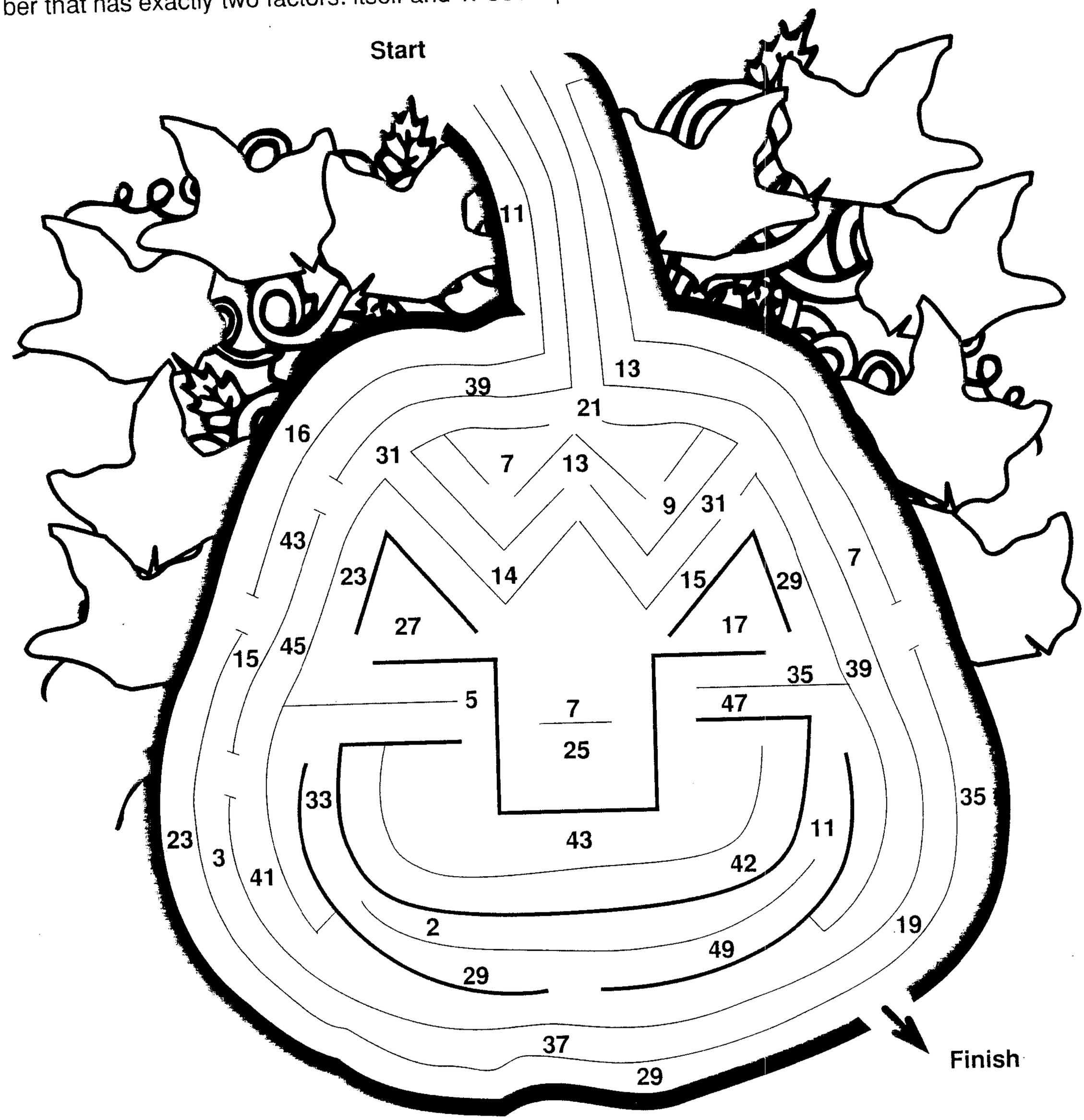
Name _____

Take The "Prime-ary" Path!

Find your way through this pumpkin maze, from start to finish. Sounds easy, right? There's one catch though: Your path can cross *only* prime numbers. Remember that a *prime number* is a number that has exactly two factors: itself and 1. Use a pencil to draw your route.



Now that you've made your way through the maze, list the ten prime numbers between 50 and 100 on the leaves, one number per leaf.

