

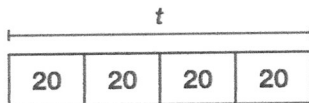
1. Kyle's house number is a multiple of 8. Which could be Kyle's house number?

- (A) 62
- (B) 64
- (C) 73
- (D) 81

2. Last month 4,861 books were checked out from the library. This month 3,278 books were checked out. How many more books were checked out last month than this month?

- (A) 583 books
- (B) 1,583 books
- (C) 1,593 books
- (D) 1,683 books

3. Julie bought 4 sheets of stamps with 20 stamps on each sheet. Which equation can be used to find the number of stamps Julie bought?



- (A) $4 \times t = 20$
- (B) $4 \times 20 = t$
- (C) $20 \div 4 = t$
- (D) $20 \div t = 4$

4. Which of the following are prime numbers? Select all that apply.

- 11
- 27
- 31
- 41
- 57

5. Henry has \$432 in his checking account. He has four times this amount in his savings account. How much money is in both of Henry's accounts?

6. Tia had 50 carrot sticks for her study group to snack on. There were 6 people eating the carrot sticks, and each person ate an equal number of carrots until there were none left to share equally. How many carrot sticks were left over? Explain.

7. A school bus can hold 36 students. A school district has 24 buses. Use compatible numbers to estimate about how many students the buses can transport.

8. Jonah's baby brother weighs 8 pounds. Jonah weighs seven times as much as his brother. Write and solve a multiplication equation to find Jonah's weight.

Vocabulary

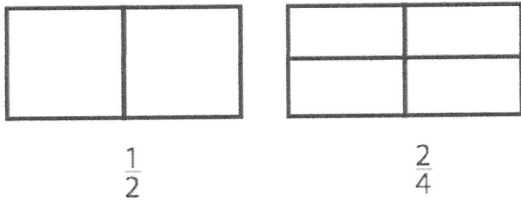
1. A **fraction** is a symbol used to name part of a whole. The **numerator** represents the part of the whole. The **denominator** represents the total number of equal parts in one whole.

Label the parts of the fraction.



2. **Equivalent fractions** name the same part of the same whole.

Shade each figure to show that $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent fractions.



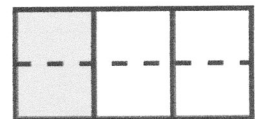
3. You can use an area model to find equivalent fractions. The area model is divided into 3 equal parts. What is the missing numerator?

Shaded parts →
 Total parts → 3



4. The dashed line divides the same area model into 6 equal parts. What is the missing numerator?

Shaded parts →
 Total parts → 6

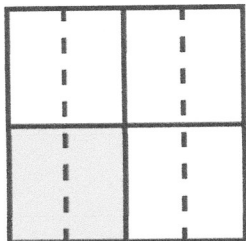


5. When the area model is divided into thirds, the shaded part represents _____.
 When the area model is divided into sixths, the shaded part represents _____.
 Since the same part of the whole area model is shaded in both models, _____ and _____ are equivalent fractions.

On the Back!

6. Draw an area model for $\frac{3}{4}$. Write an equivalent fraction for $\frac{3}{4}$. Show the equivalent fraction on your model.

1. Gina buys $\frac{1}{4}$ yard of material to make a pillow. Which fraction is equivalent to $\frac{1}{4}$?



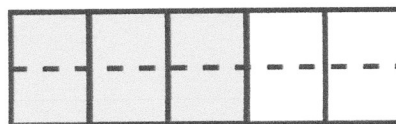
- (A) $\frac{4}{8}$ (C) $\frac{2}{8}$
 (B) $\frac{3}{8}$ (D) $\frac{1}{8}$
2. Which list includes all factors of 40?
- (A) 1, 2, 4, 10, 20, 40
 (B) 1, 2, 4, 5, 8, 10, 20, 40
 (C) 1, 2, 4, 5, 6, 8, 10, 20, 40
 (D) 1, 2, 3, 4, 10, 12, 20, 40
3. Juan has 26 beach balls. Each beach ball has 16 stripes. How many stripes are there in all?
- (A) 182 stripes
 (B) 386 stripes
 (C) 416 stripes
 (D) 566 stripes
4. Which shows a pair of equivalent fractions?
- (A) $\frac{2}{4}, \frac{1}{3}$
 (B) $\frac{3}{5}, \frac{6}{12}$
 (C) $\frac{4}{8}, \frac{1}{2}$
 (D) $\frac{6}{12}, \frac{1}{3}$

5. Keith has a package of 75 marbles. He gave an equal number of marbles to each of his 8 friends. How many marbles will be left over?
- _____

6. Last year Roberto traveled 1,435 miles for work. Write the number name for 1,435.
- _____

7. It took Jan 3 hours to do the laundry, walk the dog, and mow the lawn. How many minutes did it take Jan? Remember, there are 60 minutes in an hour.
- _____

8. Write a fraction equivalent to $\frac{3}{5}$.



9. A benefit concert raised \$12,350 for research this year. Last year, the benefit concert raised \$11,975. How much money was raised from the benefit concert both years?
- _____

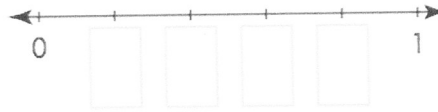
Vocabulary

1. A **number line** shows numbers in order using a scale.

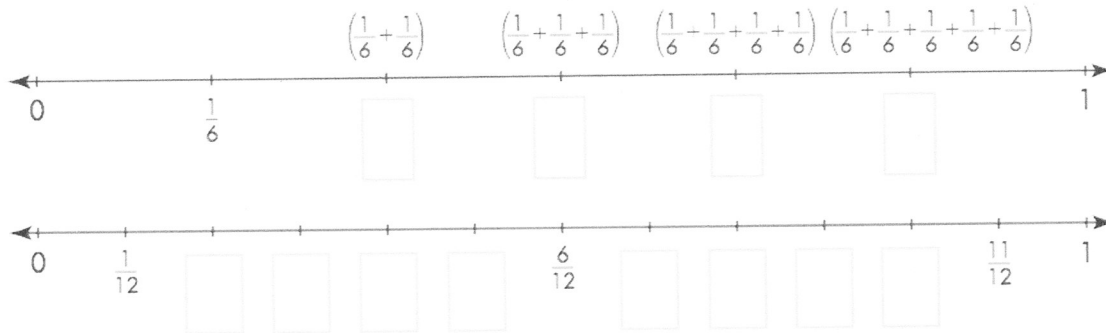
On the number line below, the distance between 0 and 1 is divided into 5 equal parts.

Each part is $\frac{1}{5}$ of the whole.

Label the number line.



