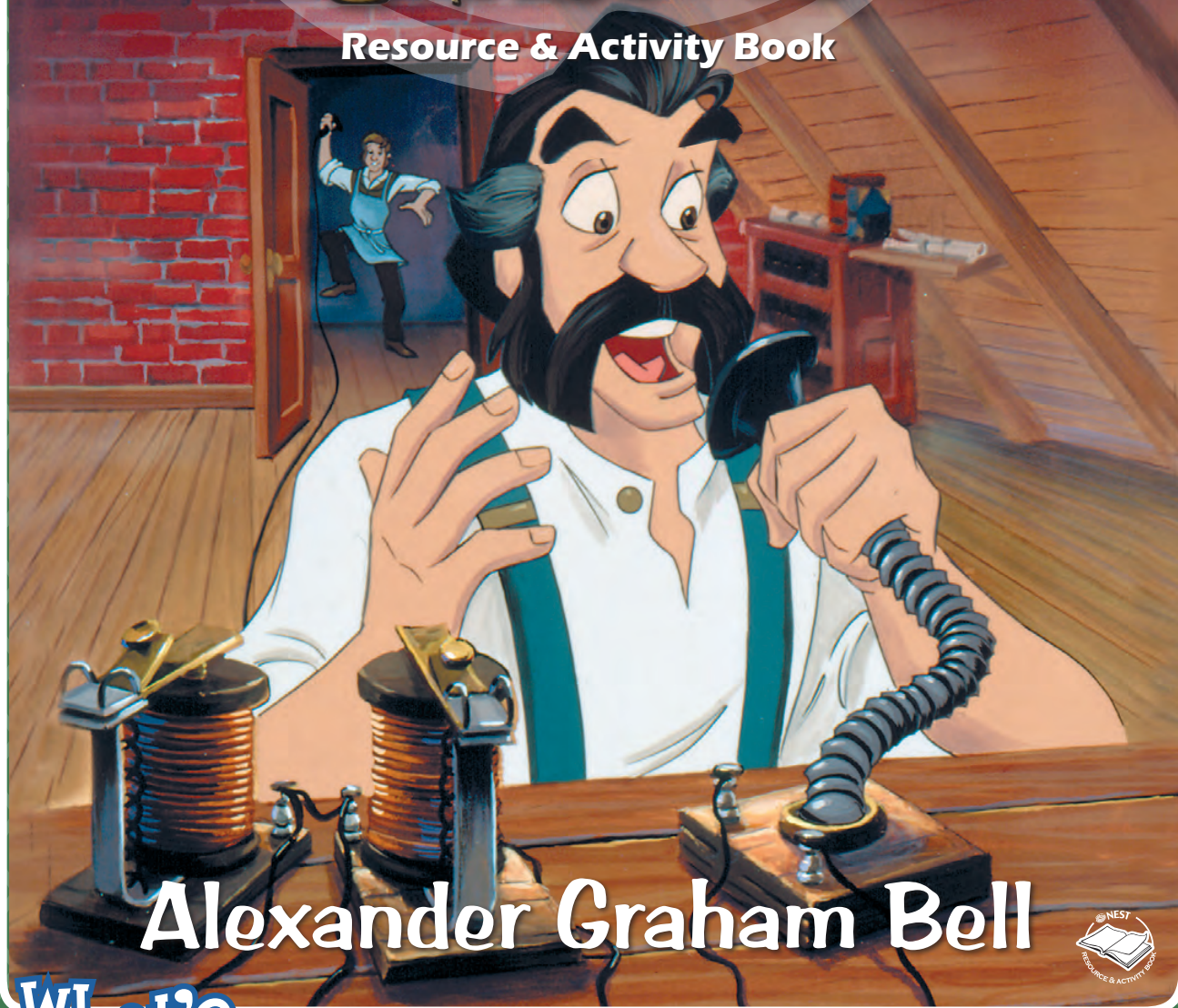


# THE ANIMATED HERO CLASSICS®

Resource & Activity Book



## Alexander Graham Bell



What's  
Inside?