Bonus Box: Multiply the following prime factors to find the weight of the largest pumpkin ever grown: 2 x 3 x 3 x 5 x 11 = _____ pounds.

Name _____ Date _____
(Answer ID # 0967600)

Prime and Composite Numbers

Classify each number as prime or composite.

1. **4** ☐ Prime ☐ Composite	2. **14** ☐ Prime ☐ Composite	3. **13** ☐ Prime ☐ Composite	4. **12** ☐ Prime ☐ Composite
5. **30** ☐ Prime ☐ Composite	6. **53** ☐ Prime ☐ Composite	7. **28** ☐ Prime ☐ Composite	8. **11** ☐ Prime ☐ Composite
9. **26** ☐ Prime ☐ Composite	10. **47** ☐ Prime ☐ Composite	11. **21** ☐ Prime ☐ Composite	12. **96** ☐ Prime ☐ Composite
13. **81** ☐ Prime ☐ Composite	14. **42** ☐ Prime ☐ Composite	15. **29** ☐ Prime ☐ Composite	16. **49** ☐ Prime ☐ Composite
17. **97** ☐ Prime ☐ Composite	18. **56** ☐ Prime ☐ Composite	19. **75** ☐ Prime ☐ Composite	20. **63** ☐ Prime ☐ Composite
21. **99** ☐ Prime ☐ Composite	22. **79** ☐ Prime ☐ Composite	23. **82** ☐ Prime ☐ Composite	24. **19** ☐ Prime ☐ Composite
25. **39** ☐ Prime ☐ Composite	26. **16** ☐ Prime ☐ Composite	27. **58** ☐ Prime ☐ Composite	28. **71** ☐ Prime ☐ Composite
29. **76** ☐ Prime ☐ Composite	30. **43** ☐ Prime ☐ Composite	31. **61** ☐ Prime ☐ Composite	32. **20** ☐ Prime ☐ Composite
33. **90** ☐ Prime ☐ Composite	34. **74** ☐ Prime ☐ Composite	35. **7** ☐ Prime ☐ Composite	36. **45** ☐ Prime ☐ Composite
37. **18** ☐ Prime ☐ Composite	38. **98** ☐ Prime ☐ Composite	39. **35** ☐ Prime ☐ Composite	40. **59** ☐ Prime ☐ Composite

Answer Key 0967600

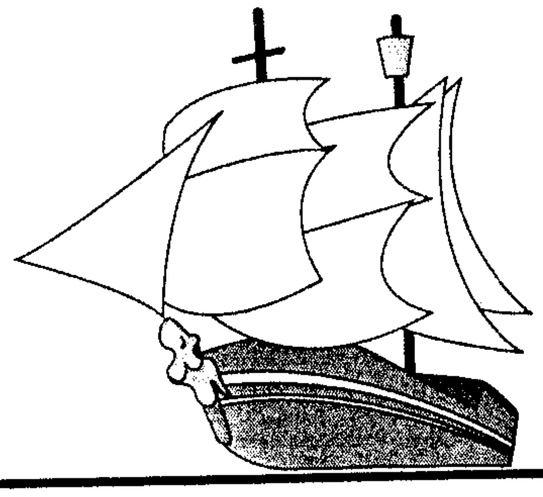
1. **4** ☐ Prime ■ Composite	2. **14** ☐ Prime ■ Composite	3. **13** ■ Prime ☐ Composite	4. **12** ☐ Prime ■ Composite
5. **30** ☐ Prime ■ Composite	6. **53** ■ Prime ☐ Composite	7. **28** ☐ Prime ■ Composite	8. **11** ■ Prime ☐ Composite
9. **26** ☐ Prime ■ Composite	10. **47** ■ Prime ☐ Composite	11. **21** ☐ Prime ■ Composite	12. **96** ☐ Prime ■ Composite
13. **81** ☐ Prime ■ Composite	14. **42** ☐ Prime ■ Composite	15. **29** ■ Prime ☐ Composite	16. **49** ☐ Prime ■ Composite
17. **97** ■ Prime ☐ Composite	18. **56** ☐ Prime ■ Composite	19. **75** ☐ Prime ■ Composite	20. **63** ☐ Prime ■ Composite
21. **99** ☐ Prime ■ Composite	22. **79** ■ Prime ☐ Composite	23. **82** ☐ Prime ■ Composite	24. **19** ■ Prime ☐ Composite
25. **39** ☐ Prime ■ Composite	26. **16** ☐ Prime ■ Composite	27. **58** ☐ Prime ■ Composite	28. **71** ■ Prime ☐ Composite
29. **76** ☐ Prime ■ Composite	30. **43** ■ Prime ☐ Composite	31. **61** ■ Prime ☐ Composite	32. **20** ☐ Prime ■ Composite
33. **90** ☐ Prime ■ Composite	34. **74** ☐ Prime ■ Composite	35. **7** ■ Prime ☐ Composite	36. **45** ☐ Prime ■ Composite
37. **18** ☐ Prime ■ Composite	38. **98** ☐ Prime ■ Composite	39. **35** ☐ Prime ■ Composite	40. **59** ■ Prime ☐ Composite