2. The first number line below is divided into 6 equal parts. The second number line below is divided into 12 equal parts. Label each number line.



3. Equivalent fractions are at the same point on each of the same-sized number lines.

Place a point at $\frac{2}{6}$ on the first number line above.

Place a point that is the same distance from 0 on the second number line.

The point on the second number line is at _____.

$\frac{2}{6}$ is equivalent to _____.

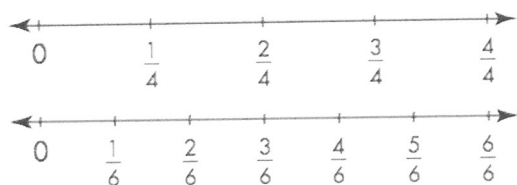
4. Name two additional equivalent fractions using the number lines above.

On the Back!

5. Are $\frac{2}{5}$ and $\frac{4}{10}$ equivalent fractions? Draw a number line to decide.

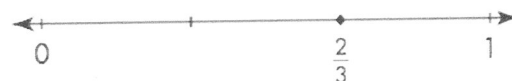
Problem Solving

8. What equivalent fractions are shown by the two number lines?



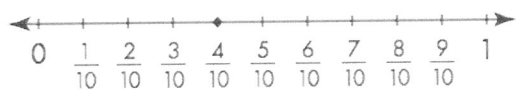
9. **Make Sense and Persevere** Randy and Carla like to walk the path around their town park. The path is 2 miles long. Last month Randy walked the path 13 times, and Carla walked it 22 times. How many more miles did Carla walk than Randy last month?

10. **Higher Order Thinking** Jarred says these number lines show $\frac{3}{4}$ is equivalent to $\frac{2}{3}$. Is Jarred correct? Explain.



Assessment

11. Kevin and Gabbie use a number line to find fractions that are equivalent to $\frac{4}{10}$. Kevin says he can find an equivalent fraction with a denominator greater than 10. Gabbie says she can find an equivalent fraction with a denominator less than 10.



Many fractions can represent the same point on a number line.



Part A

Write to explain how Kevin can use the number line to find his equivalent fraction.

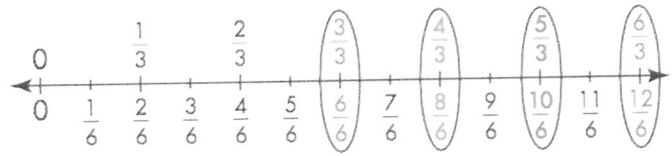
Part B

Write to explain how Gabbie can use the number line to find her equivalent fraction.

Name _____

Another Example!

You can use a number line to find equivalent fractions that are greater than or equal to 1.



★ Guided Practice ★

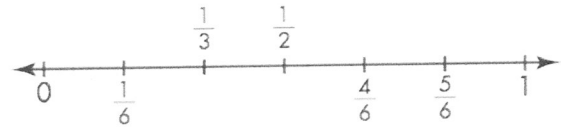
Do You Understand?

- Construct Arguments** Use the number lines on the previous page to write a fraction equivalent to $\frac{2}{8}$. Why are the fractions equivalent? Explain.

Do You Know How?

For 2–3, use the number line below.

- Write an equivalent fraction for $\frac{1}{3}$.
- Write an equivalent fraction for $\frac{1}{2}$.



★ Independent Practice ★

For 4–5, use the number line to find equivalent fractions. Circle the correct answer.



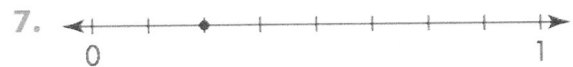
- Which of the following fractions is an equivalent fraction for point C?

$\frac{8}{6}$ $\frac{2}{3}$ $\frac{1}{2}$ $\frac{3}{2}$

- Which of the following fractions is an equivalent fraction for point D?

$\frac{6}{5}$ $\frac{3}{2}$ $\frac{6}{10}$ $\frac{5}{3}$

For 6–7, write two fractions for the point on each number line.



*For another example, see Set A on page 455.

1. A farmer has 12 goats. He has 3 times as many goats as horses. How many horses does the farmer have?

(A) 4 horses
(B) 9 horses
(C) 15 horses
(D) 36 horses

2. There are 38 students from the fourth grade and 42 students from the fifth grade in a musical recital. The students will sit in 8 equal rows. How many students will sit in each row?

(A) 8 students
(B) 10 students
(C) 12 students
(D) 80 students

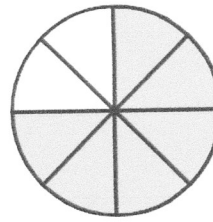
3. Which of the following lists only multiples of 4?

(A) 4, 6, 8, 12, 16
(B) 4, 16, 24, 30, 38
(C) 8, 12, 18, 22, 28
(D) 8, 16, 24, 32, 40

4. Which of the following are **NOT** possible partial products for 28×15 ? Select all that apply.

20
 40
 50
 60
 80

5. Write an equivalent fraction for the model.



6. Briana has 1,438 likes for the picture posted online of her dog dressed up like a super hero. How many more likes does Briana need to reach 2,000 likes?

7. A trail in the park is 8,645 feet long. Toby walks the trail 3 times. How many feet does Toby walk?

8. A farmer has 3,924 yellow-apple trees and 3,294 red-apple trees. Use $<$, $>$, or $=$ to write a comparison of the apple trees.

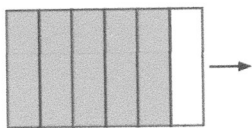
9. Are $\frac{3}{4}$ and $\frac{6}{8}$ equivalent fractions? Draw a number line to decide.

Name _____

★ Guided Practice ★

Do You Understand?

1. Use an area model and multiplication to show why $\frac{5}{6}$ and $\frac{10}{12}$ are equivalent fractions.



2. **Reasoning** Use multiplication to explain why $\frac{3}{4}$ and $\frac{8}{12}$ are **NOT** equivalent fractions.

Do You Know How?

For 3–7, multiply to find equivalent fractions.

3. → $\frac{1}{2} = \frac{\square}{\square}$

4. $\frac{3}{4} = \frac{\square}{12}$

5. $\frac{5}{5} = \frac{10}{\square}$

6. $\frac{3}{2} = \frac{6}{\square}$

7. $\frac{1}{6} = \frac{\square}{12}$

★ Independent Practice ★

Leveled Practice For 8–13, multiply to find equivalent fractions.

