Name _____

Standard 4.OA.B.4

Unit 4 Introduction

1. List all the factors of the composite number 28.

_____

Circle the factors that are prime numbers.

2. Pedro listed the factors of 30 as 2, 3, 5, 6, 10, 15, and 30. Did Pedro list all the factors of 30?

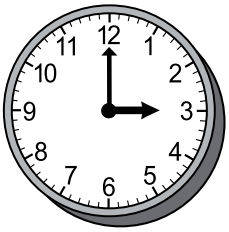
Answer:_____

Explain your answer. _____

_____

_____

3. Use the clock to answer the question.



Which numbers on the clock face are composite numbers?

Answer:_____

Which numbers are prime numbers?

Answer:_____

4. Write the multiples of 3 that are greater than 30 and less than 60.

Answer:_____

_____

5. Jackson selects a mystery number. He gives Sara two clues to help her guess his number.

- The multiples of my mystery number include 18, 36, and 63.
- My mystery number has exactly 3 different factors.

What is Jackson's mystery number?

Answer: _____

6. Amanda's birthday is in February. The date of her birthday is the only prime number in that week. Use this calendar to find Amanda's birthday.

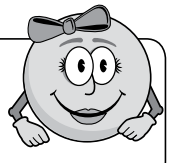
FEBRUARY						
SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

What is the date of Amanda's birthday?

Answer:_____

Words for the Wise

composite number	factor pair	prime number	whole number
factor	multiple	product	



Name _____

Unit 4 Partner Practice

Standard 4.OA.B.4

1. Which group of numbers includes only composite numbers?

Ⓐ 13, 23, 43, 53

Ⓑ 9, 11, 13, 15

Ⓒ 27, 49, 57, 63

Ⓓ 12, 17, 22, 27

2. 42 is a multiple of which numbers?

Ⓐ 7 and 5

Ⓑ 2 and 9

Ⓒ 6 and 3

Ⓓ 8 and 4

3. Clark's Store is celebrating its sixth anniversary by giving gift cards to every sixth customer. Which list shows only multiples of 6?

Ⓐ 1, 2, 3, 6

Ⓑ 12, 18, 24, 30

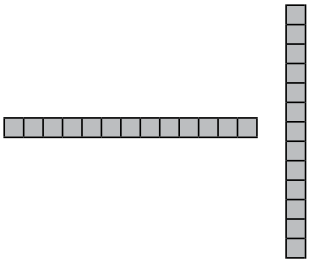
Ⓒ 6, 13, 21, 30

Ⓓ 18, 24, 32, 48

4. Is the number a factor of 36? Check Yes or No for each number.

		Yes	No
A	18	☐	☐
B	8	☐	☐
C	12	☐	☐
D	9	☐	☐
E	4	☐	☐

5. Estelyn creates arrays with square tiles for numbers less than 20. These are all the possible arrays for the number 13.



Based on the arrays, what can you conclude about the number 13?

Ⓐ The number 13 is composite.

Ⓑ The number 13 is prime.

Ⓒ The number 13 has a factor of 2.

Ⓓ The number 13 is lucky.

6. The runners in a race wear numbers from 20 to 60. The number on Omar's shirt is a prime number. Which of these could **not** be the number on Omar's shirt?

Ⓐ 51 Ⓒ 29

Ⓑ 47 Ⓓ 23

7. Jann lists all the factors of 64.

1, 2, 3, 4, 8, 16, 32, 64

Why is Jann incorrect?

Ⓐ The factors of 64 do not include 16.

Ⓑ The factors of 64 do not include 3.

Ⓒ The number 64 is not a factor of itself.

Ⓓ Numbers always have an odd number of factors.

Name _____

Standard 4.OA.B.4

Unit 4 Independent Practice

1. Which list shows four numbers that are multiples of 7?

Ⓐ 7, 14, 24, 63

Ⓑ 7, 42, 56, 84

Ⓒ 21, 42, 67, 81

Ⓓ 28, 47, 63, 77

2. At the ballpark, every ninth person in line receives a free baseball cap. Which number is **not** a multiple of 9?

Ⓐ 45

Ⓑ 63

Ⓒ 78

Ⓓ 90

3. Bart tells Lisa that all the factors of 24 are odd numbers. Why is Bart's statement incorrect?

Ⓐ All the factors of 24 are even numbers.

Ⓑ 24 is an even number, and even numbers never have odd numbers as factors.

Ⓒ 24 has only composite numbers as factors.

Ⓓ Only 2 factors of 24 are odd numbers.