5.3a

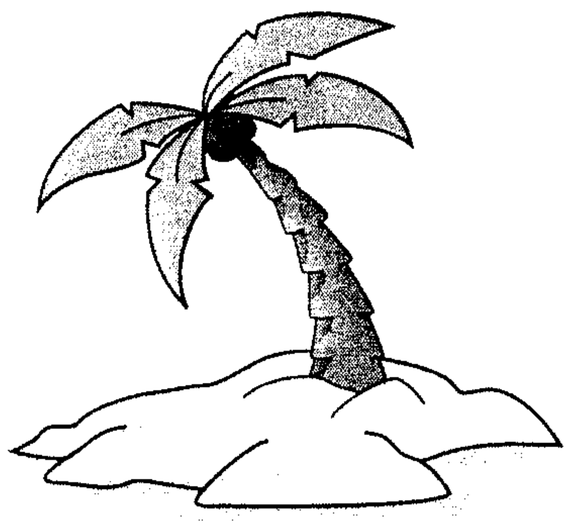
Prime Number Maze

Name: _____ Date: _____

Help the pirates find their secret island by following the path of composite (non-prime) numbers.

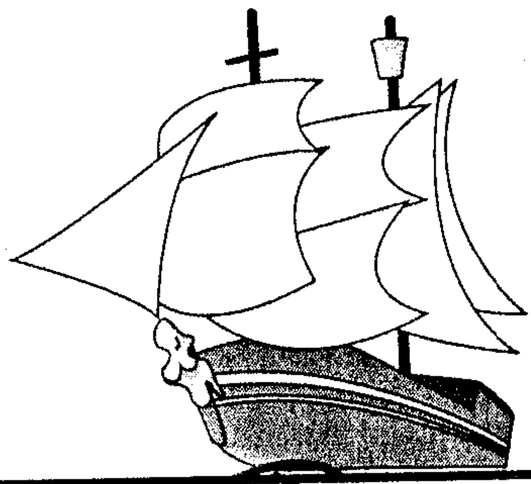


3	19	67	13	2	89	15	89	29	11	61	11	2
2	79	61	53	53	29	15	23	65	57	56	31	3
5	89	61	83	23	23	33	77	45	79	44	54	62
59	73	7	67	3	47	23	7	23	19	29	13	20
43	31	71	23						31	47	67	60
2	73	3	5						7	37	31	60
11	53	73	73						7	41	2	84
47	19	39	9						41	60	63	40
79	56	20	3	19	71	59	5	23	23	8	41	7
31	40	41	31	17	59	14	9	63	71	63	58	86
7	72	73	71	3	73	25	53	60	29	67	23	66
11	42	8	30	38	12	9	41	14	60	76	69	78



Prime Number Maze
ANSWER KEY

Help the pirates find their secret island by following the path of composite (non-prime) numbers.



3	19	67	13	2	89	15	89	29	11	61	11	2	
2	79	61	53	53	29	15	23	65	57	56	31	3	
5	89	61	83	23	23	33	77	45	79	44	54	62	
59	73	7	67	3	47	23	7	23	19	29	13	20	
43	31	71	23						31	47	67	60	
2	73	3	5						7	37	31	60	
11	53	73	73						7	41	2	84	
47	19	39	9						41	60	63	40	
79	56	20	3	19	71	59	5	23	23	8	41	7	
31	40	41	31	17	59	14	9	63	71	63	58	86	
7	72	73	71	3	73	25	53	60	29	67	23	66	
11	42	8	30	38	12	9	41	14	60	76	69	78	

OUR READERS WRITE

530

Prime and Composite Tic-Tac-Toe

For a quick review of **prime and composite numbers,** I have student pairs play tic-tac-toe. To play, each student chooses a different-colored marker. Player One writes a composite number on a square; then Player Two writes a prime number. The students continue taking turns until one gets three squares in a row, in a column, or diagonally. Once a winner has been declared, I have students switch places and repeat the game. I also use this game to review common and proper nouns or states and their capitals!