8. → $\frac{2}{3} \times \frac{2}{2} = \frac{\square}{\square}$

9. → $\frac{3}{6} \times \frac{2}{2} = \frac{\square}{\square}$

10. $\frac{1}{5} \times \frac{\square}{\square} = \frac{\square}{10}$

11. $\frac{5}{4} \times \frac{\square}{\square} = \frac{\square}{100}$

12. $\frac{7}{4} \times \frac{\square}{\square} = \frac{\square}{12}$

13. $\frac{3}{4} \times \frac{\square}{\square} = \frac{9}{\square}$

For 14–21, write two equivalent fractions for each given fraction.

14. $\frac{1}{10}$

15. $\frac{4}{2}$

16. $\frac{5}{6}$

17. $\frac{1}{3}$

18. $\frac{2}{5}$

19. $\frac{3}{4}$

20. $\frac{9}{2}$

21. $\frac{7}{12}$

*For another example, see Set B on page 455.

Problem Solving

For 22–23, use the chart at the right.

22. Write three equivalent fractions to describe the portion of the garden planted with carrots.
23. **Reasoning** Which vegetable takes up the same amount of the garden as the tomatoes? Explain.

Vegetable	Fraction of Garden Planted
Carrots	$\frac{1}{6}$
Tomatoes	$\frac{1}{4}$
Peppers	$\frac{4}{12}$
Beans	$\frac{3}{12}$

24. Jeena has 5 packets of seeds. Each packet has 12 seeds. Jeena wants to divide the seeds evenly among 10 flower pots. How many seeds can she plant in each flower pot?

25. **Higher Order Thinking** Jenny said, "I'm thinking of a fraction that is equivalent to $\frac{2}{6}$. The numerator is 8 less than the denominator." What fraction is Jenny thinking of?

Assessment

26. Use each of the fractions from the box once to complete the tables.

$\frac{2}{8}$	$\frac{3}{12}$	$\frac{4}{6}$	$\frac{8}{12}$
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Fractions Equivalent to $\frac{2}{3}$

Fractions Equivalent to $\frac{1}{4}$

27. Use each of the numbers from the box once to complete the equations.

2	4	6	8	10	12
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$$\frac{1}{2} = \frac{\square}{\square}$$

$$\frac{5}{6} = \frac{\square}{\square}$$

$$\frac{3}{4} = \frac{\square}{\square}$$

Vocabulary

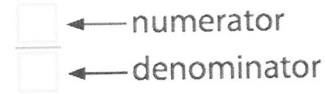
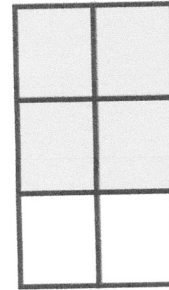
1. A **denominator** is the number below the fraction bar. It represents the total number of equal parts in one whole.

How many equal parts are in the whole? _____

2. The **numerator** is the number above the fraction bar. It represents part of the whole.

How many shaded parts are in the whole? _____

Write a fraction for the model.



3. A fraction with the same numerator and denominator is equal to 1. Write each missing number.

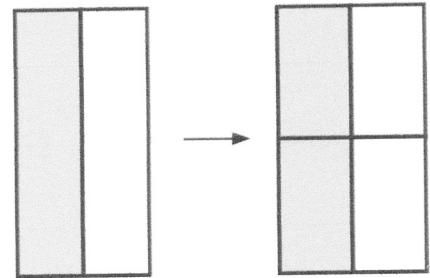
$\frac{2}{2} = 1$ $\frac{\square}{3} = 1$ $\frac{4}{\square} = 1$ $\frac{8}{\square} = 1$ $\frac{10}{\square} = 1$

4. To find an equivalent fraction, multiply by a fraction equal to 1. Multiplying by 1 does not change the value of a fraction.

Find two fractions that are equivalent to $\frac{1}{2}$.

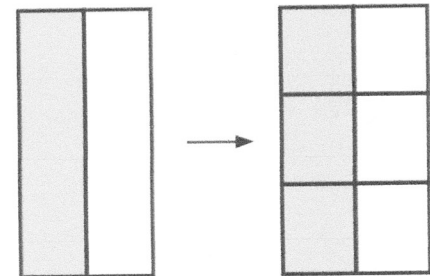
Multiply $\frac{1}{2}$ by $\frac{2}{2}$: $\frac{1}{2} \times \frac{2}{2} = \frac{\square}{\square}$

$\frac{\square}{\square} = \frac{\square}{\square}$



Multiply $\frac{1}{2}$ by $\frac{3}{3}$: $\frac{1}{2} \times \frac{3}{3} = \frac{\square}{\square}$

$\frac{\square}{\square} = \frac{\square}{\square}$



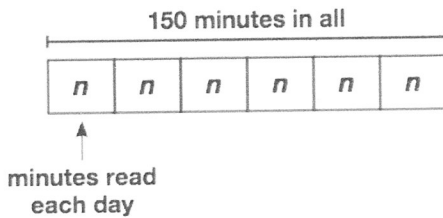
On the Back!

5. Write two fractions that are equivalent to $\frac{2}{3}$. Draw area models to represent your fractions.

1. A produce company is packaging tomatoes into boxes containing 8 tomatoes each. How many boxes do they need to package 416 tomatoes?

- (A) 36 boxes
- (B) 48 boxes
- (C) 52 boxes
- (D) 104 boxes

2. Martin read for a total of 150 minutes last week. He read the same amount of time each day for 6 days. Which equation shows, n , the number of minutes Martin read each day?



- (A) $150 \times 6 = n$
 - (B) $150 + 6 = n$
 - (C) $150 - 6 = n$
 - (D) $150 \div 6 = n$
3. Jacob counted 14 ducks at the park. He counted twice as many geese. How many birds did Jacob count in all?
- (A) 14 birds
 - (B) 28 birds
 - (C) 42 birds
 - (D) 56 birds

4. Write the factors of 42.
- _____

5. A gymnastics team bought 12 sweatshirts that cost \$45 each. How much did the team spend in all?
- _____

6. The table shows how much money a charity raised in three months.

Month	Money Raised
June	\$12,540
July	\$23,380
August	\$17,930

What was the total amount of money raised in three months?

7. Is the value of the first 7 ten times as great as the value of the second 7 in 7,237? Explain.
- _____
- _____
- _____

Vocabulary

1. **Factors** are pairs of numbers that are multiplied together to find a product.

$$1 \times 8 = 8$$

Factors

$$2 \times 4 = 8$$

Factors

The factors of 8 are 1, 2, _____, and _____.

2. A **common factor** is a factor two or more numbers have in common.

Factors of 16: 1, 2, 4, 8, 16

Factors of 20: 1, 2, 4, 5, 10, 20

The common factors of 16 and 20 are 1, _____, and _____.

You can find equivalent fractions by dividing the numerator and the denominator by a common factor greater than 1.

