pick 2 more baskets of berries than on the day before.*   El dibujito en la parte de arriba de la página significa que podemos buscar o usar un patrón.

¿Nos dice el problema cuál es el patrón? Sí ¿Cuál es el patrón? La Mamá Osa y su osezno recogen diariamente 2 canastas de bayas más que las que recogieron el día anterior.

### SOLVE IT

Use the picture and the table on your paper.

A. How many baskets of berries did Mama Bear and her cub pick the first day? 2 How many did they pick the second day? 4 How many did they pick the third day? 6

B. If Mama Bear and her cub continued to pick 2 more baskets of

- Number of Day **Baskets Picked** 1st 2 2nd 4 3rd 6 4th 8 5th 10 12 6th 14 7th 8th 16
- berries each day than on the day before, how many baskets did they pick the fourth day? 8 Record that number in the table.C. How many baskets did they pick the fifth day? 10 The sixth day? 12

The seventh day? 14 The eighth day? 16

Solution: 16



### LOOK BACK

Let's look back at the problem to see if your answer fits with what the problem tells you and asks you to find. Listen to the problem again. Read the problem. Does your answer fit?

### **EXTENSION PROBLEM**

How many baskets of berries will Mama Bear and her cub pick on the twelfth day? 24

• ¿Cuántas canastas de bayas recogerán Mamá Osa y su osezno el duodécimo día? 24

### TALK ABOUT IT

Ask questions like, Did you add to your table to figure out the number of baskets picked on the twelfth day problem, or did you solve it in another way? • ¿Llevaron la cuenta de la cantidad de canastas de bayas que recogieron el duodécimo día o resolvieron el problema de otra manera?

### PRACTICE

Similar Practice Problem: 69