Linda Messner, Wilson Christian Academy, West Mifflin, PA

12	40	24
3	19	6
16	23	7

Reinforcing Covers

To prolong the lives of **magazines** my students love to read, I attach clear Con-Tact covering to the front and back covers. Now our classroom magazines last much longer, ensuring that all students have a chance to read them.

Camille Foreman, Red Bank Middle School, Red Bank, NJ

Put It to Music!

To help my students remember the **helping verbs,** we sing the song below. When former students visit, they tell me how much this song helped them even throughout high school!

Mary Beth Endicott, St. Joseph Elementary, Crescent Springs, KY

The Helping Verb Song
(sung to the tune of "Jingle Bells")

Helping verbs, helping verbs—
There are 23.
Am, is, are, was, and *were,*
Being, been, and *be.*

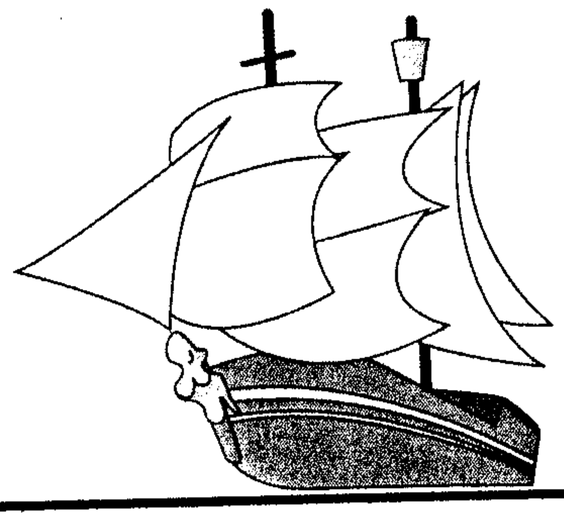
Have, has, had, do, does, did,
Shall, should, will, and *would.*
There are five more helping verbs:
May, might, must, can, could!

5.3a

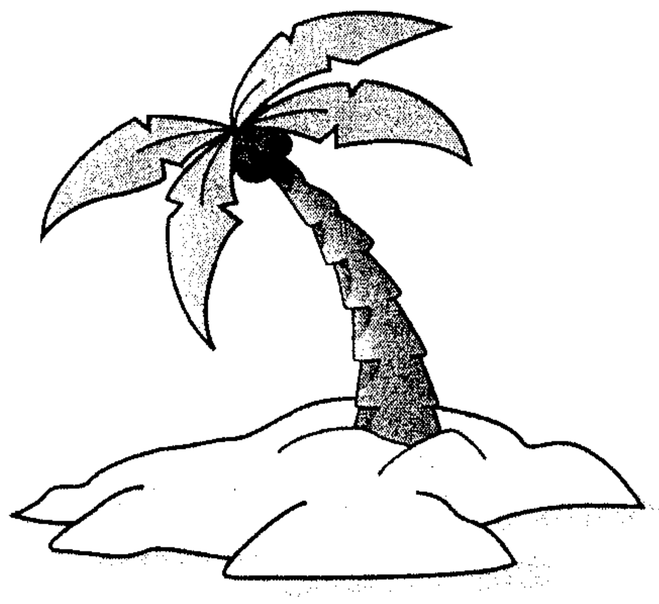
Prime Number Maze

Name: _____ Date: _____

Help the pirates find their secret island by following the path of prime numbers.

