

Math 6 - Unit 1: Number System Fluency

Ratio Practice

Name: _____

Class Period: 1 2 3 4 Date: _____

Use the stars to answer questions 1 and 2.



1) Write the ratio of black stars to white stars in three different ways.

2) Write the ratio of white stars to black stars in three different ways.

Use the table below to answer questions 3-6.

Favorite Pets	
Snake	15
Dog	10
Cat	6
Hamster	8
Fish	1



3) What is the ratio of people who chose **snakes** to those who chose **dogs**? _____

4) What is the ratio of people who chose **cats AND dogs** to those who chose **hamsters**? _____

5) What is the ratio of those who chose **snakes** to **everyone** that was surveyed? _____

6) What is the ratio of those who chose **cats** to those who chose **fish**? _____

Use the words, "East Cobb Middle School" to answer questions 7-11.

7) What is the ratio of **vowels** to **consonants**? _____

8) What is the ratio of letters in "**ECMS**" to "**East Cobb Middle School**"? _____

9) What is the ratio of the letters in "**East Cobb**" to the letters in "**Middle School**"? _____

10) What is the ratio of the letters in "**Middle School**" to the letters in "**East Cobb**"? _____

11) Crain says the ratio of letters in "East" to "Cobb" is 4:4. Hailey says that ratio is 1:1. Who is correct? Explain your answer.

The table below shows the number of balloons purchased in each color at Party City. Using this information, answer questions 12-15.

Color	Red	Yellow	Blue	Green
Quantity Sold	10	20	15	25

12) Which two items does the ratio 10:20 represent? _____

13) Which two items does the ratio 3:5 represent? _____

14) Which two items does the ratio 5 to 3 represent? _____

15) Which two items does the ratio $\frac{3}{2}$ represent? _____

16) Which two items does the ratio 4:3 represent? _____

Use the table to answer questions 17 – 26.

Find the following ratios.

Don't forget to simplify if necessary.

Favorite Snacks of the 6 th Graders	
Ice Cream	12
Takis	6
Candy	9
Fruit	4
Sunflower Seeds	2
Seaweed	5
Cookies	7

17) candy to seaweed _____ to _____

18) cookies to Takis _____ to _____

19) fruit to candy _____ to _____

20) Takis to ice cream _____ to _____

21) candy to total _____ to _____ Circle one: **Part to Whole** or **Part to Part?**

22) sunflower seeds to cookies _____ to _____ Circle one: **Part to Whole** or **Part to Part?**

23) candy to cookies and fruit _____ to _____ Circle one: **Part to Whole** or **Part to Part?**

24) Takis and fruit to seaweed _____ to _____ Circle one: **Part to Whole** or **Part to Part?**

25) ice cream to sunflower seeds _____ to _____ Circle one: **Part to Whole** or **Part to Part?**

26) cookies and ice cream to total _____ to _____ Circle one: **Part to Whole** or **Part to Part?**

Write the following ratios 3 ways. Don't forget to simplify if possible!

- 1) There are 2 drums and 4 flutes. What is the ratio of drums to flutes?

- 2) There are 4 sandwiches and 10 milk cartons. What is the ratio of milk to sandwiches?

- 3) There are 14 boys and 16 girls in math class. What is the ratio of boys to girls?

- 4) There are 6 dogs and 4 cats. What is the ratio of dogs to pets?

Write the following ratios 3 ways.

The table below represents a survey of Ms. Bothers' class about favorite ice cream flavors:
Don't forget to simplify!!!

- 5) What is the ratio of people who chose vanilla as their favorite flavor to those who chose chocolate?

FAVORITE ICE CREAM FLAVORS	
Vanilla	15
Chocolate	10
Strawberry	6
Chocolate Chip	8
Cookie Dough	1

- 6) What is the ratio of people who chose chocolate and strawberry to those who chose chocolate chip?

- 7) What is the ratio of those who chose vanilla as their favorite flavor to everyone that was surveyed?

- 8) What is the ratio of those who chose strawberry to those who chose cookie dough?

List 3 equivalent ratios for the following ratios.

9) 4:5

10) 10:2

11) 3:6

Simplify the following ratios.

12) 20:100

13) 16 to 8

14) $\frac{15}{45}$

Solve. (Don't forget to properly label your answers)

15) Divide 33 photos into two groups so the ratio is 4 to 7.

16) Divide 28 cans of soda into two groups so the ratio is 3 to 4.

Use the following information and answer the questions below.

The ratio of kittens to puppies in an animal shelter is 3 kittens and 1 puppies.

17) If there are 32 animals, how many kittens are there?

18) If there are 24 kittens, how many puppies are there?

Use ratio language to express the following ratios:

19) Ratio of Jolly Ranchers to Gummy Bears.



20) Ratio of Gummy Bears to Total.

Math 6 - Unit 1: Number System Fluency

Ratio Practice

ANSWER KEY

Name: _____

Class Period: 1 2 3 4 Date: _____

Use the stars to answer questions 1 and 2.



1) Write the ratio of black stars to white stars in three different ways.

2:5

2 to 5

2/5

2) Write the ratio of white stars to black stars in three different ways.

5:2

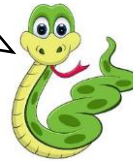
5 to 2

5/2

Use the table below to answer questions 3-6.

Favorite Pets	
Snake	15
Dog	10
Cat	6
Hamster	8
Fish	1

Pleasssssssse
remember to
ssssssssimplify!