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

**EACH**  
Level Two  
Intermediate

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.

<b>a</b>	<b>cd</b>	<b>c</b>	<b>g</b>	<b>h</b>	<b>la</b>	<b>m</b>	<b>mu</b>	<b>ps</b>	<b>sc</b>	<b>sp</b>	<b>va</b>	<b>w</b>
Art	Character Development	Culture	Geography	History	Language Arts	Math	Music	Problem Solving	Science	Spelling	Video Awareness	Writing

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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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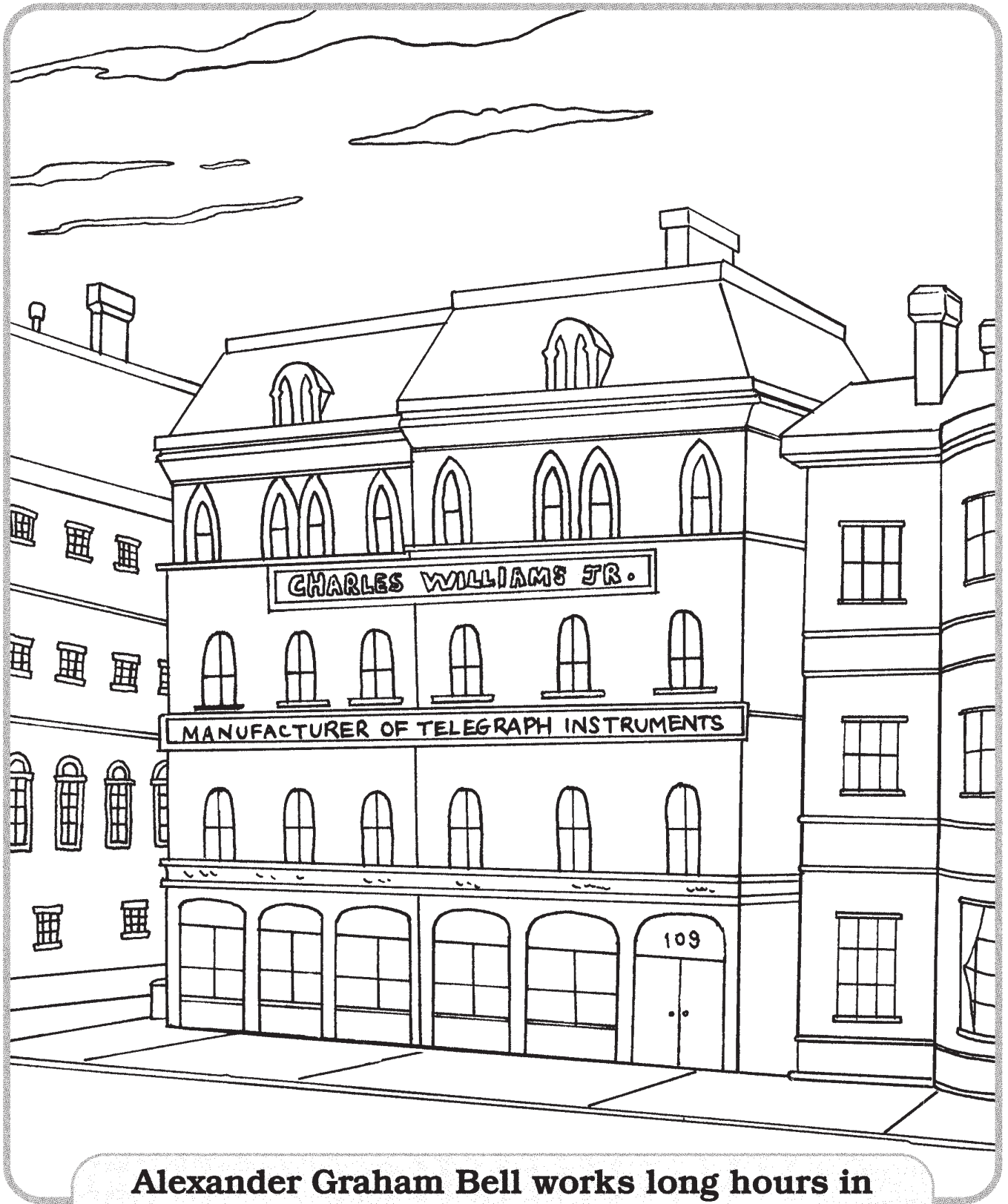
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**Alexander Graham Bell works long hours in his attic workshop above an electric shop.**

