

Fun and Engaging • Curriculum Extension Reinforces Learning • Skill Level Activities

### **Parent and Teacher Guide**

Studies have proven learning is enhanced through the use of several senses. A recent study shows that we retain 10 percent of what we see, 20 percent of what we hear, and 50 percent of what we see and hear. But when we see, hear and do, we retain 90 percent of the information. (Lisa Marie Nelson, Ph.D., Author "The Healthy Family Handbook").

The purpose of this Resource & Activity Book is to help children learn and retain the story theme and principles in a fun and educational way. Your children will love coloring pages, solving puzzles, matching games, completing word searches, and much more! Each Resource & Activity Book also features challenging questions and activities for children from preschool through middle school. And in the rare case you don't know an answer, there's an answer key in the back!

#### LEVEL OF DIFFICULTY

The activities in this book are designed in three levels of difficulty designated by symbols. The activities with one symbol are geared towards younger children while the activities with two and three symbols become increasingly challenging for older children.

Level One Easy



Level Three Advanced

#### CURRICULUM RELATED

These educational activities are related to various educational discipline such as social studies (geography, history, culture), language arts (spelling, creative writing, grammar, literature), math (simple equations), and science. There are also activities for character development, video awareness, problem solving, music, and art. The subject codes below are for your convenience.































Character Culture Geography History Language Development

Arts

Math

Music

Problem Science Solving

Spelling

Video Writing Awareness

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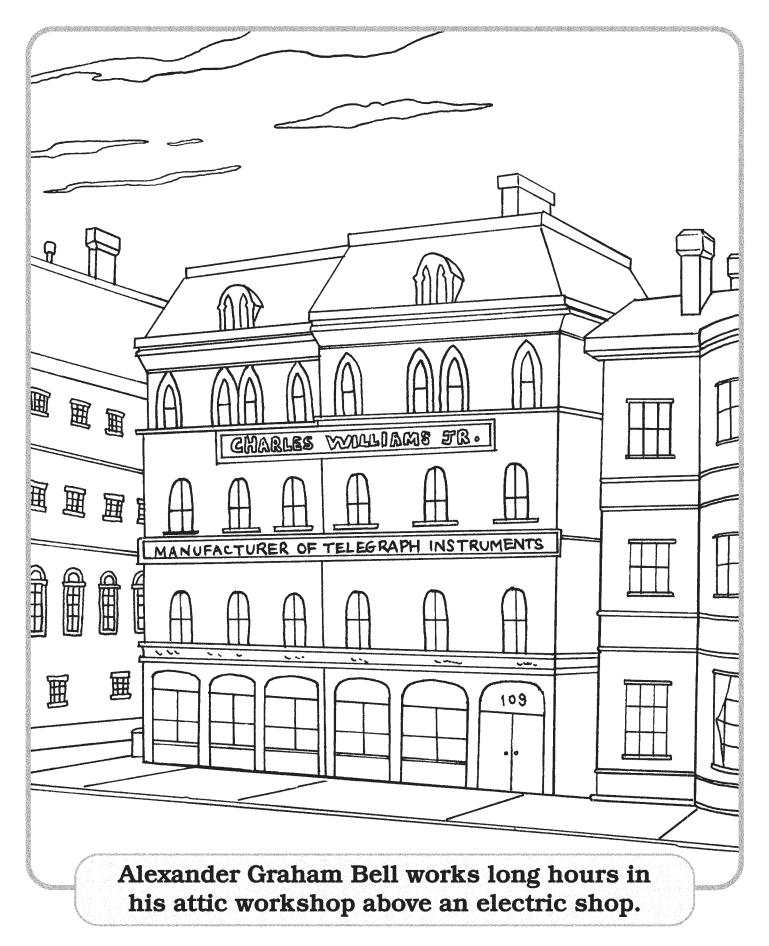
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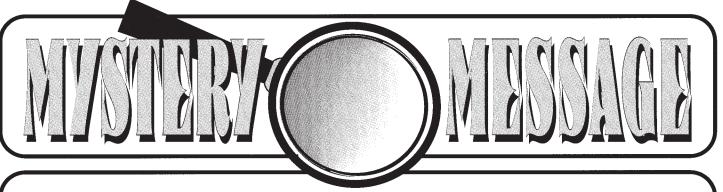
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### REFERENCES

For those wishing to further study the life of Alexander Graham Bell, some of the references used in research for the Resource & Activity Book are listed below, along with other titles that may be of interest.

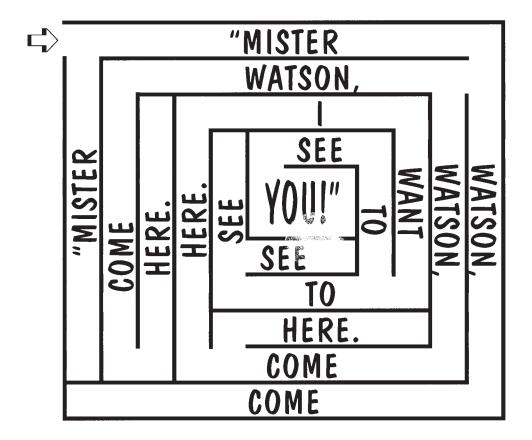
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What was the first telephone message sent and received? Alexander Graham Bell spoke the words to his assistant, Tom Watson.

Work the maze below, writing each word as you come to it on the blanks below.



The first telephone message was,

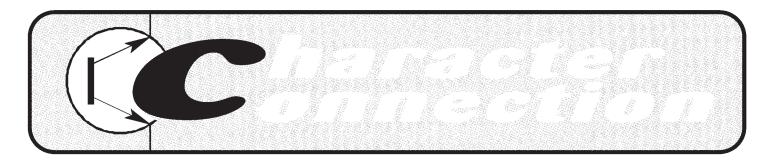
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	7"

## WORD SEARCH

Can you find and circle the words in the puzzle? Mr. Bell used these words in his work.