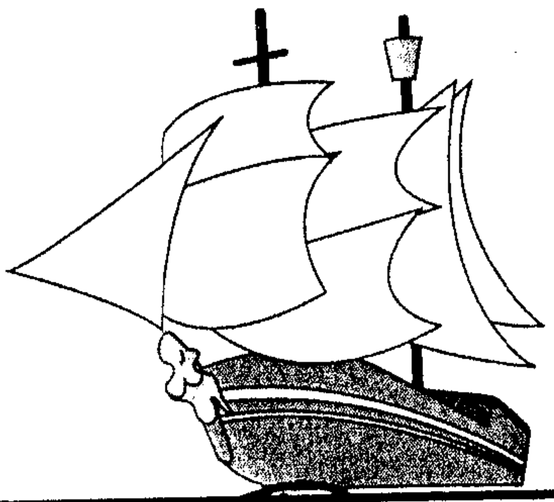


48	35	39	21	8	45	2	60	44	49	30	26	51
10	9	36	32	38	60	67	84	76	69	58	35	22
85	39	43	3	7	3	47	26	62	78	60	9	28
18	26	5	14	57	18	42	81	80	38	78	8	14
76	68	73	44						48	83	3	47
2	5	67	42						67	11	33	7
41	12	22	10						42	66	74	73
31	66	48	52						72	18	66	31
71	7	67	64						58	42	30	67
32	72	47	36	14	21	69	9	82	42	12	9	41
88	55	37	60	30	60	53	43	37	42	43	37	7
87	69	37	5	38	7	31	82	79	8	89	14	88
8	88	63	83	23	11	27	60	5	17	73	10	82

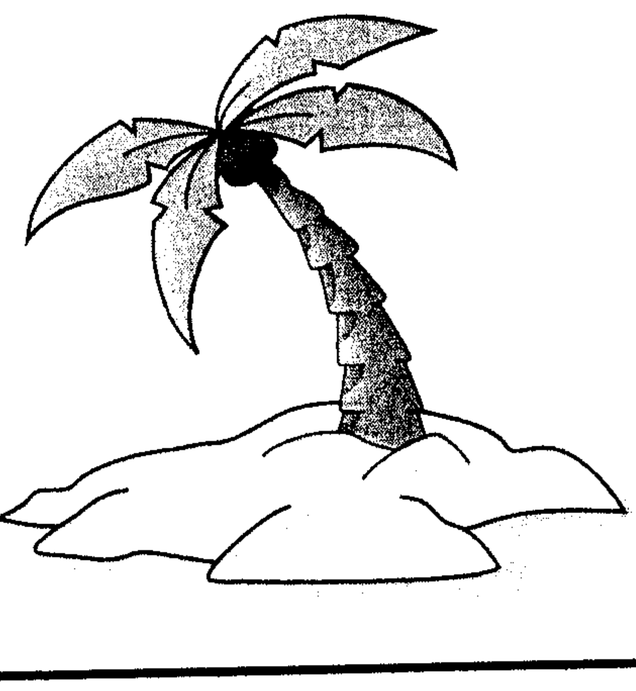


Prime Number Maze
ANSWER KEY

Help the pirates find their secret island by following the path of prime numbers.



48	35	39	21	8	45	2	60	44	49	30	26	51
10	9	36	32	38	60	67	84	76	69	58	35	22
85	39	43	3	7	3	47	26	62	78	60	9	28
18	26	5	14	57	18	42	81	80	38	78	8	14
76	68	73	44						48	83	3	47
2	5	67	42						67	11	33	7
41	12	22	10						42	66	74	73
31	66	48	52						72	18	66	31
71	7	67	64						58	42	30	67
32	72	47	36	14	21	69	9	82	42	12	9	41
88	55	37	60	30	60	53	43	37	42	43	37	7
87	69	37	5	38	7	31	82	79	8	89	14	88
8	88	63	83	23	11	27	60	5	17	73	10	82