3) What is the ratio of people who chose **snakes** to those who chose **dogs**? **15:10 = 3:2**

4) What is the ratio of people who chose **cats AND dogs** to **hamsters**? **16:8 = 2:1**

5) What is the ratio of those who chose **snakes** to **everyone** that was surveyed? **15:40 = 3:8**

6) What is the ratio of those who chose **cats** to those who chose **fish**? **6:1**

Use the words, "East Cobb Middle School" to answer questions 7-11.

7) What is the ratio of **vowels** to **consonants**? **7:13**

8) What is the ratio of letters in "**ECMS**" to "**East Cobb Middle School**"? **4:20 = 1:5**

9) What is the ratio of the letters in "**East Cobb**" to the letters in "**Middle School**"? **8:12 = 2:3**

10) What is the ratio of the letters in "**Middle School**" to the letters in "**East Cobb**"? **12:8 = 3:2**

11) Crain says the ratio of letters in "East" to "Cobb" is 4:4. Hailey says that ratio is 1:1. Who is correct? Explain your answer.

Both are correct; Hailey just simplified.

The table below shows the number of balloons purchased in each color at Party City. Using this information, answer questions 12-15.

Color	Red	Yellow	Blue	Green
Quantity Sold	10	20	15	25

12) Which two items does the ratio 10:20 represent? **Red : Yellow**

13) Which two items does the ratio 3:5 represent? **Blue : Green**

14) Which two items does the ratio 5 to 3 represent? **Green : Blue**

15) Which two items does the ratio $\frac{3}{2}$ represent? **Blue : Red**

16) Which two items does the ratio 4:3 represent? **Yellow : Blue**

Use the table to answer questions 17 – 26.

Find the following ratios.

Don't forget to simplify if necessary.

Favorite Snacks of the 6 th Graders	
Ice Cream	12
Takis	6
Candy	9
Fruit	4
Sunflower Seeds	2
Seaweed	5
Cookies	7

17) candy to seaweed **9 to 5**

18) cookies to Takis **7 to 6**

19) fruit to candy **4 to 9**

20) Takis to ice cream **6 to 12 = 1:2**

21) candy to total **9 to 45 = 1:5** Circle one: **Part to Whole** or Part to Part?

22) sunflower seeds to cookies **2 to 7** Circle one: Part to Whole or **Part to Part?**

23) candy to cookies and fruit **9 to 11** Circle one: Part to Whole or **Part to Part?**

24) Takis and fruit to seaweed **10 to 5 = 2:1** Circle one: Part to Whole or **Part to Part?**

25) ice cream to sunflower seeds **12 to 2 = 6:1** Circle one: Part to Whole or **Part to Part?**

26) cookies and ice cream to total **19 to 45** Circle one: **Part to Whole** or Part to Part?

Write the following ratios 3 ways. Don't forget to simplify if possible!

- 1) There are 2 drums and 4 flutes. What is the ratio of drums to flutes? **1:2, 1 to 2, $1/2$**

- 2) There are 4 sandwiches and 10 milk cartons. What is the ratio of milk to sandwiches? **5:2, 5 to 2, $5/2$**

- 3) There are 14 boys and 16 girls in math class. What is the ratio of boys to girls? **7:8, 7 to 8, $7/8$**

- 4) There are 6 dogs and 4 cats. What is the ratio of dogs to pets? **3:5, 3 to 5, $3/5$**

Write the following ratios 3 ways.

The table below represents a survey of Ms. Bothers' class about favorite ice cream flavors:
Don't forget to simplify!!!

- 5) What is the ratio of people who chose vanilla as their favorite flavor to those who chose chocolate? **3:2, 3 to 2, $3/2$**

FAVORITE ICE CREAM FLAVORS	
Vanilla	15
Chocolate	10
Strawberry	6
Chocolate Chip	8
Cookie Dough	1

- 6) What is the ratio of people who chose chocolate and strawberry to those who chose chocolate chip? **2:1, 2 to 1, $2/1$**

- 7) What is the ratio of those who chose vanilla as their favorite flavor to everyone that was surveyed? **3:8, 3 to 8, $3/8$**

- 8) What is the ratio of those who chose strawberry to those who chose cookie dough? **6:1, 6 to 1, $6/1$**

List 3 equivalent ratios for the following ratios. Answers will vary.

9) 4:5 **8:10, 12 to 15, $16/20$**

10) 10:2 **5:1, 20 to 4, $30/6$**

11) 3:6 **1:2, 2 to 4, $6/12$**

Simplify the following ratios.

12) 20:100 **1:5**

13) 16 to 8 **2:1**

14) $\frac{15}{45}$ $\frac{1}{3}$

Solve. (Don't forget to properly label your answers)

15) Divide 33 photos into two groups so the ratio is 4 to 7. **12 to 21**

16) Divide 28 cans of soda into two groups so the ratio is 3 to 4. **12 to 16**

Use the following information and answer the questions below.

The ratio of kittens to puppies in an animal shelter is 3 kittens and 1 puppies.

17) If there are 32 animals, how many kittens are there? **24 kittens**

18) If there are 24 kittens, how many puppies are there? **8 puppies**

Use ratio language to express the following ratios:

19) Ratio of Jolly Ranchers to Gummy Bears.

For every 3 Jolly Ranchers there are 2 Gummy Bears



20) Ratio of Gummy Bears to Total.

2 out of every 5 items are Gummy Bears. Or There are 2 Gummy Bears for every 5 items.