LIPS	SIGN	<b>VIBRATION</b>	MOUTH PIECE
READ	SPEAK	LANGUAGE	CYLINDER
TELEGRAPH	HEAR	DEAF	INVENTION
TELEPHONE	SOUND	VOICE	<b>TEACHER</b>

A	R	S	P	M	В	S	T	L	T	V	S	0
M	0	U	T	H	P	I	E	C	E	C	В	A
V	T	E	L	E	G	R	A	P	H	Y	R	M
Ι	E	В	A	A	L	T	C	E	P	L	A	P
В	L	K	$\mathbf{D}$	R	R	M	H	V	H	Ι	N	E
R	E	A	R	M	E	L	E	T	В	N	Z	G
A	P	g	D	E	A	F	R	S	R	D	T	A
T	Н	U	A	M	D	В	R	S	N	E	L	U
Ι												
_	O	T	E	P	S	A	C	U	E	R	R	G
						A Q						
	N	A	C	D	В		0	C	S	Ι	G	N
O N	N E	A L	C N	D B	B P	Q	О І	C V	S R	I U	G	N
O N E	N E	A L Q	C N D	D B R	B P A	Q S	O I N	C V P	S R S	I U P	G M I	N A L

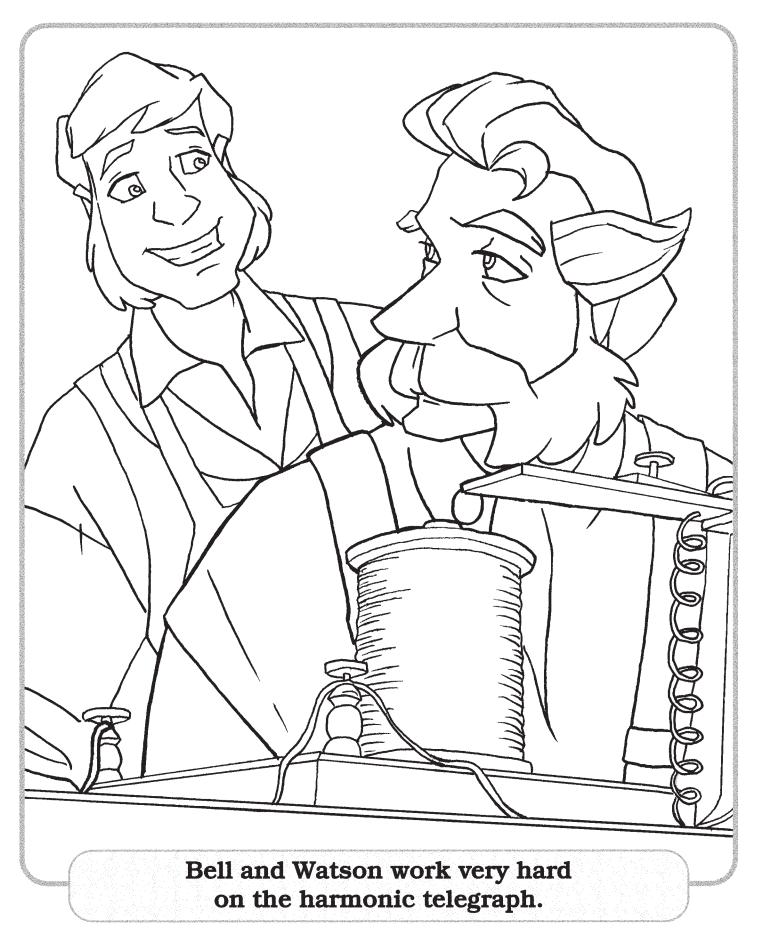


Solve these equations to discover two of Mr. Bell's best character qualities. Use the code below to fill in letters next to each equation.

2 x 8	3 x 1
5 x 1	3 x 5
9 x 2	13 x 1
1 x 19	4 x 4
3 x 3	1 x 1
19 x 1	19 x 1
4 x 5	1 x 19
1 x 5	3 x 3
7 x 2	3 x 5
3 x 1	2 x 7
5 x 1	

100	ł E	V.			25. 25.	C	() E	þĒ	. 4	0		96.0 80.0 800.	404		D	55 6 2	C (		E				rec Sec	Pa d	Ta.
A	В	С	D	E	F	G	Н	Ι	J	K	L	M	N	0	P	Q	R	S	Т	U	V	W	X	Y	Z
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

MR. BELL'S BEST CHARACTER QUALITIES:

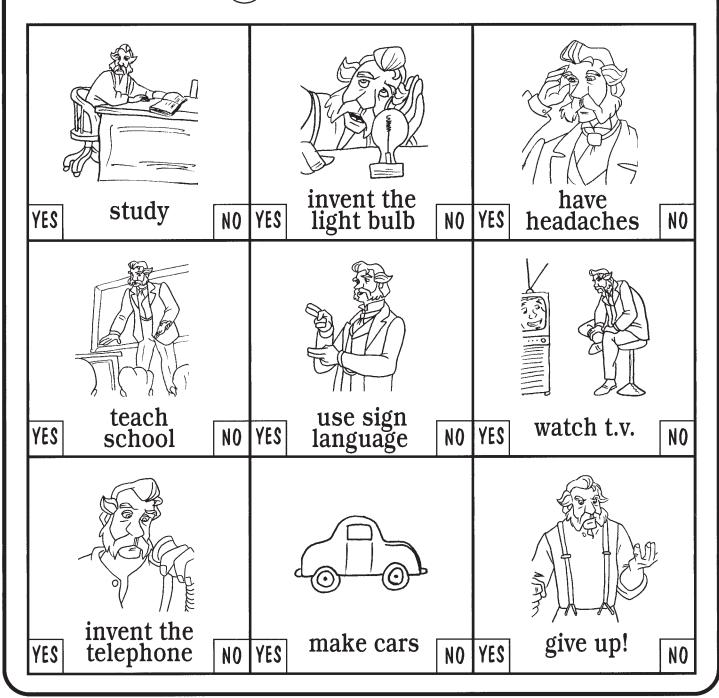


# CIRCLE THE PICTURES



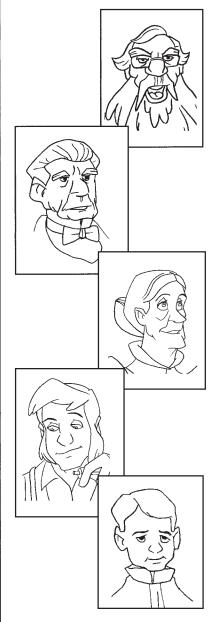
Alexander G. Bell

Did Mr. Bell do it? Look at the pictures below. If Mr. Bell did it, circle (YES). If he did not do it, circle (NO).





Solve each person's riddle by unscrambling the names of Alexander Graham Bell's friends. Draw a line from each description to the unscrambled name that matches.



- 1. I paid Mr. Bell to invent a harmonic telegraph.
- 2. I encouraged Mr. Bell to study electrical theory and keep on experimenting.
- 3. I urged Mr. Bell to rest more often and reminded him when classes began.
- 4. I assisted Mr. Bell with his experiments and inventions.
- 5. Mr. Bell taught me to speak and read lips.

- A. OTANWS
- **B. RMS FLULRE**
- C. UBHDBAR
- D. IVADD
- **E. JPSHEO HNREY**

Homonyms are words that sound alike but have different meanings. A sample of a pair of homonyms is "die" and "dye."

Look for the pairs of homonyms in the blocks below. When you find a pair, color the entire block. When you finish, you will discover the answer to the riddle below.

My first name is sometimes "Liberty," Riddle:

I let you know when visitors arrive at your door,

And I was an important American inventor.