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# A WORD SEARCH

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

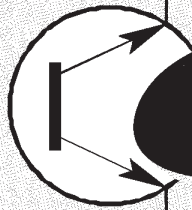
LIPS  
READ  
TELEGRAPH  
TELEPHONE

SIGN  
SPEAK  
HEAR  
SOUND

VIBRATION  
LANGUAGE  
DEAF  
VOICE

MOUTH PIECE  
CYLINDER  
INVENTION  
TEACHER

A R S P M B S T L T V S O  
M O U T H P I E C E C B A  
V T E L E G R A P H Y R M  
I E B A A L T C E P L A P  
B L K D R R M H V H I N E  
R E A R M E L E T B N Z G  
A P Q D E A F R S R D T A  
T H U A M D B R S N E L U  
I O T E P S A C U E R R G  
O N A C D B Q O C S I G N  
N E L N B P S I V R U M A  
E S Q D R A O N P S P I L  
P A F I N V E N T I O N X  
M O R S B F R I L D A G T



# Character Connection

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.

$2 \times 8 = \underline{\quad} \quad \square$

$3 \times 1 = \underline{\quad} \quad \square$

$5 \times 1 = \underline{\quad} \quad \square$

$3 \times 5 = \underline{\quad} \quad \square$

$9 \times 2 = \underline{\quad} \quad \square$

$13 \times 1 = \underline{\quad} \quad \square$

$1 \times 19 = \underline{\quad} \quad \square$

$4 \times 4 = \underline{\quad} \quad \square$

$3 \times 3 = \underline{\quad} \quad \square$

$1 \times 1 = \underline{\quad} \quad \square$

$19 \times 1 = \underline{\quad} \quad \square$

$19 \times 1 = \underline{\quad} \quad \square$

$4 \times 5 = \underline{\quad} \quad \square$

$1 \times 19 = \underline{\quad} \quad \square$

$1 \times 5 = \underline{\quad} \quad \square$

$3 \times 3 = \underline{\quad} \quad \square$

$7 \times 2 = \underline{\quad} \quad \square$

$3 \times 5 = \underline{\quad} \quad \square$

$3 \times 1 = \underline{\quad} \quad \square$

$2 \times 7 = \underline{\quad} \quad \square$

$5 \times 1 = \underline{\quad} \quad \square$

DE		CODE		CODE		CODE		CODE		CODE		CODE		CODE		CODE		CODE		CODE					
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	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:

\_\_\_\_\_ & \_\_\_\_\_



**Bell and Watson work very hard  
on the harmonic telegraph.**



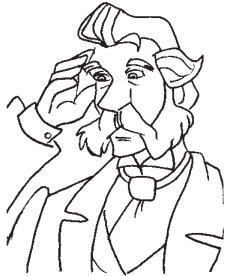


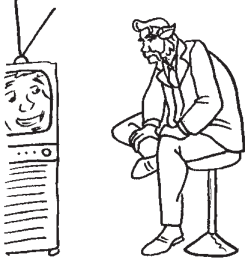

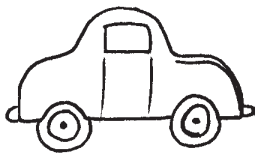

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# CIRCLE THE PICTURES



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**.

