Activity 7

Use the clues and the chart to determine the value of each letter, solve the cryptogram, and discover the famous quote.

$h > a > n$

$s > a > n$

$h + 3 = s + n$

	a	h	s	n
12				
7				
9				
6				

a = ____
h = ____
s = ____
n = ____

$e \div g = 2$

$t > e$

	i	g	e	t
11				
10				
8				
5				

i = ____
g = ____
e = ____
t = ____

$o + k = r$

$r < p$

$o \times r = r$

	r	k	o	p
4				
3				
2				
1				

r = ____
k = ____
o = ____
p = ____

Cryptogram (Parenthesis separate double digits; they have no other meaning.)

"7   c(12)786   89   61   9(11)3165(10)3   (11)(12)76   8(11)9 w(10)72(10)9(11)   l862."

(10)65l89(12)   431v(10)3b

"_   c_ _ _ _   _ _   _ _   _ _ _ _ _ _ _ _

_ _ _ _   _ _ _   w _ _ _ _ _ _   l _ _ _ ."

_ _ _ l _ _ _   _ _ _ v _ _ b

Activity 17

Use the clues and the chart to determine the value of each letter, solve the cryptogram, and discover the famous quote.

$(h \div i) + 2.5 = k$

<mark>h > i</mark>

	h	i	n	k
4				
3				
2				
1				

h = ___
i = ___
n = ___
k = ___

$l + s + y = 20$

$l < s < y$

	y	e	l	s
9				
8				
7				
5				

y = ___
e = ___
l = ___
s = ___

p > t
r > t
a = 6
p ≠ 10
p > r

	t	p	a	r
12				
11				
10				
6				

t = ___
p = ___
a = ___
r = ___

Cryptogram (Parentheses separate double digits; they have no other meaning.)

"(10)3214   fo(11)   8ou(11)795v97   61d   59(10)   o(10)39(11)7 91jo8   (10)39   (12)(11)2v259g9   (10)o   do   7o,   (10)oo."

Vo5(10)62(11)9

> "_ _ _ _ _ _   fo _   _ ou _ _ _ _ v _ _   _ _ d
>
> _ _ _   o _ _ _ _ _ _   _ _ jo _   _ _ _
>
> _ _ _ v _ _ _ g _   _ o   do   _ o,   _ oo."
>
> Vo _ _ _ _ _ _

Activity 23

Use the clues and the chart to determine the value of each letter, solve the cryptogram, and discover the famous quote.

$t > o + a + o$

$o \times a = (a \times a) - a$

	s	a	t	o
2				
3				
6				
9				

s = ____
a = ____
t = ____
o = ____

$j = n + e$

$n \times m = m$

	j	n	m	e
1				
4				
5				
7				

j = ____
n = ____
m = ____
e = ____

$w + w = (r + w) - 2$

$g = 12$

	r	w	h	g
8				
10				
11				
12				

r = ____
w = ____
h = ____
g = ____

Cryptogram (Parenthesis separate double digits; they have no other meaning.)

"8(11)39   84   (11)2p4   4v4(10)   92   d2   8i9(11)   4364,   84
7u69   l43(10)1   fi(10)69   92   d2   8i9(11)   dili(12)41c4."

637u4l   52(11)1621

"_ _ _ _   _ _   _ _ p _   _ v _ _   _ _   d _

_ i _ _   _ _ _ _,   _ _   _ u _ _   l _ _ _ _

fi _ _ _   _ _   d _   _ i _ _   dili _ _ _ c _."

_ _ _ u _ l   _ _ _ _ _ _ _

Activity 24

Use the clues and the chart to determine the value of each letter, solve the cryptogram, and discover the famous quote.

i > s

s < u

u > o

i < o

i < u

	i	o	u	s
3				
8				
10				
12				

i = ____

o = ____

u = ____

s = ____

d × d = (e + 1) + 8

q < d

	d	e	a	q
2				
4				
6				
7				

d = ____

e = ____

a = ____

q = ____

m + v = l × 4

v − 1 = (m − v) + 6

	l	r	m	v
1				
5				
9				
11				

l = ____

r = ____

m = ____

v = ____

Cryptogram (Parentheses separate double digits; they have no other meaning.)
"(10)(12)t   (10)f   th7   2(12)73t8(10)n3   (10)f   3t(12)47nt3
c(10)(11)7   (11)(10)3t   (10)f   th7   c176t897   84763   6n4
483c(10)971873."