Who am I?

fair	stare	bow
fare	stair	bough
peal	cane	whale
peel	cape	wail
wine	hair	sew
whine	hare	new
boar	show	wear
bore	shop	ware
reign	site	week
rain	sight	weak

one	neigh	pair
won	nay	pare
mourn	lick	sign
morn	pick	mine
our	ore	fill
hour	or	Phil
peak	bit	men
peek	bait	mean
feet	daze	beat
feat	days	beet

no	stare	nice
know	store	neice
bear	doze	hop
bare	daze	hope
heal	when	up
heel	then	cup
tear	thin	dark
tare	this	park
way	I	soar
weigh	eye	sore

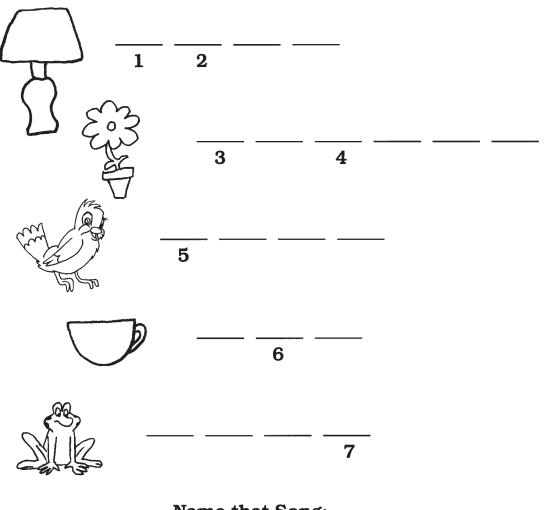
bye	love	sample
buy	dove	simple
night	cane	live
knight	can	dive
gnu	type	look
new	tip	book
sew	stain	like
so	Stan	lick
doe	lie	blue
dough	lye	blew





Mr. Watson sang a song while working. He sang it over the telephone wire. Find the name of the song by working the puzzle below.

Write the name of the picture on the blanks. Copy the numbered letters on the blanks with the same number to learn the name of the song.



#### Name that Song:

 5
 6
 3
 3
 2
 1
 4
 7
 2
 1



Alexander Graham Bell's ancestors were not originally from America. Use the code below to discover in what countries his family had lived.

Mr. Bell's grandfather lived in



which is an island.

Whitehorse

&•Vancouve

San Francisco

•Los Angeles

Edmonton

Salt Lake City
•Denver



Mr. Bell's father sailed across the Atlantic Ocean to live in

 $\square$   $\square$   $\square$   $\square$   $\square$  where he

was a teacher for deaf people.

Mr. Bell lived in the

☆ ■ + ▼ ❖

where he taught school and researched.

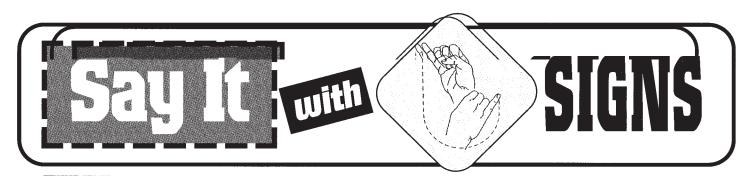
Where did Mr. Bell live in the U.S.?

Houston Wew Orleans

Atlanta •







Use the sign language guide at the bottom of the page to find out why Bell first began his scientific experiments.











































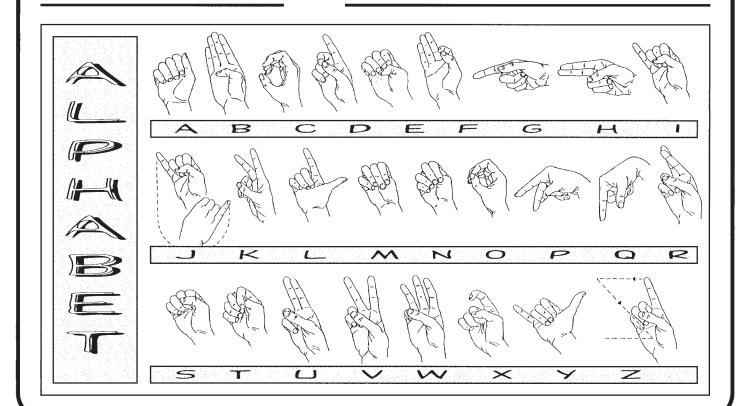














These things have no sound in them. You can make them sound. Draw a line to match the object with the motion it needs to make

Sound Stake A SOUND

Ball Blowing

Pencil Snapping

Door

Fingers Pressing the keys

Bell Spinning

Drum Slamming

Horn Bouncing

Piano Writing

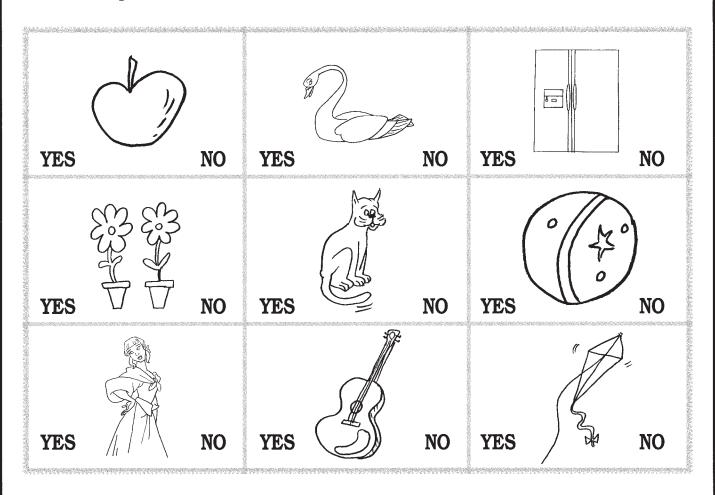
Winding Winding

Top Beating with sticks

Music Box Clapping

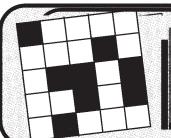


Alexander Graham Bell worked with sounds. Look at the object in the picture. If it makes a sound, circle the YES. If it does not, circle the NO. Color the picture.



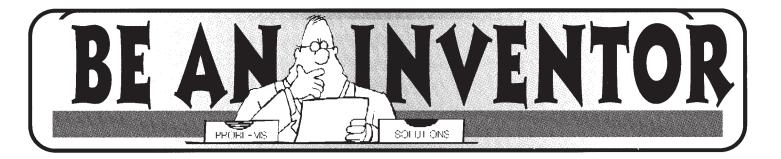
Draw something that makes a sound.