3. Divide to find equivalent fractions for $\frac{6}{12}$.

First, find the factors of 6 and 12.

Factors of 6: _____

Factors of 12: _____

The common factors of 6 and 12 are 1, _____, _____, and _____.

4. Divide the numerator and denominator by the common factors.

$$\frac{6}{12} \div \frac{2}{2} = \frac{6 \div 2}{12 \div 2} = \frac{\square}{6} \quad \frac{6}{12} \div \frac{3}{3} = \frac{6 \div 3}{12 \div 3} = \frac{\square}{4} \quad \frac{6}{12} \div \frac{6}{6} = \frac{6 \div 6}{12 \div \square} = \frac{\square}{2}$$

_____, _____, and _____ are equivalent to $\frac{6}{12}$.

Divide to find an equivalent fraction.

5. $\frac{10}{12}$ _____

6. $\frac{80}{100}$ _____

On the Back!

7. Divide to find two fractions equivalent to $\frac{4}{12}$.

Name _____

☆ Guided Practice *

Do You Understand?

1. Use division to show $\frac{9}{12}$ and $\frac{3}{4}$ are equivalent fractions.

2. **Reasoning** Is there a fraction with a smaller numerator and denominator that is equivalent to $\frac{4}{12}$? Explain.

Do You Know How?

For 3–8, divide to find equivalent fractions.

3. $\frac{6}{10} = \frac{\square}{\square}$

4. $\frac{8}{12} = \frac{\square}{\square}$

5. $\frac{8}{12} = \frac{\square}{3}$

6. $\frac{10}{12} = \frac{5}{\square}$

7. $\frac{2}{10} = \frac{\square}{5}$

8. $\frac{10}{100} = \frac{\square}{10}$

☆ Independent Practice ☆

Leveled Practice For 9–16, divide to find equivalent fractions.

9. $\frac{6}{12} \div \frac{6}{6} = \frac{\square}{\square}$

10. $\frac{70}{10} \div \frac{5}{5} = \frac{\square}{\square}$

11. $\frac{2}{6} \div \frac{2}{2} = \frac{\square}{\square}$

12. $\frac{50}{100} \div \frac{10}{10} = \frac{\square}{\square}$

13. $\frac{9}{6} \div \frac{\square}{\square} = \frac{3}{\square}$

14. $\frac{10}{4} \div \frac{\square}{\square} = \frac{\square}{2}$

15. $\frac{4}{12} \div \frac{\square}{\square} = \frac{\square}{6}$

16. $\frac{2}{8} \div \frac{\square}{\square} = \frac{\square}{4}$

For 17–24, divide to find two equivalent fractions.

17. $\frac{20}{100}$

18. $\frac{40}{10}$

19. $\frac{16}{12}$

20. $\frac{12}{8}$

21. $\frac{24}{12}$

22. $\frac{10}{100}$

23. $\frac{90}{10}$





24. $\frac{80}{100}$

*For another example, see Set B on page 455.

Problem Solving

For 25–27, use the table at the right.

25. Complete the table at the right by writing the fraction of the day each animal sleeps and an equivalent fraction. Remember, there are 24 hours in a day.
26. Suppose the cow slept 4 more hours. What fraction of the day would the cow spend sleeping?
27. How many hours does a tiger sleep in 7 days?

Animal	Number of Hours Spent Sleeping	Fraction of the Day Spent Sleeping	Equivalent Fraction
Cat 	12		
Cow 	4		
Squirrel 	15		
Tiger 	16		

28. **Make Sense and Persevere** Ethan ate $\frac{4}{8}$ of the sandwich. Andy ate $\frac{1}{2}$ of the sandwich. The sandwiches were the same size.

- Whose sandwich had more equal parts?
- Whose sandwich had larger equal parts?
- Who ate more? Explain.

29. **Higher Order Thinking** If the numerator and denominator of a fraction are both odd numbers, can you write an equivalent fraction with a smaller numerator and denominator? Explain.

Assessment

30. Which equation is **NOT** true?

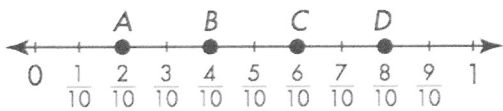
- $\frac{12}{10} = \frac{6}{5}$
- $\frac{3}{1} = \frac{30}{10}$
- $\frac{6}{12} = \frac{2}{3}$
- $\frac{8}{6} = \frac{16}{12}$

31. There are 12 students in DeLynn's class. Eight students own pets. Which shows the fraction of the class that owns pets?

- $\frac{8}{12}$
- $\frac{1}{2}$
- $\frac{6}{4}$
- $\frac{12}{8}$

1. Several local communities planted 2,360 trees this year on Arbor Day. They planted 380 more trees this year than they planted last year. How many trees did they plant last year?
- (A) 1,980 trees (C) 2,640 trees
(B) 2,080 trees (D) 2,740 trees

2. Which point represents an equivalent fraction for $\frac{2}{5}$?



- (A) point A (C) point C
(B) point B (D) point D
3. Jessica has \$40 to spend at the book fair. She buys 2 notebooks for \$3 each and wants to spend the rest of her money on books. How many books can Jessica buy if each book costs \$8? How much money does Jessica have left over?
- (A) 2 books; \$2
(B) 4 books; \$2
(C) 4 books; \$5
(D) 5 books; \$0
4. Which is **NOT** a way to make an array to model 18?
- (A) 2 rows, 9 columns
(B) 6 rows, 3 columns
(C) 10 rows, 8 columns
(D) 18 rows, 1 column

5. A school is buying 8 new computers that cost \$365 each. How much will the school spend on the new computers?
- _____

6. Round 246,539 to the nearest ten thousand and to the nearest hundred thousand.
- _____

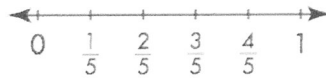
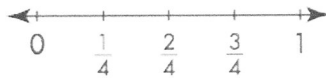
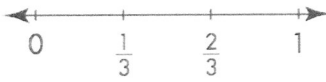
7. Write the multiplication equation that represents the statement "72 is 9 times as many as 8."
- _____

8. Sarah spent 30 minutes practicing her spelling words. She spent 3 times as much time reading. How many minutes did Sarah spend reading?
- _____

9. Draw an area model and use partial products to find 35×14 .

Vocabulary

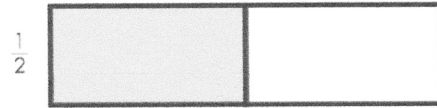
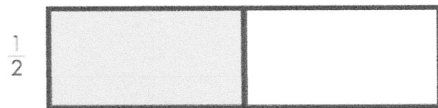
1. You can use **benchmark fractions** to compare fractions. Benchmark fractions are commonly used fractions such as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{3}$, and $\frac{3}{4}$.



