5.18

Open Sentence Match Game

Open Sentence $b + 3 = 60$	Story Problem How many cookies are in a box if the box plus three more equals 60 cookies, where b stands for the number of cookies in the box?	Solution $b = 57$
Open Sentence $3b = 60$	Story Problem How many plants are on a tray if three full trays of plants is equal to 60 plants, where b stands for the number of plants on a tray?	Solution $b = 20$
Open Sentence $b - 3 = 60$	Story Problem How many birds are in a tree if the number of birds in the tree take away three is equal to 60 birds, where b stands for the number of birds in the tree?	Solution $b = 63$
Open Sentence $\frac{b}{3} = 60$	Story Problem How many marbles are in a bag if a full bag of marbles shared among three people is equal to 60 marbles each, where b stands for the number of marbles in a bag.	Solution $b = 180$

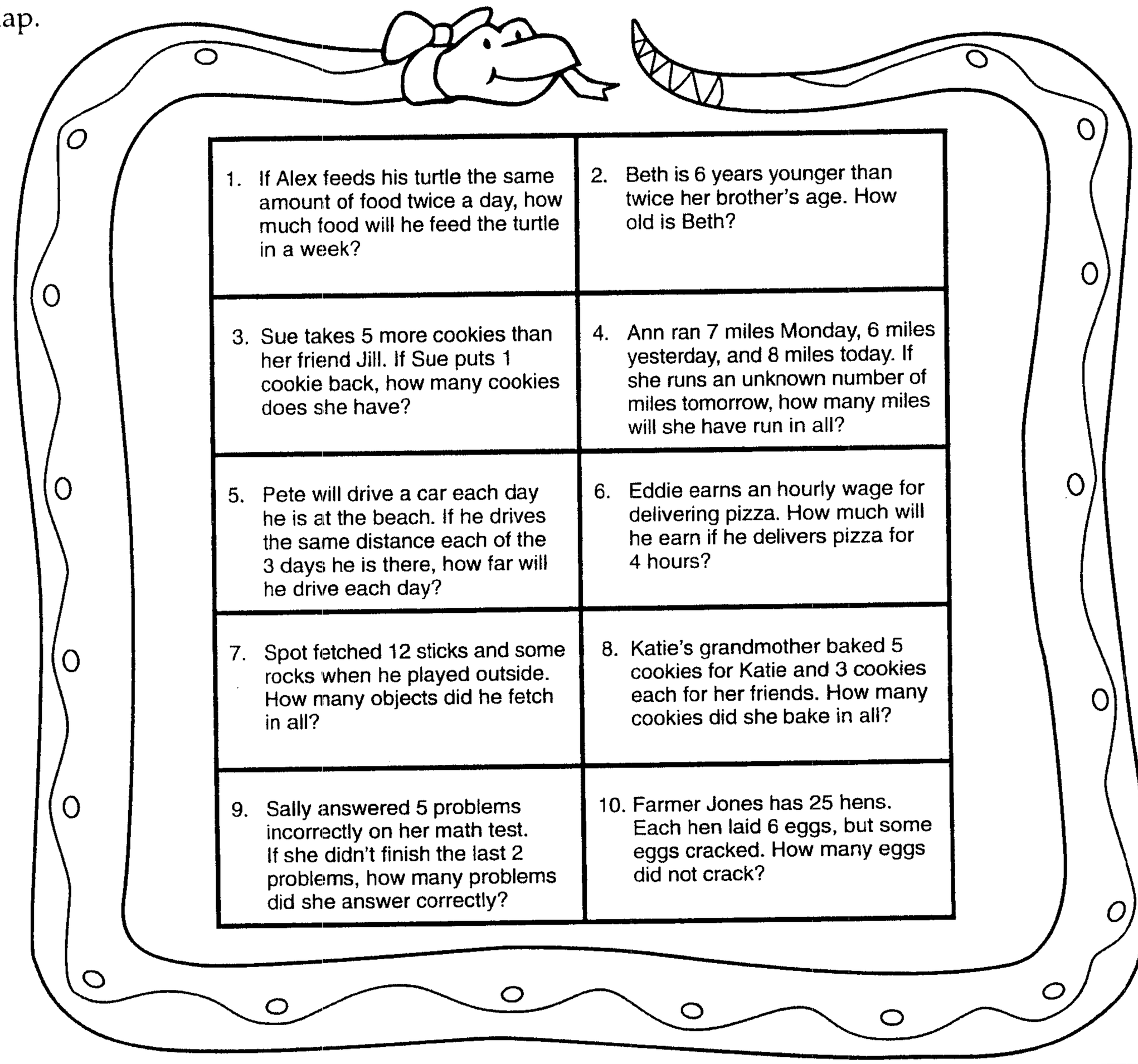
Framework

Name _____ Algebraic expressions

5.8

"Asssisssting" Sssereena

Sssereena needs help. She can't figure out which algebraic expression goes with each word problem. Cut out the algebraic expressions at the bottom of the page. Match each expression to a different word problem. Then tape each expression near the top of its corresponding box to create a flap.