# Bell's Crossword

A	cross	D	own
1.	Bell invented the first	2.	Bell was a of deaf students.
3.	The name of Bell's lab assistant.	3. 4.	They did not lose; they the game.  Mrs. is for woman and Mr. is for .
6.	Hubbard first paid Bell to create a harmonic	5.	You only when you stop trying.
7.	Bell conducted many before he created the telephone.	8 9.	Bell taught school in the city of  Bell wanted his deaf students to learn to clearly.
11.	Bell is remembered as the of the first telephone.	10.	Bell taught during the day and experimented during the
13.	Objects are classified as nouns; action words are classified as		An abbreviation for Pennsylvania is      Watson could hear Bell's over the first telephone.
	5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	12 13 8 11 9 10
	7	<u>,                                    </u>	



## YOU CAN BECOME AN INVENTOR LIKE ALEXANDER GRAHAM BELL! ASK YOURSELF THE QUESTIONS BELOW TO BEGIN YOUR OWN ADVENTURE!

- Are there some products I use that I think could work better? Be more appealing? Be made to do more? Be made for less?
- ♦ Is there something that would make a person's job/life easier?
- What particular problem would I like to solve?
- What subjects should I study before going ahead with my invention?
- Is this idea really new? Is it practical? Will enough people want this invention to make it profitable?
- Can this invention be made at a reasonable cost?

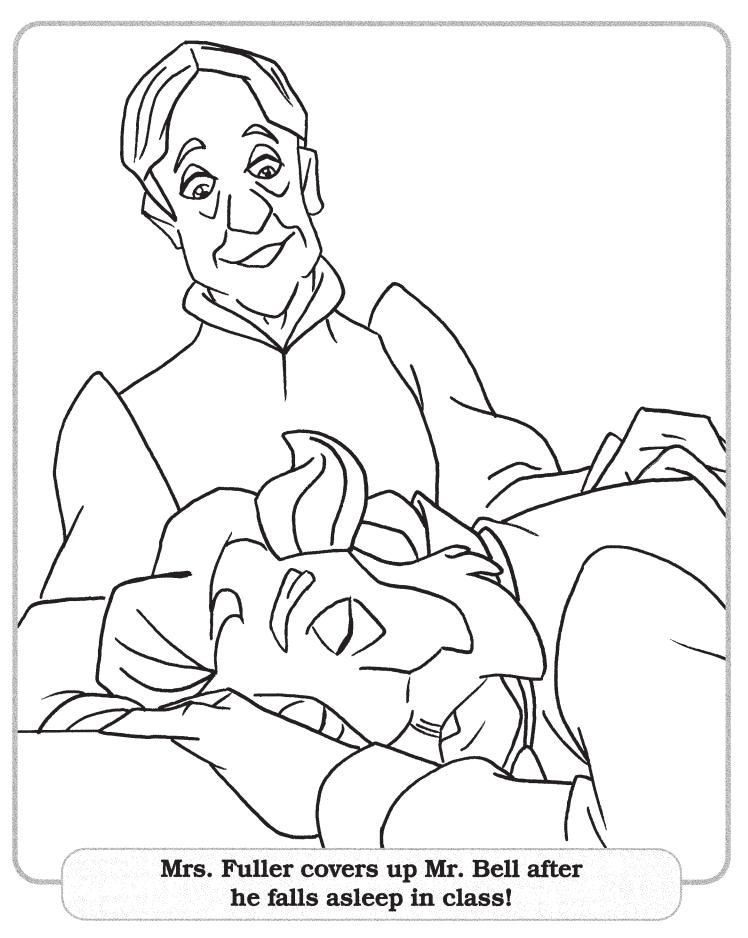
#### HERE ARE SOME MORE TIPS FOR BEGINNING INVENTORS:

- Many inventors keep a notebook in which they record ideas, data, results, etc. Use ink and never erase an idea!
- A good inventor must be able to produce many potential solutions to a problem. Then he/she must be able to choose the best idea and pursue it with determination.
- Brainstorming with others is very useful. Even your wild ideas can create new ideas.
- Inventors ask questions like "How does it work?" and "How could I make it better?" They find connections between unrelated ideas and things.

# Turturing New Ideas

Use the list below to practice brainstorming and thinking like an inventor. Come up with as many unusual uses for each thing as you can:

A paper clip	
A balloon	
A paper bag	
A jar with a lid	
A shoelace	
A rubber band	
raw a picture of one of your ideas below:	

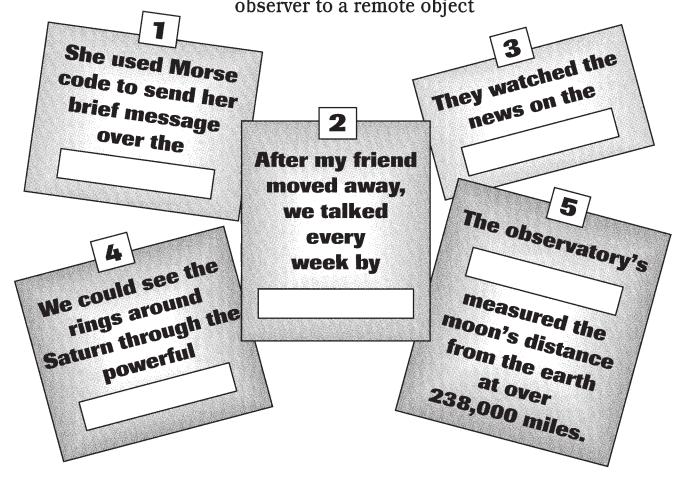




Prefixes are added to root words to enhance the word's meaning. For example, the prefix "tele" means "far off" or "distant." It can be added to many root words to create new words.

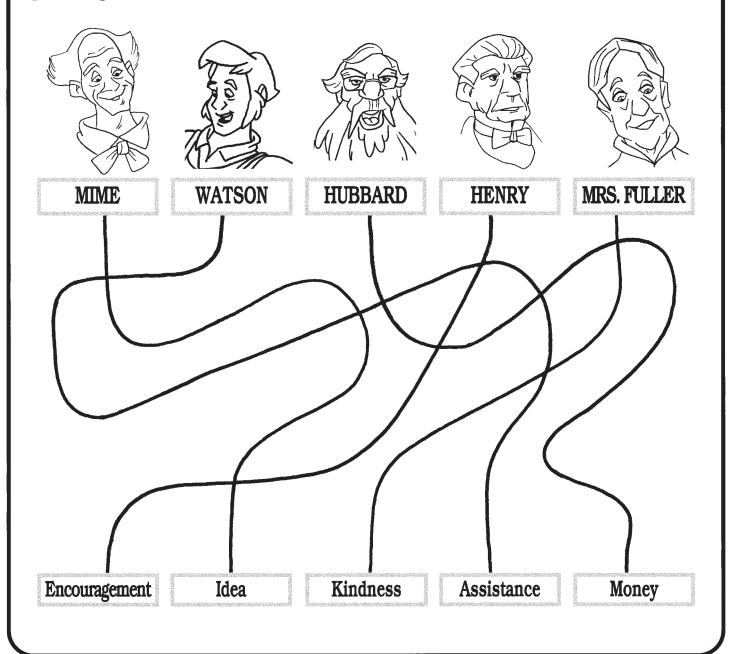
Match the words below with their correct definitions. Then put each word in the correct blank to complete the sentences below.