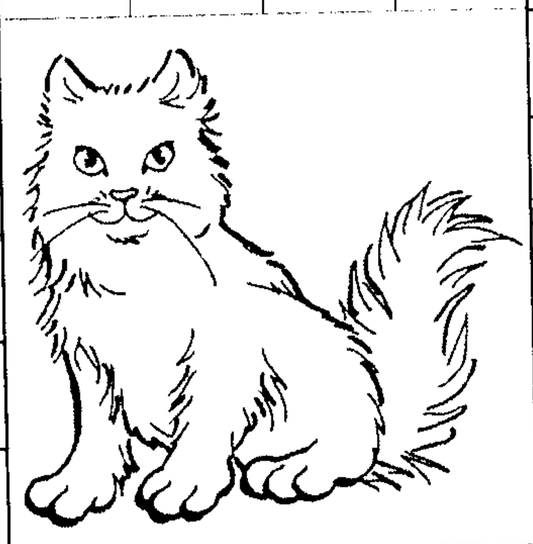
5.3b

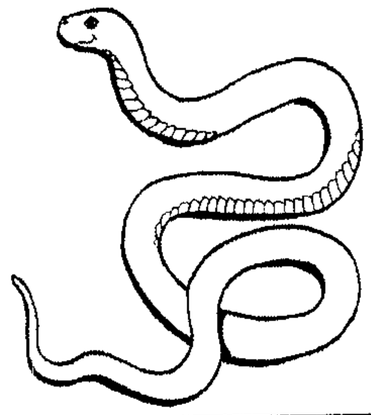
Name: _____

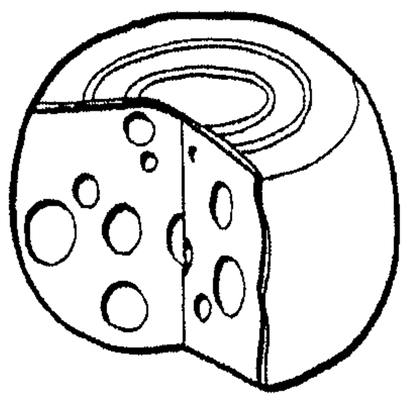
The Odd Mouse Path

Color the boxes with odd numbers in them.
Can you make a trail to help the mouse find the cheese?

3	57	93	90	38	40	14	34	16	2	36
46	8	51	42	10	28	50				2
14	10	65	88	96	70	48				58
2	87	79	30	20	8	20				22
24	56	78	34	42	1	80	16	26	18	24				4
40	50	72	54	6	55	44	34	20	38	64	70	46	2	58
84	51	9	97	43	31	40	22	6	99	29	53	13	14	42
26	13	74	82	8	50	68	0	66	79	18	0	27	40	10
76	49	32					4	78	57	16	92	1	62	58
28	7	60					12	64	59	12	8	17	60	2
81	21	72					80	76	31	86	90	99	94	58
47	74	6					62	34	87	22				
93	0	72					0	73	31	96				
25	36	52	4	38	70	66	28	29	48	4				
15	69	11	63	5	19	37	21	85	2	10				







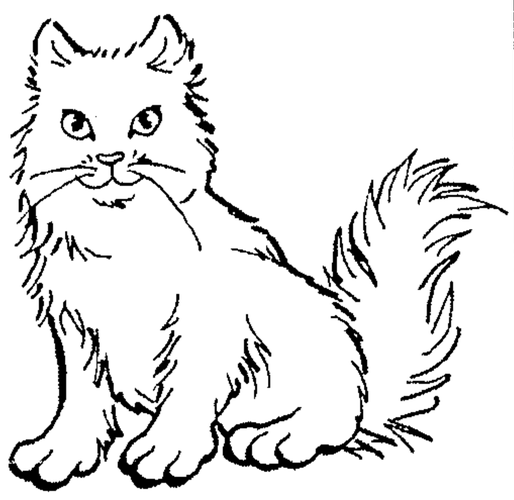
ANSWER KEY

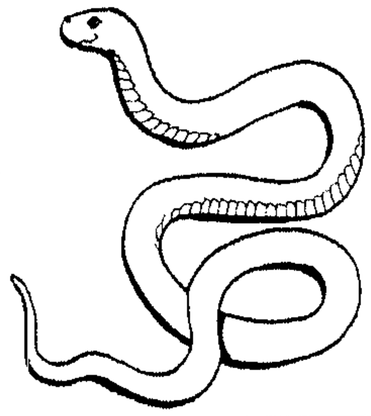
Name: _____

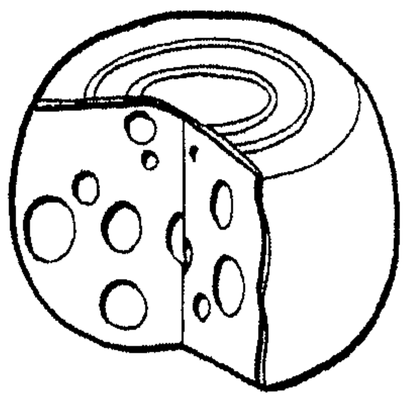
The Odd Mouse Path

Color the boxes with odd numbers in them.
Can you make a trail to help the mouse find the cheese?