1. If Alex feeds his turtle the same amount of food twice a day, how much food will he feed the turtle in a week?	2. Beth is 6 years younger than twice her brother's age. How old is Beth?
3. Sue takes 5 more cookies than her friend Jill. If Sue puts 1 cookie back, how many cookies does she have?	4. Ann ran 7 miles Monday, 6 miles yesterday, and 8 miles today. If she runs an unknown number of miles tomorrow, how many miles will she have run in all?
5. Pete will drive a car each day he is at the beach. If he drives the same distance each of the 3 days he is there, how far will he drive each day?	6. Eddie earns an hourly wage for delivering pizza. How much will he earn if he delivers pizza for 4 hours?
7. Spot fetched 12 sticks and some rocks when he played outside. How many objects did he fetch in all?	8. Katie's grandmother baked 5 cookies for Katie and 3 cookies each for her friends. How many cookies did she bake in all?
9. Sally answered 5 problems incorrectly on her math test. If she didn't finish the last 2 problems, how many problems did she answer correctly?	10. Farmer Jones has 25 hens. Each hen laid 6 eggs, but some eggs cracked. How many eggs did not crack?

Bonus Box: On the back of this page, write two story problems that describe the ages of two people in your family. Also write an algebraic expression for each problem. Use parentheses in at least one problem.

$d \div 3$	$(2 \times b) - 6$	$4 \times w$	$(j + 5) - 1$	$(2 \times f) \times 7$
$(p - 5) - 2$	$(3 \times f) + 5$	$(7 + 6 + 8) + m$	$12 + r$	$(25 \times 6) - c$

 Note to the teacher: Each student will need scissors and tape to complete this page.

Name _____ _____ 18b

Writing algebraic expressions

Horsing Around With Variables

Write an algebraic expression for each word expression. Then shade the matching box below.

1. *n* more than five _____
2. eight less than *n* _____
3. *n* increased by two _____
4. five less than *n* _____
5. six decreased by *n* _____
6. *n* decreased by four _____
7. one more than *n* _____
8. nine less than *n* _____
9. sixteen less than *n* _____
10. *n* less than twelve _____
11. fifteen increased by *n* _____
12. *n* more than zero _____
13. seven less than *n* _____
14. ten more than *n* _____
15. zero less than *n* _____
16. two decreased by *n* _____
17. *n* more than thirteen _____
18. one increased by *n* _____
19. eleven decreased by *n* _____
20. *n* less than fourteen _____
21. *n* more than six _____

T $13 + n$	I $n - 7$	H $n - 16$	N $6 - n$	E $5 + n$	D $1 + n$	R $n - 2$	O $12 - n$	G $n - 4$
E $n - 8$	I $14 + n$	N $n - 0$	C $15 + n$	D $13 - n$	D $n + 8$	I $n + 10$	L $11 - n$	H $n + 1$
U $n + 2$	S $14 - n$	E $2 - n$	C $0 + n$	A $n - 9$	E $n + 4$	V $n - 5$	L $6 + n$	N $16 - n$

To answer the question above, write the letters in the unshaded boxes in order in the blanks below.

Those that are being

_____.

Name _____ Math expressions

Home, Sweet Home

Where do some alligators go in the winter while they wait for springtime? They make homes with their bodies! To find out what these homes are called, follow the directions below.

Directions:

1. Match each phrase (1–16) with a math expression in the box.
2. Circle the expression; then write it in the blank.
3. You will not use nine expressions.
4. The first one has been done for you.

1. the quotient of four and another number $\frac{4}{z}$
2. five times the difference of two numbers _____
3. six pounds less than Marty _____
4. Janis read three times as much _____
5. five more than the difference between 16 and another number _____
6. a number increased by five _____
7. sold four boxes of candy; half of my earnings was profit _____
8. scored field goals playing basketball, plus four free throws _____
9. ten more than a number _____
10. served some drinks from a 12-pack _____
11. the sum of six and another number, multiplied by five _____
12. the product of eight and another number _____
13. half of my baseball cards _____
14. six times the sum of two numbers _____
15. earned the same amount of pay for each of three hours of work; then spent five dollars _____
16. double the quotient of three and another number _____

$b + 5$
$a - 5$
$10 + j$
$m - 6$
$6 - e$
$12 - w$
$r - 12$
$8s$
$3f$
$5\left(\frac{o}{6}\right)$
$\left(\frac{4}{z}\right)$
$\frac{n}{2}$
$16 - y + 5$
$\frac{t}{3}$
$7o + 7$
$2k + 4$
$2\,(g + 4)$
$3p - 5$
$6\,(c + d)$
$5\,(p - q)$
$2\left(\frac{3}{x}\right)$
$2\left(\frac{h}{3}\right)$
$\frac{4v}{2}$
$4 \times l + 2$
$5\,(6 + u)$

List all of the letters in the expressions that you didn't use: _____. Arrange the letters in the blanks below to answer the question: What do you call an alligator's winter home?

___ ___ ___ ___ ___ ___ ___ ___ ___ ___