- 1. Telemeter
- 2. Telephone
- 3. Telescope
- 4. Television
- 5. Telegraph
- a. Instrument that conveys images over distances
- b. Instrument that enhances sight from a distance
- c. Instrument that conveys speech over distances
- d. Instrument that conveys signals over distances
- e. Instrument that determines distance from the observer to a remote object





What assistance did Mr. Bell get from each person below? Follow the lines with different colored crayons and find the help each person gave.

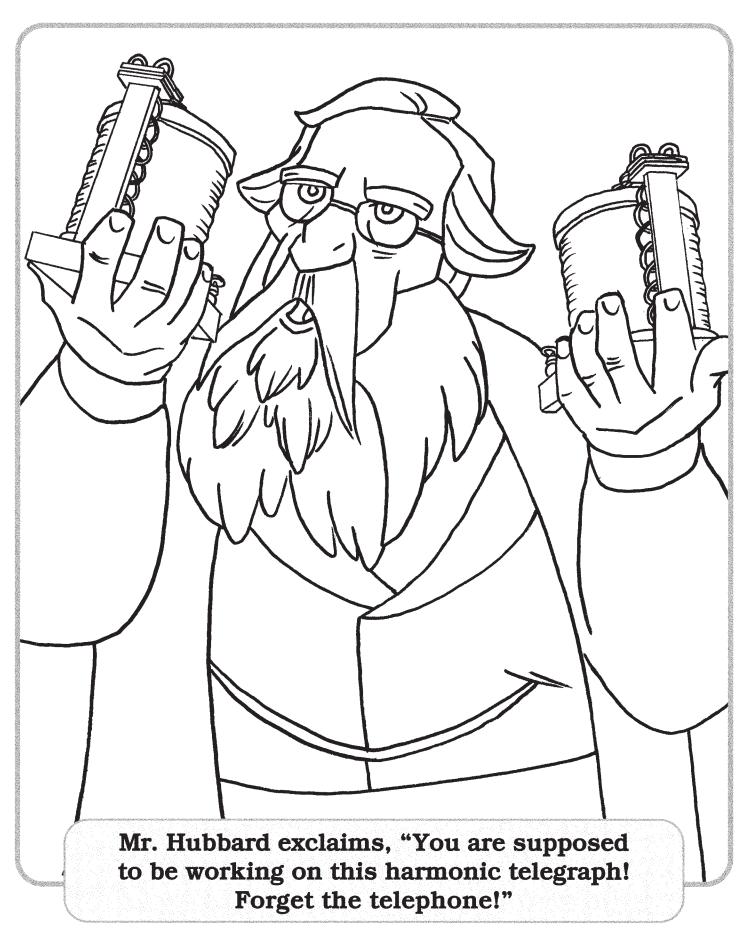




Number the sentences below to describe the events that led Mr. Bell to invent the first telephone. If you put the sentences in the correct order, the first letter of each sentence will correctly spell the name of Bell's homeland.

Then while working on the new telegraph, Bell was inspired with a new idea - what if he could invent a machine that would transmit voices instead of signals?
Careful businessman, Gardiner Hubbard, hired the teacher to invent a harmonic telegraph.
Later, Bell convinced Hubbard to let him work on his new idea, the telephone, instead of the harmonic telegraph.
Only teaching could pull Bell away from his continuous work on the harmonic telegraph.
After talking with Joseph Henry, Bell began studying electrical theory.
Night after night, Bell and Watson tested the telephone until Watson heard Bell call for him.
Schoolteacher Bell taught deaf students and loved to help them communicate.
Discovering how to send voices through wires was a great achievement, and Bell continued his experiments with new inventions for many more years.

#### Mr. Bell's homeland was



## HIID DIE N

All of the words in the box below are hidden in the chart below. Words may be spelled across, up and down and backwards. Unscramble the unused letters in the puzzle to find a secret message. (Some of the unused letters have already been shown to help you get started!).

### WORD BOX

ALEXANDER GRAHAM

BELL

**VIBRATION** 

WATSON

**DAVID** 

**HUBBARD** 

**DEAF** 

SOUND

**TELEGRAPH** 

**TELEPHONE** 

SIGN LANGUAGE

**TEACHER** 

**INVENTORS** 

**PERSIST** 

**SPEAK** 

**HENRY** 

0	N	H	P	A	R	G	E	L	E	T	В
S	Ι	G	N	L	A	N	G	U	A	G	E
0	L	W	H	E	A	D	0	T	W	I	L
U	N	S	U	X	I	E	U	E	A	N	L
N	E	G	R	A	H	A	M	L	T	V	R
D	Y	0	T	N	U	F	L	E	S	E	E
D	A	V	I	D	$\mathbf{B}$	Y	F	P	0	N	H
T	G	N	I	E	В	0	P	H	N	T	C
R	V	I	В	R	A	T	I	0	N	0	A
Y	T	S	I	S	R	E	P	N	Y	R	E
Y	R	N	E	H	D	K	A	E	P	S	T

Copy the unused letters and unscramble:

	Hidde	n Message:	
<u>Y</u>		<u>F</u>	
	_ S	Y	!

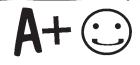


Below is an unfinished poem about Alexander Graham Bell. The word at the end of every other line is missing.

**YOU** be the poet! Look at each underlined word. Think of a word that rhymes with it. Then write the rhyming word in the blank space to finish the sentence.

### "How Can You Use The Telephone?"

The telephone can help us in most every way, We find it is useful many times each
When I am at my friend's house and want my Mom, I just dial the number and there she will
When Tom got hurt at school playing ball, The teacher picked up the phone and gave his mom a
You can call in a car, you can call on a plane, You can call from a ship, you can call on a
It is fun to call your grandma, or a cousin far away, It is fun to call a friend to come over to
So, we thank you, Mr. Bell, for the telephone, With it in our house we are never



# Find-The-Spelling-Mistakes...

The man who furst sent human speech over wirez was actually looking for a way to help daf peeple. Bell, who was a teacher at the Boston school for the Deaf, was the first teacher that Helen Keller's parents brot her too. Mr. Bell helped many children lurn to speak and to use sine language. As scientists have continued to studie sound, they have found many ways to help deaf and heering impaired people.