Which benchmark fraction is closest to $\frac{1}{5}$? _____

Which benchmark fraction is closest to $\frac{4}{5}$? _____

2. Compare $\frac{5}{8}$ and $\frac{4}{10}$ using the benchmark fraction $\frac{1}{2}$.



$\frac{5}{8} \bigcirc \frac{1}{2}$

$\frac{4}{10} \bigcirc \frac{1}{2}$

Since $\frac{5}{8} > \frac{1}{2}$ and $\frac{4}{10} < \frac{1}{2}$, then $\frac{5}{8} \bigcirc \frac{4}{10}$.

3. Compare $\frac{3}{8}$ and $\frac{3}{6}$ using benchmark fractions. _____

4. Compare $\frac{5}{10}$ and $\frac{6}{12}$ using benchmark fractions. _____

5. Compare $\frac{7}{8}$ and $\frac{2}{3}$ using benchmark fractions. _____

On the Back!

6. Name 2 fractions that are greater than $\frac{1}{2}$. Use benchmark fractions to help.

Another Example!

Compare $\frac{9}{10}$ and $\frac{7}{6}$. Use 1 whole as a benchmark.

$$\frac{9}{10} < 1 \text{ and } \frac{7}{6} > 1, \text{ so } \frac{9}{10} < \frac{7}{6}.$$

★ Guided Practice *

Do You Understand?

1. **Reasoning** Carl found $\frac{4}{8}$ is equal to $\frac{1}{2}$, and $\frac{1}{3}$ is less than $\frac{1}{2}$. How can Carl compare $\frac{4}{8}$ to $\frac{1}{3}$? Explain.

2. Write a fraction that is closer to 0 than to 1. Write another fraction that is closer to 1 than to 0. Use your fractions to complete the comparison.

$$\frac{\square}{\square} < \frac{\square}{\square}$$

Do You Know How?

For **3–4**, compare. Write $<$, $>$, or $=$.

3. $\frac{2}{6}$ $\frac{4}{5}$

4. $\frac{11}{12}$ $\frac{9}{8}$

5. Circle the fractions that are less than $\frac{1}{2}$.
 $\frac{5}{4}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{2}{3}$ $\frac{2}{12}$ $\frac{51}{100}$

6. Circle the fractions that are greater than 1.

$$\frac{99}{100} \quad \frac{6}{5} \quad \frac{7}{8} \quad \frac{14}{8} \quad \frac{11}{10} \quad \frac{11}{12}$$

★ Independent Practice ★

For **7–10**, circle all the fractions that match each statement.

7. Fractions less than $\frac{1}{2}$

$$\frac{3}{4} \quad \frac{1}{6} \quad \frac{6}{12} \quad \frac{4}{10} \quad \frac{5}{8} \quad \frac{5}{2}$$

8. Fractions greater than $\frac{1}{2}$

$$\frac{5}{8} \quad \frac{1}{4} \quad \frac{6}{3} \quad \frac{7}{10} \quad \frac{5}{12} \quad \frac{6}{12}$$

9. Fractions greater than 1

$$\frac{5}{4} \quad \frac{2}{3} \quad \frac{6}{6} \quad \frac{1}{10} \quad \frac{15}{12} \quad \frac{7}{8}$$

10. Fractions closer to 0 than to 1

$$\frac{3}{4} \quad \frac{1}{8} \quad \frac{1}{4} \quad \frac{7}{5} \quad \frac{2}{4} \quad \frac{3}{10}$$

For **11–18**, compare using benchmark fractions or 1. Then write $>$, $<$, or $=$.

11. $\frac{1}{3}$ $\frac{4}{6}$

12. $\frac{4}{8}$ $\frac{2}{4}$

13. $\frac{7}{5}$ $\frac{7}{8}$

14. $\frac{6}{12}$ $\frac{4}{5}$

15. $\frac{4}{5}$ $\frac{2}{5}$

16. $\frac{6}{6}$ $\frac{13}{12}$

17. $\frac{8}{10}$ $\frac{1}{8}$

18. $\frac{4}{4}$ $\frac{10}{10}$

Problem Solving

19. **Reasoning** Jordan has $\frac{5}{8}$ can of green paint and $\frac{3}{6}$ can of blue paint. If the cans are the same size, does Jordan have more green paint or blue paint? Explain.

20. **Vocabulary** Write two examples of a benchmark fraction.

21. Four neighbors each have gardens that are the same size.

- Which neighbors planted vegetables in less than half of their gardens?
- Who has a larger section of vegetables in their garden, Margaret or Wayne?

Neighbor	Fraction of Garden Planted with Vegetables
James	$\frac{5}{12}$
Margaret	$\frac{5}{10}$
Claudia	$\frac{1}{6}$
Wayne	$\frac{2}{3}$

22. **Make Sense and Persevere** Gavin bought 3 pizzas for a party. Each pizza had 8 slices. There were 8 other people at the party. Everyone ate the same number of slices. What is the greatest number of slices each person ate? How many slices were left over?

23. **Higher Order Thinking** How can you tell just by looking at the numerator and denominator of a fraction if it is closer to 0 or to 1? Give some examples in your explanation.

Assessment

24. Donna ate $\frac{7}{12}$ box of popcorn. Jack ate $\frac{4}{10}$ box of popcorn. The boxes of popcorn are the same size. Write to explain how to use a benchmark fraction to determine who ate more popcorn.

Subject / Verb Agreement

With Gabriella Grammar

Hi! I'm Gabriella Grammar. Let's learn about subject and verb agreement together! The subject and verb must agree in number: both must be singular, or both must be plural. For example:

Singular --> The dog chases the cat

Plural --> The dogs chase the cat



Circle the verb that correctly completes each sentence.

1. The four aliens _____ green goo inside their spaceship.
2. My dinosaur _____ onto the trampoline.
3. Those cars _____ a loud sound as they race around the track.
4. One of his sisters _____ the trombone.
5. I _____ milkshakes to cool down on hot summer days.
6. Our hamburgers _____ so delicious!
7. Mrs. Lane, my teacher, _____ us to finish our homework before the big game.

eat eats

leap leaps

make makes

play plays

drink drinks

taste tastes

want wants

Circle the correct verb and complete the sentence.

1. The elephant (bring/brings)
2. Sarah (win/wins)
3. All the princes and princesses (eat/eats)

Action verbs and linking verbs

Grade 4 Verbs Worksheet

Circle the verbs, then label the type of verb: A = action or L = linking.