7557n   56ng71

"_ _ t   _ f   th _   _ _ _ _ t _ _ n _   _ f   _ t _ _ _ nt _

c _ _ _   _ _ _ t   _ f   th _   c _ _ _ t _ _ _

_ _ _ _ _   _ n _   _ _ _ c _ _ _ _ _ _ _ ."

_ _ _ _ n   _ _ ng _ _

Activity 28

Use the clues and the chart to determine the value of each letter, solve the cryptogram, and discover the famous quote.

$a \times a = 142 + t$

$(g \times g) \times e = g \times g$

	a	t	g	e
12				
4				
2				
1				

a = ____

t = ____

g = ____

e = ____

$(o \times n) \times 10 = 500$

o > n

n < p

p > o

	v	p	n	o
11				
10				
6				
5				

v = ____

p = ____

n = ____

o = ____

i > l > r

i < h

	l	i	h	r
9				
8				
7				
3				

l = ____

i = ____

h = ____

r = ____

Cryptogram (Parentheses separate double digits; they have no other meaning.)

"(12)77   29(12)2   4782213s   8s   5(10)2   4(10)7d."

15478s9   (11)3(10)613b

"_ _ _   _ _ _ _   _ _ _ _ _ _ _ _ s   _ s   _ _ _

_ _ _ d."

_ _ _ _ _ s _   _ _ _ _ _ _ b

	b	f	l	s
1	−	−	+	−
5	−	−	−	+
6	+	−	−	−
8	−	+	−	−

Answers: b = 6; f = 8; l = 1; s = 5
If f is greater than or equal to 371 minus 365 (# of days in a year), f must be 6 or 8. If l times any positive # equals the same #, l must be 1. If f is greater than l plus s, f must be 8 for the statement to be true. Since s is less than b, s must be 5. b is then 6.

	t	o	g	h
12	−	+	−	−
2	−	−	+	−
10	−	−	−	+
7	+	−	−	−

Answers: t = 7; o = 12; g = 2; h = 10
If t equals 21 minus o plus g, t must be either 7, or 12, and o and g must be either 2, 7, or 12. Therefore, h is then 10. If o equals t plus h minus 5, o must be 12 and t must be 7 for the equation to be true. g is then 2.

Page 17: "Think for yourselves and let others enjoy the privilege to do so, too."
Voltaire

	h	i	n	k
4	−	−	−	+
3	+	−	−	−
2	−	+	−	−
1	−	−	+	−

Answers: h = 3; i = 2; n = 1; k = 4
If h is greater than i, and h divided by i plus 2.5 = k, h must be 3, i must be 2, and k must be 4 for the equation to be true. n is then 1.

	y	e	l	s
9	−	+	−	−
8	+	−	−	−
7	−	−	−	+
5	−	−	+	−

Answers: y = 8; e = 9; l = 5; s = 7
If l plus s plus y = 20, l, s, and y must be 5, 7, or 8. Therefore, e must be 9. Since l is less than s and y, l must be 5. Since s is less than y, but greater than l, s must be 7. y is then 8.

	t	p	a	r
12	−	+	−	−
11	−	−	−	+
10	+	−	−	−
6	−	−	+	−

Answers: t = 10; p = 12; a = 6; r = 11
If t is less than p and r, t must be 6 or 10. If a equals 6, t must be 10. Since p is greater than r and t, p must be 12, the largest number. Since r is less than p, but greater than t, r must be 11.

Page 18: "Try not to become a man of success, but rather try to become a man of value."   *Albert Einstein*

	v	n	a	t
12	−	+	−	−
3	+	−	−	−
11	−	−	−	+
4	−	−	+	−

Answers: v = 3; n = 12; a = 4; t = 11
If v plus 6 equals t minus a minus 2, t must be 11, and a and v must be either 3 or 4 for the equation to be true. Therefore, n must be 12. Since v is less than a, v must be 3 and a must be 4.

	o	h	e	m
2	−	−	−	+
1	−	+	−	−
10	−	−	+	−
9	+	−	−	−

Answers: o = 9; h = 1; e = 10; m = 2
If o is less than all double digits and greater than h, o must be either 2 or 9, and since m is not 1 or 10, m must also be either 2 or 9. Since e is greater than 9, e must be 10. If m equals 13 minus e plus h, m must be 2 and h must be 1 for the equation to be true. o is then 9.

	f	r	k	i
5	+	−	−	−
7	−	+	−	−
6	−	−	+	−
8	−	−	−	+

Answers: f = 5; r = 7; k = 6; i = 8
If f equals i minus 3, f must be 5, and i must be 8 for the equation to be true. If i equals 1 plus r, r must be 7 for the equation to be true. k is then 6.