#### **INSTRUCTIONS:**

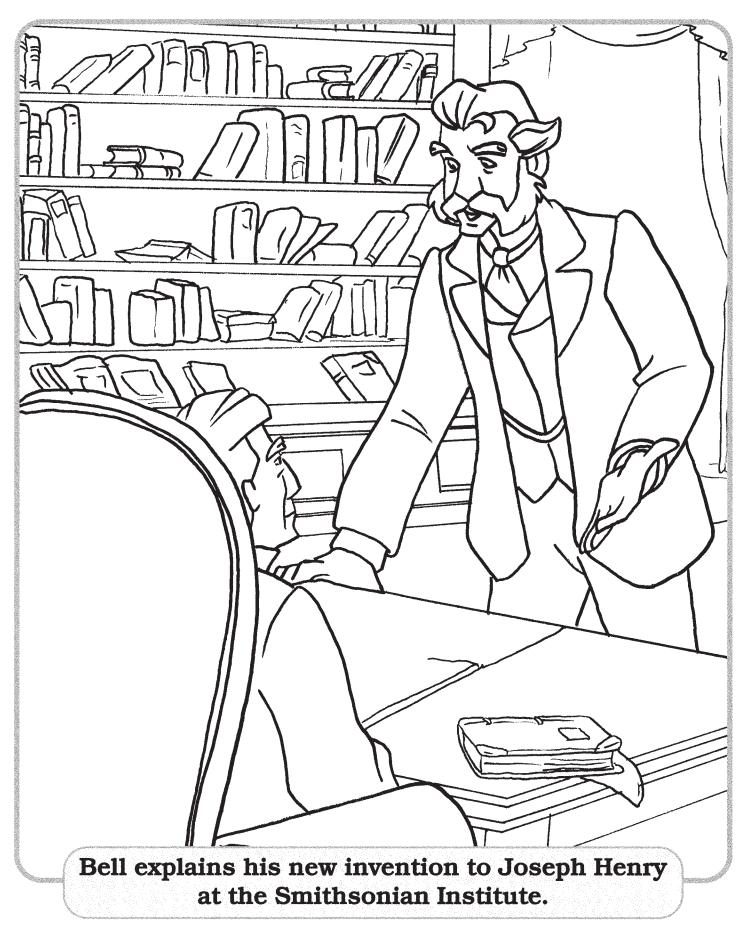
Read the sentences below. There are 10 spelling mistakes in these sentences. Circle the mistakes and write the words correctly on the lines below.



1 2

3 4 5 6

7 8 9 10

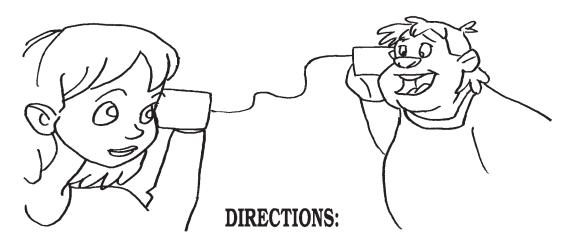


## ALEXANDER'S SCIENCE 5144115 SECTION



#### You Will Need:

Two empty tin cans with no tops A hammer and a nail A ball of strong string Two buttons A friend to help you



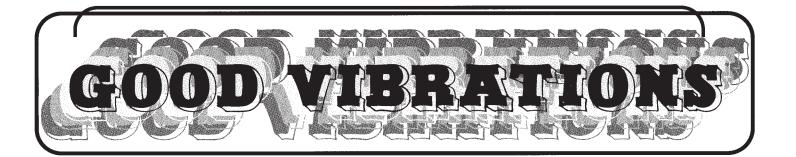
Hammer the nail through the center of the bottom of each tin can. Pull the nail out.

Take the end of the string and put it through the hole in one of the cans. Pull the string through and tie one of the buttons on the end of the string. Pull the string so that the button goes down against the inside of the can.

Unwind as much string as you want to reach as far as you like. Do not let it touch anything. Cut the string from the ball and put the end through the hole in the second can. Tie on the button in the same way. Pull back and let the button go against the inside of the can.

Make the string tight between you and the person holding the other can. Do not let it touch anything.

Talk into the can. The button passes on the vibrations of your voice to the tin can. The tin can passes them on to the string, and on to the button, to the can, to the ear of the other person. Have the person talk to you. Hold your can over your ear to listen and near your mouth to speak.



You may not think of sound as something you can see or feel. However, Alexander Graham Bell taught his deaf students how to speak by helping them understand that sound is made up of vibrations. Try this experiment to learn more about vibrations for yourself.

You will need:

✓a piece of paper

✓a comb

✓a blown-up balloon



1. Fold the comb inside the piece of paper and hold it lightly against your lips. Make a "coo"sound. Feel your lips tingle as the paper vibrates.



2. Hold the balloon against your lips and make a "coo" sound. Feel the balloon vibrate.

3. Have someone else touch the balloon while you speak. Then repeat this exercise with the other person holding the balloon next to his/her mouth as he/she speaks. Can you "feel" the person speak?

# DISCONDECTED

These telephone wires have been cut! Reconnect the words that belong together!

Inventor



Businessman



**Assistant** 



Smithsonian Institute



**Boston School** 



Harmonic



Student





Watson



Joseph Henry



For the Deaf



Telegraph



**David** 



Hubbard



Bell





See how many words YOU can make out of the letters in the name:

# NOTE: You cannot use any letter more times that it appears in the name. (For example: no more than one M, two R's, three E's, four A's, etc.)

3 Letter Words - 1 point each	4 Letter Words - 2 points each
words x 1 = points	words x 2 = points
5 Letter Words - 3 points each	6 Letter Words - 4 points each
words x 3 = points	words x 4 = points

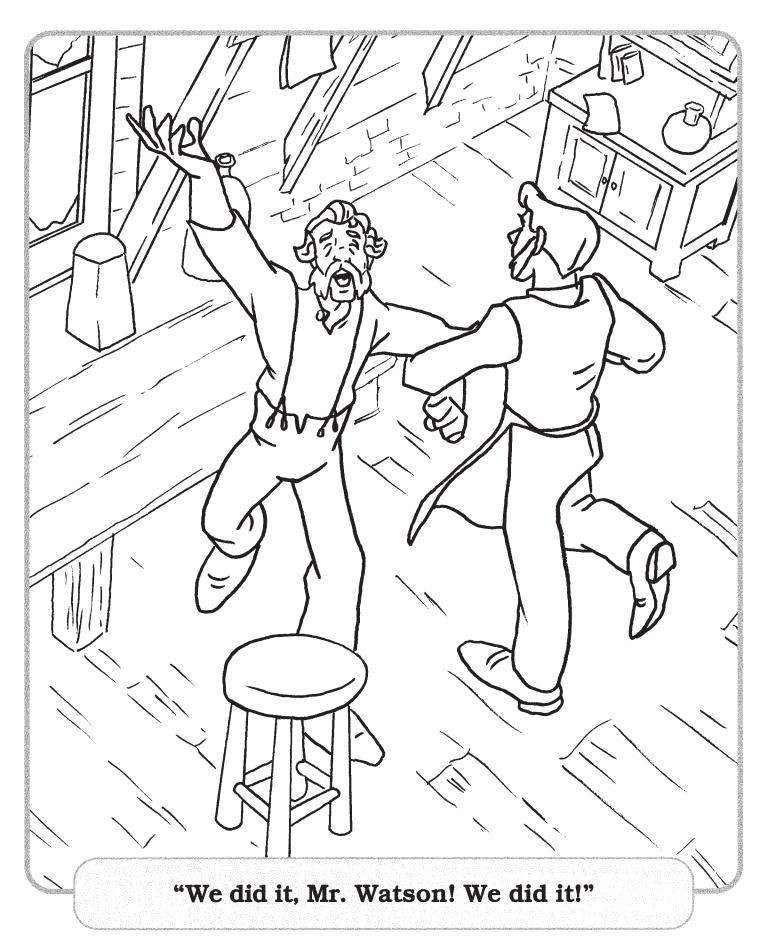
### TOTAL POINTS\_\_\_\_:

5-15 = Junior • 16-30 = Intermediate • 31-45 = Advanced • 46-60 points = Ace 61-85 = Champ • 86-100 = Super Champ • 101 and up = Out of Sight!



Each rhyme below describes something or someone from the story of Alexander Graham Bell. Read each rhyme aloud. Then write your answer on the blank.

I am the homeland of "Aleck Bell",
Along with his brothers, Edward and Mel.
Who am I?
I am an instrument Mr. Bell played,
He would study the vibrations my strings made.
What am I?
I helped Mr. Bell all day long,
Over the wires I would sing a song.
Who am I?
I am Mr. Bell's invention that transmits speech,
All over the world my words will reach.
What am I?



## TRUE OR



Read each statement below. If it is true, circle the "T." If it is false, circle the "F."

1.	Alexander Graham Bell taught deaf students to speak.	T	F
2.	Mr. Bell worked on many projects.	T	F
3.	Mr. Bell worked alone on his inventions.	T	F
4.	The multiple telegraph was Mrs. Fuller's invention.	T	F
5.	The multiple telegraph could send four messages at the same time.	T	F
6.	Mr. Bell liked to sing "Buffalo Gal."	T	F
7.	Mr. Bell believed the human voice could be sent over a wire.	T	F
8.	Mr. Hubbard paid for the cost of the inventions.	T	F
9.	Mr. Bell stopped teaching in order to work on his invention.	T	F
10.	Mr. Bell had to study more about the electrical theory.	T	F
11.	Mr. Bell was very interested in teaching deaf students to read lips.	T	F
12.	Mr. Bell demonstrated sound and vibration by leaping from a chair.	T	F



- 1. Why did Bell demonstrate vibrations when he began teaching his students to speak?
- 2. What invention had Mr. Hubbard originally hired Bell to create?
- 3. Who encouraged Bell to keep learning and keep working on the telephone?
- 4. How did Bell's deaf students communicate with their teacher?
- 5. What was the name of Bell's friend who aided with his experiments?
- 6. What topic did Bell have to study in order to finally complete the telephone?
- 7. Why was Bell reluctant to reduce his teaching schedule?
- 8. How did Bell's love for teaching deaf children affect his inventing?
- 9. Why do you think people say "Creativity is 1% inspiration and 99% perspiration?"
- 10. Why did Bell want his students to learn to speak properly?
- 11. Why was the telegraph not the most efficient way for humans to communicate?
- 12. How did Bell communicate with his deaf students?
- 13. What message helped both Bell and his students succeed?
- 14. What physical ailment often slowed down Bell's experiments?
- 15. What were the first words transmitted over Bell's telephone?

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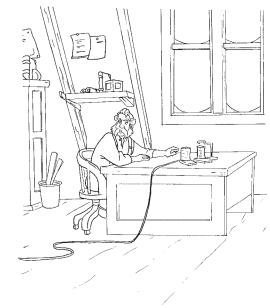
## FUNTIMUS TO ABOUT & DO

NOTE TO THE TEACHER: These are activities for a group to discuss and think about.

- 1. Alexander Graham Bell studied electrical theory and acoustics because he wanted to help deaf people. How have other people used their minds to help others in their community?
- 2. Learn sign language. You can use sign language to communicate with deaf or hearing impaired people. You can also use sign language to communicate ideas and feelings when you must be very quiet or when it is too noisy to hear the human voice.
- 3. Conduct your own experiments with sound waves, water waves, and electrical waves. Your local library has many books available that can help you discover

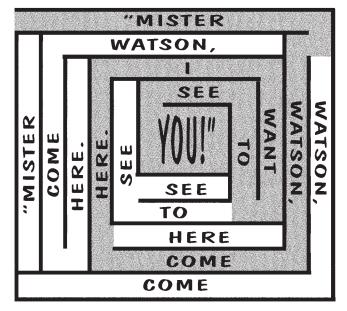
more about these waves of energy!

- 4. Tour the facilities of your local phone company. Ask them how telephone service has improved today since Mr. Bell's day.
- 5. One of Mr. Bell's most prominent character traits was persistence. Why is persistence a valuable quality? How does persistence help people overcome problems?



### ANSWER E Y

### **MYSTERY MESSAGE** — PAGE 6



"MISTER WATSON, COME HERE. I WANT TO SEE YOU!"

### WORD SEARCH — PAGE 7

A	R	S	P	M	B	S	T	L	T	$\mathbf{v}$	S	0
M	0	U	Т	H	P	I	E	С	E	$ \mathbf{C} $	В	Α
V	$\mathbf{T}$	E	L	E	G	R	Α	P	H	Y	R	M
I	$ \mathbf{E} $	В	A	A	L	T	C	E	P	L	Α	P
В	$ \mathbf{L} $	K	D	R	R	M	н	V	Н	I	N	E
R	E	A	R	M	$ \mathbf{E} $	L	E	T	В	N	Z	G
A	P	g	D	E	Α	F	$\mathbf{R}$	S	R	D	T	A
T	H	U	Α	M	$ \mathbf{D} $	В	$\mathbf{R}$	S	N	E	L	U
I	O	T	E	P	S	Α	C	\U_	E	$\mathbf{R}$	R	G
O	N	Α	C	$\mathbf{D}$	В	9	<b>O</b> /	<b>/c</b> /	S	Ī	G	N
N	$ \mathbf{E} $	L	N	В	P	S	<b>/I</b> /	v	R	U	M	A
E	Š	Q	D	R	A	<b>o</b>	N	P	S	P	I	L
P	A	F	I	N	$\sqrt{\mathbf{v}}$	E	N	T	I	0	N	$\mathbf{X}$
M	0	R	S	В	F	R	I	L	D	Α	G	T