 <p><b>study</b></p> <p>YES NO YES</p>	 <p><b>invent the light bulb</b></p> <p>NO YES</p>	 <p><b>have headaches</b></p> <p>YES NO</p>
 <p><b>teach school</b></p> <p>YES NO YES</p>	 <p><b>use sign language</b></p> <p>NO YES</p>	 <p><b>watch t.v.</b></p> <p>YES NO</p>
 <p><b>invent the telephone</b></p> <p>YES NO YES</p>	 <p><b>make cars</b></p> <p>NO YES</p>	 <p><b>give up!</b></p> <p>YES NO</p>



# Who's Who?

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.

**A. OTANWS**



**2.** I encouraged Mr. Bell to study electrical theory and keep on experimenting.

**B. RMS FLULRE**



**3.** I urged Mr. Bell to rest more often and reminded him when classes began.

**C. UBHDBAR**



**4.** I assisted Mr. Bell with his experiments and inventions.

**D. IVADD**



**5.** Mr. Bell taught me to speak and read lips.

**E. JPSHEO HNREY**

# SOUND OFF!

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.

**Riddle:** My first name is sometimes “Liberty,”  
I let you know when visitors arrive at your door,  
And I was an important American inventor.  
Who am I?

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

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

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

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



**Tom Watson sings the song that he is tapping out on the keys.**

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# Name That Song

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.



\_\_\_\_\_

1      2



\_\_\_\_\_

3                  4



\_\_\_\_\_

5



\_\_\_\_\_

6



\_\_\_\_\_

7

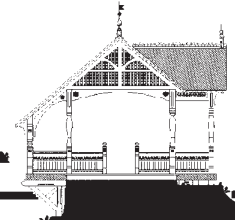
**Name that Song:**

\_\_\_\_\_

5      6      3      3      2      1      4                  7      2      1



# HOME SWEET HOME



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.



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



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.?



☎	📠	✉	☘	✚	☘	◇	★	+	⊕	➡	●	○	■	□	◆	*	▲	⊙	▼	☆	❖	☾	*	*	☀
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