- A 1. These books help students.
2. Angela loves kittens and puppies.
3. George and Susan are extremely intelligent students.
4. My mom is a high school teacher.
5. He goes to a small school in the city.
6. Stewart and Ryan eat pancakes for breakfast.
7. My grandparents are generous.
8. You look tired.
9. This candy bar tastes amazing!
10. The office worker types a lot of letters.
11. We ordered a cake for my birthday.
12. The balloon is gray and black.

An **action verb** describes what the subject does.

A **linking verb** links the subject to words describing the subject.



Action verbs and linking verbs

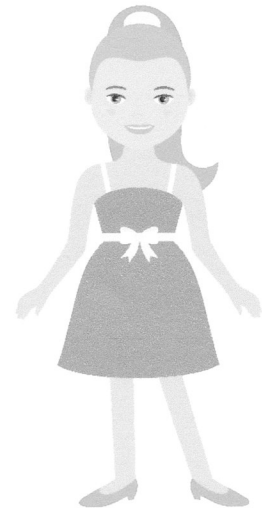
Grade 4 Verbs Worksheet

Circle the verbs, then label the type of verb: A = action or L = linking.

- A 1. Holly works in the bakery.
- _____ 2. Wow! Your family is awesome!
- _____ 3. These chocolate brownies are delicious.
- _____ 4. Meredith talks on the phone often.
- _____ 5. The girls made cards for their grandparents.
- _____ 6. We host a Christmas party every year.
- _____ 7. The salesman sold three cars.
- _____ 8. Leo is a very nice young man.
- _____ 9. Lisa looks pretty in her green dress.
- _____ 10. A.J. and Fran are parents.
- _____ 11. My family went to Florida on vacation.
- _____ 12. Did you play baseball in high school?

An **action verb** describes what the subject does.

A **linking verb** links the subject to words describing the subject.



Action verbs and linking verbs

Grade 4 Verbs Worksheet

Circle the verbs, then label the type of verb: A = action or L = linking.

- A 1. The bird ate the worm.
2. My mom looks beautiful.
3. Michael is a lawyer.
4. My parents are American.
5. The boy and his friends played soccer at recess.
6. Leslie and Brian bought a car for their daughter.
7. The pizza tastes spicy.
8. Ian forgot to shut the door.
9. The teacher instructs the students about the rules.
10. My favorite shirt is green and silky.
11. The television and the radio are broken.
12. Kelly made a cake for Allison's birthday.

An **action verb** describes what the subject does.

A **linking verb** links the subject to words describing the subject.



Name _____

Date _____

Building Sentences

A complete thought (or sentence) contains a subject and a predicate. That means you can identify a "who/what" and a "what about it."

The softball team | won the game

Subject (who/what) | Predicate (what about it)

Sometimes, sentences contain compound subjects or predicates. That means there are two subjects or predicates, like in the example below.

The pack of dogs and the garbage men chasing them ran around the corner and went into the parking lot.

Directions: Circle the subject and underline the predicate in each example below.

1. Julio and I went down to the school yard.
2. She got a ticket to ride the rollercoaster and then bought a slushy.
3. My new shoes and socks got dirty.
4. My gum popped out of my mouth and fell on the floor.
5. My sister went to the movies and then joined her friends.

Now, create complete sentences that have...

1. One subject and one predicate:

2. One subject and two predicates:

3. Two subjects and one predicate:

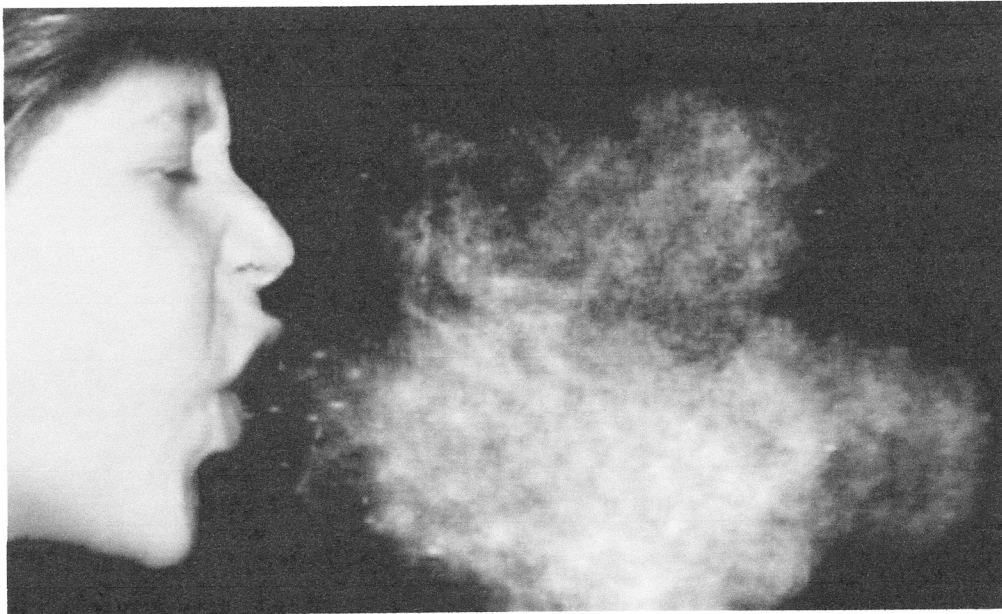
4. Two subjects and two predicates:

Got Allergies?

More people in the United States have allergies today compared with decades ago. Allergies are bad reactions to things around you or that you eat.

In 2010, more than half of Americans were sensitive to at least one allergen. That was the finding of one survey by the National Institutes of Health. Allergens are things that set off allergies. Many allergens-such as dust and mold-are found in the air.

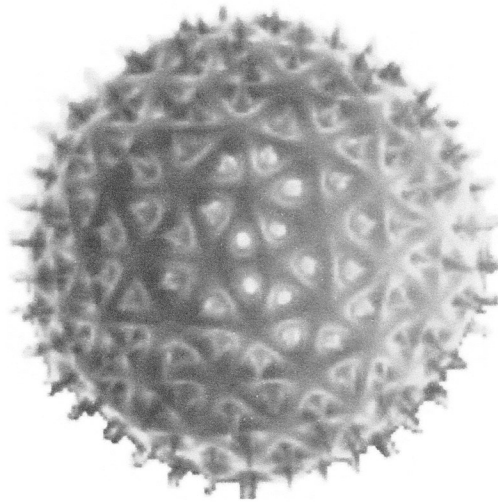
"Allergies [are] increasing over time," said Andy Nish. He is a doctor from Georgia.



Corbis

Allergens in the air aren't the only problem. Kids' food allergies have risen too. Between 1997 and 2007, the number of kids with food allergies jumped 18 percent. Eating milk products and eggs can give some children rashes. Those foods can even cause some people to have trouble breathing.