### **CHARACTER CONNECTION** — PAGE 8

16	$\boldsymbol{P}$	3	$\boldsymbol{C}$
5	$\boldsymbol{E}$	15	0
18	$\boldsymbol{R}$	13	M
19	$\boldsymbol{S}$	16	$\boldsymbol{P}$
9	$\boldsymbol{I}$	1	$\boldsymbol{A}$
19	$\boldsymbol{S}$	19	$\boldsymbol{S}$
20	$\boldsymbol{T}$	19	$\boldsymbol{S}$
5	$oldsymbol{E}$	9	I
14	N	15	0
3	$\boldsymbol{C}$	14	N
5	$\boldsymbol{E}$		

### **CIRCLE THE PICTURES** — PAGE 10

YES	NO	YES
YES	YES	NO
YES	NO	NO

### WHO'S WHO? — PAGE 11

- 1. C Hubbard
- 2. E Joseph Henry
- 3. B Mrs. Fuller
- 4. A Watson
- 5. D David

### **SOUND OFF** — PAGE 12



### NAME THAT SONG — PAGE 14

Lamp

Flower

Bird

Cup

Frog

**BUFFALO GAL** 

### **HOME SWEET HOME** — PAGE 15

Scotland Canada United States Boston

### **SAY IT WITH SIGNS** — PAGE 17

Bell wanted to help deaf people.

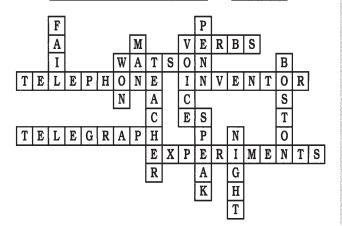
### MAKE A SOUND — PAGE 18

BALL - Bouncing
PENCIL - Writing
DOOR - Slamming
HORN - Blowing
FINGERS - Snapping
BELL - Ringing
DRUM - Beating with sticks
PIANO - Pressing the keys
HANDS - Clapping
TOP - Spinning
MUSIC BOX - Winding

### SUPER SOUNDS — PAGE 19

NO	YES	YES
NO	YES	NO
YES	YES	NO

### BELL'S CROSSWORD — PAGE 21



### PUZZLING PREFIXES — PAGE 25

- 1. Telemeter (E/5)
- 2. Telephone (C/2)
- 3. Telescope (B/4)
- 4. Television (A/3)
- 5. Telegraph (D/1)

### **HELPING HISTORY** — PAGE 26

MIME - Idea
WATSON - Assistance
HUBBARD - Money
HENRY - Encouragement
MRS. FULLER - Kindness

### WHAT'S NEXT? — PAGE 27

4, 2, 5, 3, 6, 7, 1, 8. S C O T L A N D

### **HIDDEN MESSAGE** — PAGE 29

O	N	H	P	A	R	G	E	L	E	T	$\mathbf{B}$
S	I	G	N	L	Α	N	G	U	Α	G	E
O	L	W	Н	E	Α	$\bigcirc$	O	$\mathbf{T}$	$\overline{\mathbf{w}}$	I	L
U	N	s	U	X	I	E	U	E	Α	N	L
N	E	G	R	Α	H	Α	M	L	T	V	R
D	Y	O	T	N	U	F	L	E	s	E	E
$\overline{\mathbf{D}}$	Α	V	Ι	D	В	Y	$\mathbf{F}$	P	O	N	H
T	G	N	1	E	В	O	$\mathbf{P}$	Н	N	T	C
$\mathbf{R}$	$\overline{\mathbf{v}}$	I	В	R	Α	Т	I	О	N	O	A
Y	$\overline{\mathbf{T}}$	S	I	S	R	E	P	N	Y	R	E
$\overline{\mathbf{Y}}$	R	N	E	H	D	K	Α	E	P	S	T

YOU ONLY FAIL WHEN YOU STOP TRYING!

### POET'S PAGE — PAGE 30

Day Come Call Train Play Alone

### FIND THE SPELLING MISTAKES — PAGE 31

furst - FIRST

wirez - WIRES

daf - DEAF

peeple - PEOPLE

brot - BROUGHT

too - TO

lurn - LEARN

sine - SIGN

studie - STUDY

heering - HEARING

### DISCONNECTED LINES — PAGE 35

Inventor BELL

Business HUBBARD

Assistant WATSON

Smithsonian JOSEPH HENRY

Institute

Boston School FOR THE DEAF

Harmonic TELEGRAPH

Student DAVID

### PUZZLING POETRY — PAGE 38

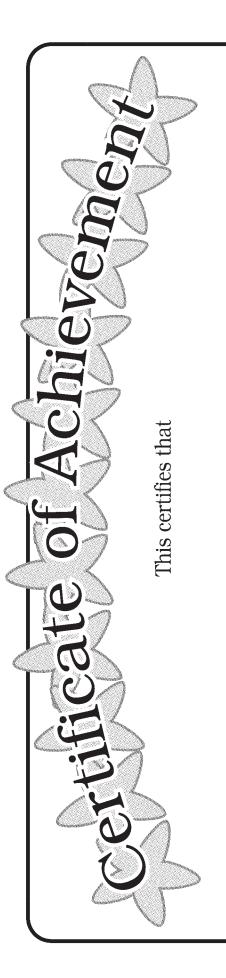
SCOTLAND PIANO WATSON TELEPHONE

### TRUE OR FALSE — PAGE 40

1.	T	5.	T	9. F
<i>2.</i>	T	6.	$\boldsymbol{F}$	10. T
3.	$\boldsymbol{F}$	7.	T	11. T
4.	$\boldsymbol{F}$	8.	T	12. T

### **QUESTIONS** — PAGE 41

- 1. Bell demonstrated vibrations because sound is created by vibrations and he wanted his students to understand that they could make these same vibrations even if they could not hear.
- 2. Mr. Hubbard originally hired Bell to invent the harmonic telegraph.
- 3. Joseph Henry, the administrator of the Smithsonian Institute, encouraged Bell.
- 4. Bell's students communicated through sign language and by reading lips.
- 5. Watson was Bell's assistant.
- 6. Bell had to study electrical theory.
- 7. Bell loved teaching and did not want to give up the profession he loved.
- 8. Bell originally began researching in order to help his deaf students.
- 9. Bell and other inventors must always put in much study and experimentation to bring their ideas (inspiration) to completion.
- 10. He wanted them to be able to communicate with the hearing world in every way.
- 11. It did not communicate ideas or the expression of the human voice.
- 12. He communicated through sign language and speech (reading lips).
- 13. You can only fail if you quit trying.
- 14. Bell had severe headaches.
- 15. The first words transmitted were, "Mr. Watson, come here. I want to see you!"



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