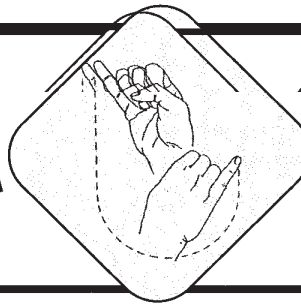


**“My name is Alexander Graham Bell.  
How many of you can read lips?”**

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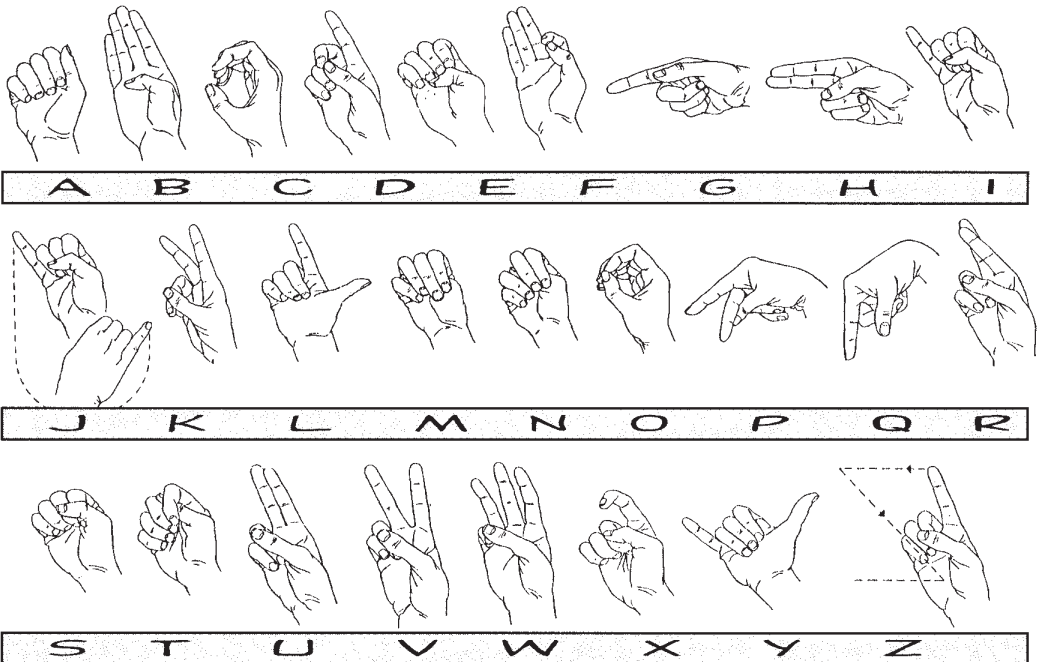
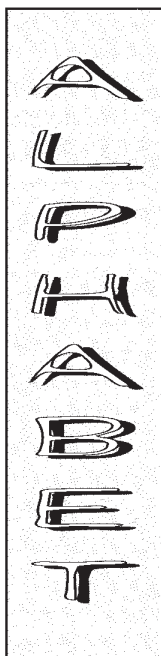
# Say It

with

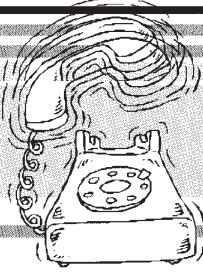


# SIGNS

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



# MAKE A SOUND



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.



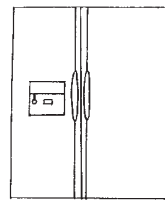
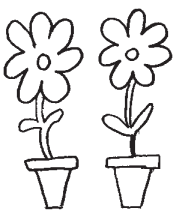

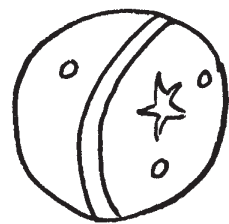





Ball  
Pencil  
Door  
Fingers  
Bell  
Drum  
Horn  
Piano  
Hands  
Top  
Music Box

Blowing  
Snapping  
Ringing  
Pressing the keys  
Spinning  
Slamming  
Bouncing  
Writing  
Winding  
Beating with sticks  
Clapping

# SUPER SOUNDS

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.

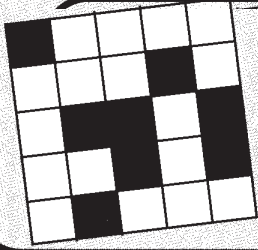
 <b>YES</b> <b>NO</b>	 <b>YES</b> <b>NO</b>	 <b>YES</b> <b>NO</b>
 <b>YES</b> <b>NO</b>	 <b>YES</b> <b>NO</b>	 <b>YES</b> <b>NO</b>
 <b>YES</b> <b>NO</b>	 <b>YES</b> <b>NO</b>	 <b>YES</b> <b>NO</b>

Draw something that makes a sound.