What's behind the spread of allergies? Some scientists think our immune systems don't have enough to do. Immune systems help our bodies fight germs. But many kids today come in contact with fewer germs than their grandparents did. That's in part because they grow up in environments with fewer germs such as cleaner homes and smaller families. Experts say that when our immune systems have fewer germs to fight, they can get confused. They attack other things, such as milk that we drink, instead.



Getty Images

Other scientists say hotter temperatures are to blame. They say the weather is warmer for longer periods now, so plants bloom longer. Plants release pollen, which is a common allergen.

Doctors do not know for sure what's making allergies increase. But they do know how to treat them with medicine. "There is very good treatment for allergies," Nish says. "No one should suffer with symptoms."

Take Cover!

Dust and other allergens that float into your nose are in for a blast—a cough or a sneeze, that is! Both are natural **reflexes**, or responses, to help keep you from getting sick. Here's a look at the big bursts.

Sneeze

Sneezes start at the back of your throat. Each quick burst can force out up to 40,000 droplets of saliva. The tiny droplets travel at up to 300 miles per hour.

Cough



iStock

Coughs come out of your lungs. Each blast can push out 3,000 saliva droplets as fast as 50 miles per hour. Enough air comes out to almost fill a two-liter bottle.



Alamy

Name: _____ Date: _____

1. According to the text, what are increasing in the United States?

- A. allergens
- B. germs
- C. allergies
- D. reflexes

2. Which of the following best describes the solution proposed in the text for people who suffer from allergies?

- A. The solution is to stay away from dust and mold.
- B. The solution is to stop eating milk products and eggs.
- C. The solution is to hide from anything that causes allergies.
- D. The solution is taking medicine to help with allergy symptoms.

3. Allergies can affect someone's everyday life.

What evidence can be used to support the statement?

- A. "More people in the United States have allergies today compared with decades ago."
- B. "Allergens in the air aren't the only problem."
- C. "Those foods can even cause some people to have trouble breathing."
- D. "But kids today come in contact with fewer germs than their grandparents did."

4. What can be concluded from the passage?

- A. A person with allergies is sick and needs to see a doctor.
- B. A person who sneezes and coughs often may have allergies.
- C. A person who drinks milk and eats eggs will definitely get allergies.
- D. A person who lives in a place with hot weather will never get allergies.

5. What is the main idea of this article?

- A. Allergies are increasing, but simple steps can be taken to cope with them.
- B. Our own human nature has produced more allergies than ever.
- C. Everyday foods have caused a higher proportion of allergies than ever.
- D. Coughs and sneezes are reflexes to allergens.

6. Read the sentences:

"There is very good treatment for allergies,' Nish says. 'No one should suffer with **symptoms**.'"

As used in the text, what does "**symptoms**" mean?

- A. changes in the body that are signs that a person is sick
- B. changes in temperature that give people allergies
- C. changes in medicine to treat people when they are sick
- D. changes in people's immune systems that cause allergies

7. Choose the answer that best completes the sentence below.

Kids come into contact with fewer germs today, _____ their immune systems get confused and attack other things.

- A. if
- B. after
- C. although
- D. so

8. What can be concluded from the evidence that coughs and sneezes are natural reflexes and from the evidence that our immune system attacks allergens?

9. What two possible reasons for the increase in allergies are explained in the passage? Use evidence from the text to support your answer.

10. What can be concluded about the increase of allergies in the future? Use the evidence from the text to support your answer.

Immigration, Immigrant Housing: Lower East Side Manhattan Tenements

by ReadWorks

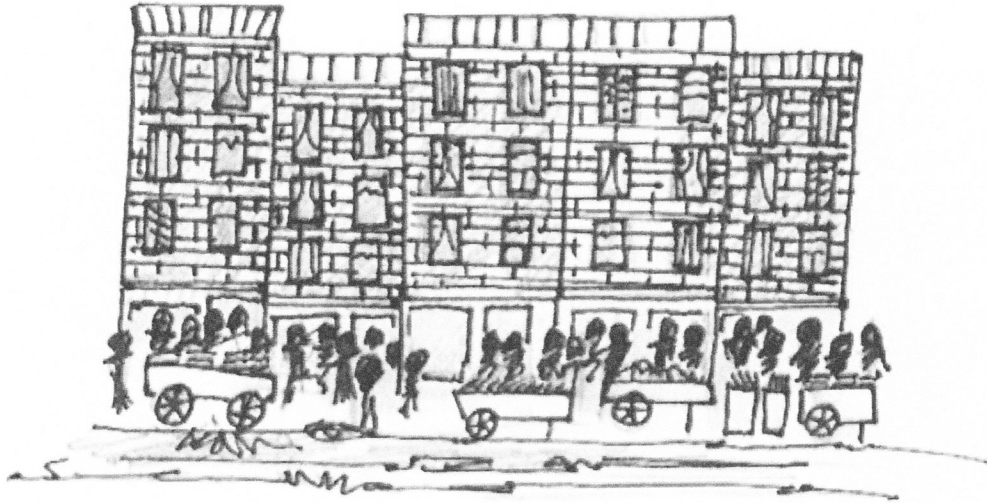


Illustration by Lynn M. Hanousek

Immigrants faced many challenges once they moved to America. Many did not have family or friends here. They could not speak the language and felt awkward with American culture. They took any low-paying jobs they could find to survive. But perhaps the biggest challenge immigrants faced was housing. As immigrants poured in during the late 1800s, they had no housing laws to protect them. This allowed landlords to offer immigrants tiny, filthy apartments.

Perhaps one of the harshest places immigrants lived in was the Lower East Side of Manhattan. The conditions in these tenement slums were horrible. It was common for several families to be cramped into a two-room apartment with no sunlight or ventilation. There was often no electricity or plumbing. Toilets were in the backyard. Usually only a few toilets were used by as many as 30 families in a building.

Running water was often in the backyards of these tenements as well. Residents would have to carry buckets of water to their apartments, sometimes up six flights. They needed water for cooking, cleaning, and for personal hygiene. Sometimes the water was contaminated because the toilets would leak into the well. People got sick from the dirty water. Several diseases broke out in the tenements and thousands died.

Tenement life had other grave dangers besides disease. The front door to the tenement was rarely locked. Anyone could come in off the street whenever they pleased. Also, there was no lighting in the front hallway and stairs. Without windows it was always pitch black, day and night. This made climbing up and down the stairs a very dangerous activity. Robbers and other criminals were also a threat. They would sneak up on people in the dark and attack them.