4. The factors of a number include 2, 3, and 4. Select **all** the numbers that have factors of 2, 3, and 4.

Ⓐ 16

Ⓑ 24

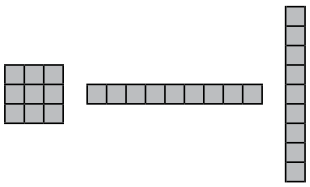
Ⓒ 36

Ⓓ 48

Ⓔ 64

Ⓕ 72

5. Jason uses color tiles to create arrays for the number 9. These are all the possible arrays.



Based on the arrays, what can you conclude about the number 9?

Ⓐ It is a prime number.

Ⓑ It is a composite number.

Ⓒ It has a factor of 4.

Ⓓ It is a multiple of 18.

6. Which pair shows the least and greatest 2-digit prime numbers?

Ⓐ 2, 99

Ⓑ 13, 91

Ⓒ 11, 97

Ⓓ 1, 89

7. Which list contains exactly two prime numbers and two composite numbers?

Ⓐ 12, 13, 14, 15

Ⓑ 9, 10, 11, 12

Ⓒ 11, 12, 13, 14

Ⓓ 15, 16, 17, 18

Name _____

Unit 4 Assessment

Standard 4.OA.B.4

1. Is the number a multiple of 6? Check Yes or No for each number.

		Yes	No
A	48	☐	☐
B	42	☐	☐
C	62	☐	☐
D	72	☐	☐
E	94	☐	☐
F	30	☐	☐

2. Mary creates a table showing the factor pairs of 42.

Factor Pairs of 42

Factor Pairs	1	2	3	6
	42	21	14	7

Based on the table of factor pairs, what can you conclude about 42?

Ⓐ The number 42 is prime.

Ⓑ The number 42 has a factor of 5.

Ⓒ The number 42 is composite.

Ⓓ The number 7 is the only prime factor of 42.

3. J'Nae made a mistake when she listed all the factors of 100.

1, 2, 4, 5, 20, 25, 50, 100

What was J'Nae's mistake?

Ⓐ She did not include 40 as one of the factors.

Ⓑ She should have included 10 as a factor.

Ⓒ She should not have included 5 as a factor.

Ⓓ One is not a prime number, so it cannot be a factor.

4. Which list names all the factors of 84?

Ⓐ 1, 3, 4, 7, 12, 28, 42, 84

Ⓑ 2, 3, 4, 7, 12, 28, 42

Ⓒ 1, 2, 4, 6, 7, 12, 14, 21, 28, 42, 84

Ⓓ 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

5. Lukas tells his teacher that on his birthday his age will be a prime number. He also tells her that it will be the first time his age has been prime since he was 7 years old. What age will Lukas be on his birthday?

Ⓐ 9 Ⓒ 11

Ⓑ 10 Ⓓ 12

6. Are all prime numbers also odd numbers? _____

Justify your answer.

_____

_____

Name _____

Standard 4.OA.B.4

1. Marco is in elementary school. His father is 30 years older than Marco, and his mother is 4 years younger than his father. The ages of Marco, his mother, and his father are all prime numbers. What are their ages?

Marco's age: _____

Father's age: _____

Mother's age: _____

2. Percy, Hilda, and Fred take turns riding their horse. Percy rides every 4 days, Hilda rides every 5 days, and Fred rides every 6 days. This pattern continues. What will be the first day they all ride the horse on the same day?

Answer: _____

How did you find your answer?

_____

_____

_____

Journal

Is 1 a prime number or a composite number? Use words, numbers, or pictures to justify your answer.

_____

_____

_____

_____

_____

Name _____

Unit 4 Motivation Station

Standard 4.OA.B.4

Multiple Multiples

Skip count to find multiples on the hundred chart. Record the multiples by marking the square of each multiple with a colored dot using the colors and locations outlined in the table. For example, for each multiple of 2, you will place a small red dot in the upper left corner of that number's square.

Color and Location Table

Multiples of...	Color of Dot	Location of Dot
2	Red	
3	Blue	
4	Green	
5	Orange	
6	Yellow	
7	Black	
8	Purple	
9	Brown	

Hundred Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

1. Name a number on the chart that is a multiple of all these factors: 2, 3, 4, 5, and 6.

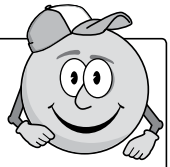
Answer: _____

2. Describe a pattern you can see on your completed chart.

_____

_____

Parent Activities



1. Practice finding multiples by skip counting together. Select a number from 2 through 9 and skip count to 100.

2. Have your child use small square tiles to make rectangles. Find the length, width, and area of each rectangle by counting the tiles. Then determine if another rectangle can be formed with the same area but different dimensions. Use this information to determine if the area value is a prime or composite number.