6	57	93	90	38	40	14	34	16	2	36
46	8	51	42	10	28	50				2
14	10	65	88	96	70	48				58
2	87	79	30	20	8	20				22
24	56	78	34	42	1	80	16	26	18	24	4
40	50	72	54	6	55	44	34	20	38	64	70	46	2	58
84	51	9	97	43	31	40	22	6	99	29	53	18	14	42
26	13	74	82	8	50	68	0	66	77	18	0	27	40	10
76	49	32					4	78	57	16	92	1	62	58
28	7	60					12	64	59	12	8	17	60	2
81	21	72					80	76	31	86	90	99	94	58
47	74	6					62	34	87	22				
93	0	72					0	73	31	96				
25	36	52	4	38	70	66	28	29	48	4				
15	69	11	63	5	19	37	21	85	2	10				







5.3b

Name: _____

Even and Odd

Word Problems

a. Do you usually buy an odd number of shoes or an even number of shoes? _____

b. When you buy a dozen eggs are you getting an odd or even number of eggs? _____

c. Is there an odd or even number of letters in the alphabet? _____

d. Even numbers must end with a 2, 4, 6, 8, or __. _____

e. Odd numbers must end with a 1, 3, 5, 9, or __. _____

f. Which of these numbers is odd 22, 44, 66, or 77? _____

g. Which of these numbers is even: 65, 83, 26, or 91? _____

h. Subtract 9 from 18. Is the answer even or odd? _____

i. Add 9 and 18 together. Is the answer even or odd? _____

j. Which shape has an odd number of sides: triangle, square, rectangle, or octagon? _____

k. Does a car usually have an odd or even number of tires? _____

l. Jenna, Hannah, Jessica, Patty, and Lily eat lunch together at the same table. Are there an odd or even number of girls at the table? _____

m. In a basketball game, the Lakers scored 101 points. The Bulls scored 104 points. Which team scored an odd number of points? _____

ANSWER KEY

Even and Odd

Word Problems

a. Do you usually buy an odd number of shoes or an even number of shoes? even

b. When you buy a dozen eggs are you getting an odd or even number of eggs? even

c. Is there an odd or even number of letters in the alphabet? even

d. Even numbers must end with a 2, 4, 6, 8, or ___. 0

e. Odd numbers must end with a 1, 3, 5, 9, or ___. seven

f. Which of these numbers is odd 22, 44, 66, or 77? 77

g. Which of these numbers is even: 65, 83, 26, or 91? 26

h. Subtract 9 from 18. Is the answer even or odd? odd

i. Add 9 and 18 together. Is the answer even or odd? odd

j. Which shape has an odd number of sides: triangle, square, rectangle, or octagon? triangle

k. Does a car usually have an odd or even number of tires? even

l. Jenna, Hannah, Jessica, Patty, and Lily eat lunch together at the same table. Are there an odd or even number of girls at the table? odd

m. In a basketball game, the Lakers scored 101 points. The Bulls scored 104 points. Which team scored an odd number of points? Bulls

Name: _____

5.3b

Odd or Even?

Color the boxes with even numbers blue.
Color the boxes with odd numbers red.

0	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

Even numbers have a _____, _____, _____, _____, or _____ in the ones place.

Odd numbers have a _____, _____, _____, _____, or _____ in the ones place.

Circle the <u>odd</u> number in each group.

a. 56 30 45 98 62

b. 87 58 32 26 70

c. 76 94 12 99 4

d. 46 90 83 22 78

Circle the <u>even</u> number in each group.

a. 31 27 49 1 28

b. 90 43 85 69 3

c. 49 57 62 33 79

d. 91 77 35 73 4

Name: _____ ANSWER KEY

Odd or Even?

Color the boxes with even numbers blue.
Color the boxes with odd numbers red.

0	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

Even numbers have a 0, 2, 4, 6, or 8 in the ones place.

Odd numbers have a 1, 3, 5, 7, or 9 in the ones place.

Circle the odd number in each group.

a. 56 30 45 98 62

b. 87 58 32 26 70

c. 76 94 12 99 4

d. 46 90 83 22 78

Circle the even number in each group.

a. 31 27 49 1 28

b. 90 43 85 69 3

c. 49 57 62 33 79

d. 91 77 35 73 4