It took a very long time before housing laws were adopted to stop these abuses. The new laws forced landlords to install plumbing and electricity. Landlords were also ordered to make their building safe. They had to make sure hallways were lit. They also had to provide fire escapes for everybody.

Times were very hard for people emigrating to the United States. Immigrants had to have strong determination and strength to overcome the challenges they faced. Thankfully, today's immigrants have housing laws to protect them. They are less likely to endure shoddy housing and disease as the price they have to pay for liberty.

Name: _____ Date: _____

1. What is the reason landlords offered immigrants tenement slums?

- A. There were no housing laws in the 1800s.
- B. The immigrants did not have family here.
- C. The immigrants took low-paying jobs.
- D. The immigrants did not speak the language.

2. How does the author organize the information in this passage?

- A. The author explains the events of the emergence of housing laws in chronological order.
- B. The author provides evidence to support a central argument.
- C. The author compares and contrasts housing in the 1800s.
- D. The author provides information in groups about a central topic.

3. What evidence can be used to support the statement, "New housing laws made people in the homes more safe."

- A. "They had to make sure hallways were lit."
- B. "They also had to provide fire escapes for everybody."
- C. "The new laws forced landlords to install plumbing."
- D. All of the above

4. What can be concluded about the purpose of housing laws?

- A. Housing laws were put into law to protect landlords.
- B. Housing laws have never been very popular, but may be necessary.
- C. Housing laws were put into law to ensure that all people had safe and adequate housing.
- D. Housing laws were put into law to protect immigrants only.

5. Read the sentence:

"It was common for several families to be **cramped** into a two-room apartment with no sunlight or ventilation."

What word could best replace **cramped** as used in this sentence?

- A. packed
- B. allowed
- C. beaten
- D. placed

6. The main idea of this passage is

- A. Landlords were guilty of breaking many housing laws in the 1800s.
- B. Lack of sanitation was a cause of many deaths in the 1800s.
- C. Immigrants faced many challenges once they moved to America, notably low-income wages.
- D. Immigrants were forced to live in unsafe and unsanitary conditions before housing laws.

7. Choose the answer that best completes the sentence below.

The toilets would sometimes leak into the well; _____, the water became contaminated.

- A. instead
- B. beforehand
- C. except
- D. consequently

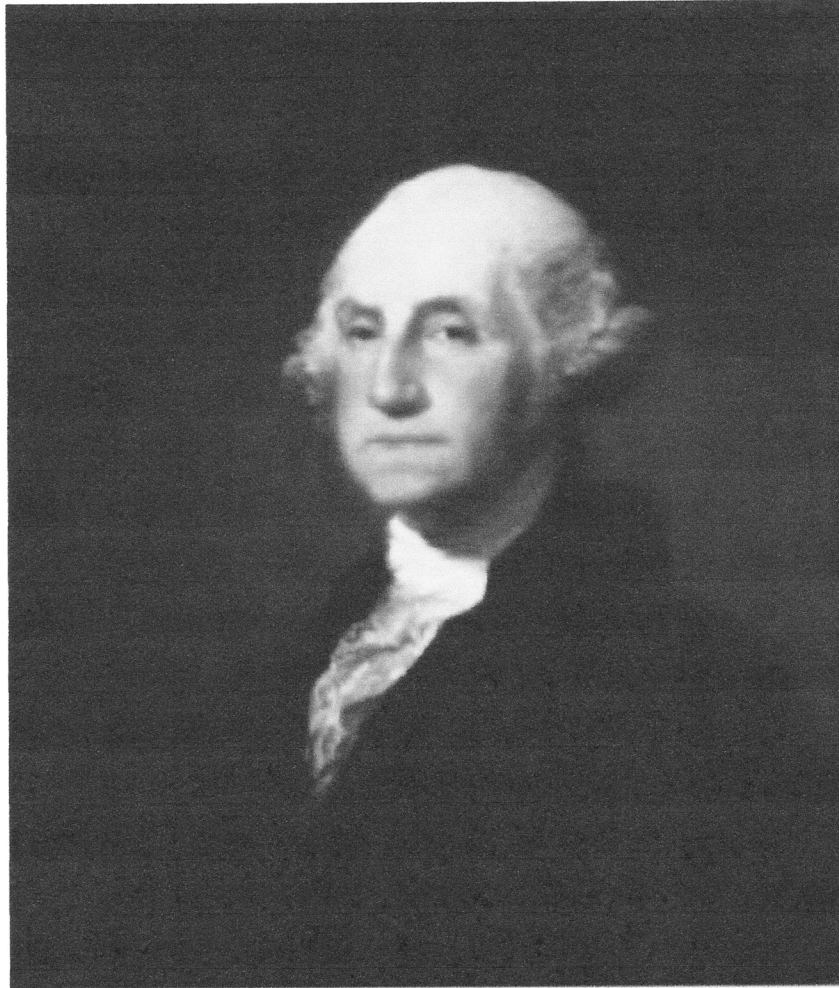
8. What can be concluded about most tenement landlords based on the information in this passage?

9. What other challenges besides the housing conditions did immigrants face?

10. Re-read the last line of the passage. What does the author suggest about immigrants' hopes for coming to America in this last line?

U.S. Presidents: George Washington

by ReadWorks



George Washington is regarded as the Father of Our Country. He guided America and helped it evolve into the nation that it is today. Before becoming President, Washington led the Continental Army to victory, winning American independence from Britain during the Revolutionary War. After the war ended, he was a key player at the convention that drafted the United States Constitution. Finally, as President, Washington's leadership solved many problems. It showed people that the Constitution could work to govern a new nation.

America was a very different place back in Washington's time. The nation was small and weak. There were only 11 states in the U.S. when Washington took office. When he left after two terms there were 16. The country only stretched as far as the Mississippi River. Most people farmed and struggled to make a living. Many children never went to school. Most

adults could not read or write. Communication and transportation were slow and difficult. It took days for Washington to travel the distance covered in a couple of hours by car today.

Most Americans loved Washington for the way he handled hardship. As a general, he lost many battles and suffered greatly. Washington never gave up, even during the bitter winters when he and his troops had barely enough food or supplies to survive. Washington's officers admired his loyalty and strength so much that they wanted to make him king. Washington refused.

Today, George Washington is honored in many ways. His face adorns America's dollar bill and its quarter. Both Washington state and our nation's capitol, Washington, D.C., are named after the first President. The bridge that stretches across the Hudson River from New Jersey to New York is named the George Washington Bridge. It is located exactly where Washington crossed the Hudson with his troops to defeat British forces. Perhaps one of Washington's officers expressed America's feelings about Washington best: "He was first in war, first in peace, and first in the hearts of his countrymen."