Page 27: "Those who know how to think need no teachers."   *Mahatma Gandhi*

	t	h	o	w
10	—	—	+	—
9	+	—	—	—
7	—	—	—	+
6	—	+	—	—

Answers: t = 9; h = 6; o = 10; w = 7
If *t* is not 7, and *t* is greater than *w*, but less than *o*, *t* must be a middle number; therefore, *t* must be 9. If *h* is less than 7, *h* must be 6. Since *o* is greater than *w*, *o* must be 10, and *w* must be 7.

	n	e	a	r
12	—	—	+	—
11	+	—	—	—
4	—	+	—	—
3	—	—	—	+

Answers: n = 11; e = 4; a = 12; r = 3
If *n* times *r* equals 33, *n* and *r* must be either 11 or 3 for the equation to be true. *e* is less than *n*, but greater than *r*, so *e* must be a middle number, either 4 or 11; therefore, *e* must be 4. *r* is less than *e*; therefore, *r* must be 3, and *n* must be 11. *a* is then 12.

	s	m	k	i
8	—	+	—	—
5	—	—	+	—
2	—	—	—	+
1	+	—	—	—

Answers: s = 1; m = 8; k = 5; i = 2
i is less than 3; therefore, *i* must be either 1 or 2, and since *i* is greater than *s*, and not 8, *i* must be 2, and *s* must be 1. If *k* plus *k* minus *i* equals *m*, *k* must be 5 and *m* must be 8 for equation to be true.

Page 28: "All that glitters is not gold."
                                          English Proverb

	a	t	g	e
12	+	—	—	—
4	—	—	+	—
2	—	+	—	—
1	—	—	—	+

Answers: a = 12; t = 2; g = 4; e = 1
If *a* times *a* equals *t* plus 142, *a* must be 12, and *t* must be 2 for the equation to be true. If *g* times *g*, times *e*, equals *g* times *g*, *e* must be 1. *g* is then 4.

	v	p	n	o
11	—	+	—	—
10	—	—	—	+
6	+	—	—	—
5	—	—	+	—

Answers: v = 6; p = 11; n = 5; o = 10
If *o* times *n* times 10 equals 500, *o* and *n* must be either 5 or 10 for the equation to be true. If *o* is greater than *n*, *o* must be 10 and *n* must be 5. If *n* is less than *p*, *p* must be 6 or 11, the only numbers remaining that are greater than 5. If *p* is greater than *o*, *p* must be 11. *v* is then 6.

	l	i	h	r
9	—	—	+	—
8	—	+	—	—
7	+	—	—	—
3	—	—	—	+

Answers: l = 7; i = 8; h = 9; r = 3
If *i* is greater than *l* and *r*, but less than *h*, *i* must be 8. *h* is greater than *i*, so *h* must be 9, the largest number. *r* is less than *l*; therefore, *r* must be 3, and *l* must be 7.

Page 29: "Be the change you want to see in the world."   *Mahatma Gandhi*

	e	h	s	b
10	—	—	—	+
8	+	—	—	—
5	—	+	—	—
2	—	—	+	—

Answers: e = 8; h = 5; s = 2; b = 10
If 10 percent of 100 equals *b*, *b* must be 10. Six percent of 300 equals *e* plus *b*; therefore, *e* must be 8 for the equation to be true. If *e* minus *s* plus 1 equals *h*, and *s* is greater than *h*, *s* must be 2, and *h* must be 5 for the equation to be true.

	c	o	u	t
12	—	—	—	+
7	+	—	—	—
4	—	—	+	—
1	—	+	—	—

Answers: c = 7; o = 1; u = 4; t = 12
If 11 percent of 400 minus *t* equals 32, *t* must be 12 for the equation to be true. If *t* divided by *o* equals *u* times 3, *o* must be 1, and *u* must be 4 for the equation to be true. *c* is then 7.