**Mr. Bell encourages one of his deaf students.**

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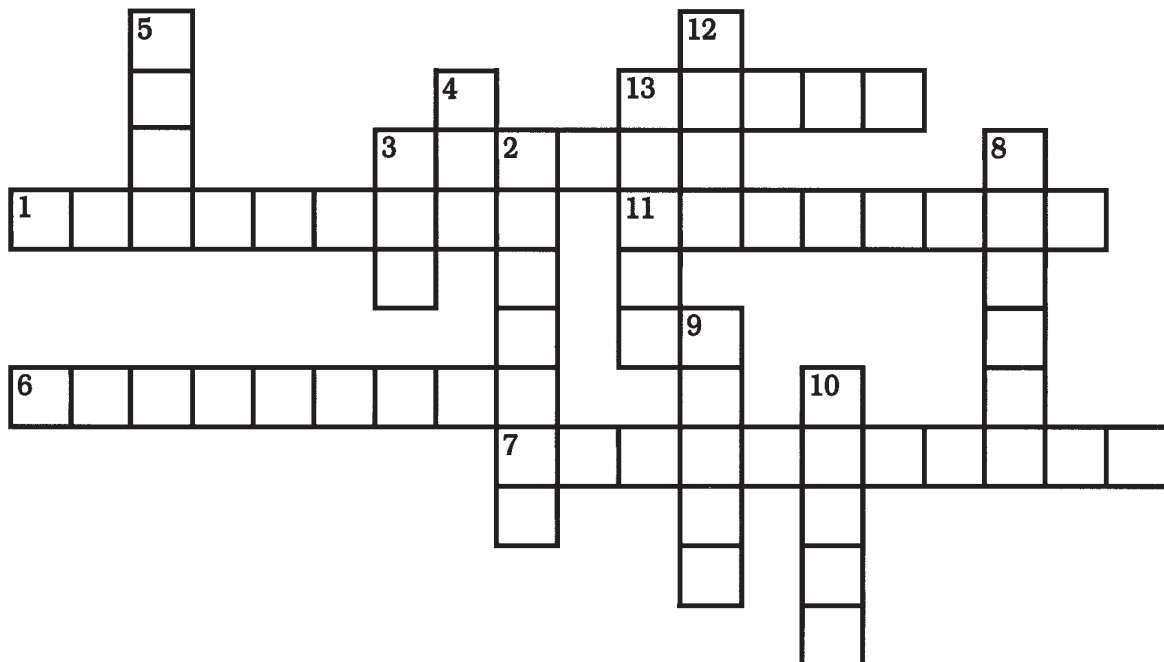
# Bell's Crossword

## Across

1. Bell invented the first \_\_\_\_\_.
3. The name of Bell's lab assistant.
6. Hubbard first paid Bell to create a harmonic \_\_\_\_\_.
7. Bell conducted many \_\_\_\_\_ before he created the telephone.
11. Bell is remembered as the \_\_\_\_\_ of the first telephone.
13. Objects are classified as nouns; action words are classified as \_\_\_\_\_.

## Down

2. Bell was a \_\_\_\_\_ of deaf students.
3. They did not lose; they \_\_\_\_\_ the game.
4. Mrs. is for woman and Mr. is for \_\_\_\_\_.
5. You only \_\_\_\_\_ when you stop trying.
8. Bell taught school in the city of \_\_\_\_\_.
9. Bell wanted his deaf students to learn to \_\_\_\_\_ clearly.
10. Bell taught during the day and experimented during the \_\_\_\_\_.
12. An abbreviation for Pennsylvania is \_\_\_\_\_.
13. Watson could hear Bell's \_\_\_\_\_ over the first telephone.



# BE AN INVENTOR

PROBLEM

SOLUTIONS

**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.

# Nurturing 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 \_\_\_\_\_

Draw a picture of one of your ideas below:





**Mrs. Fuller covers up Mr. Bell after  
he falls asleep in class!**

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# PUZZLING

## PREFIXES

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

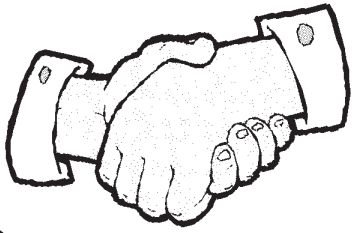
**1**  
She used Morse code to send her brief message over the

**2**  
After my friend moved away, we talked every week by

**3**  
They watched the news on the

**4**  
We could see the rings around Saturn through the powerful

**5**  
The observatory's  measured the moon's distance from the earth at over 238,000 miles.



# Helping History

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



**MIME**



**WATSON**



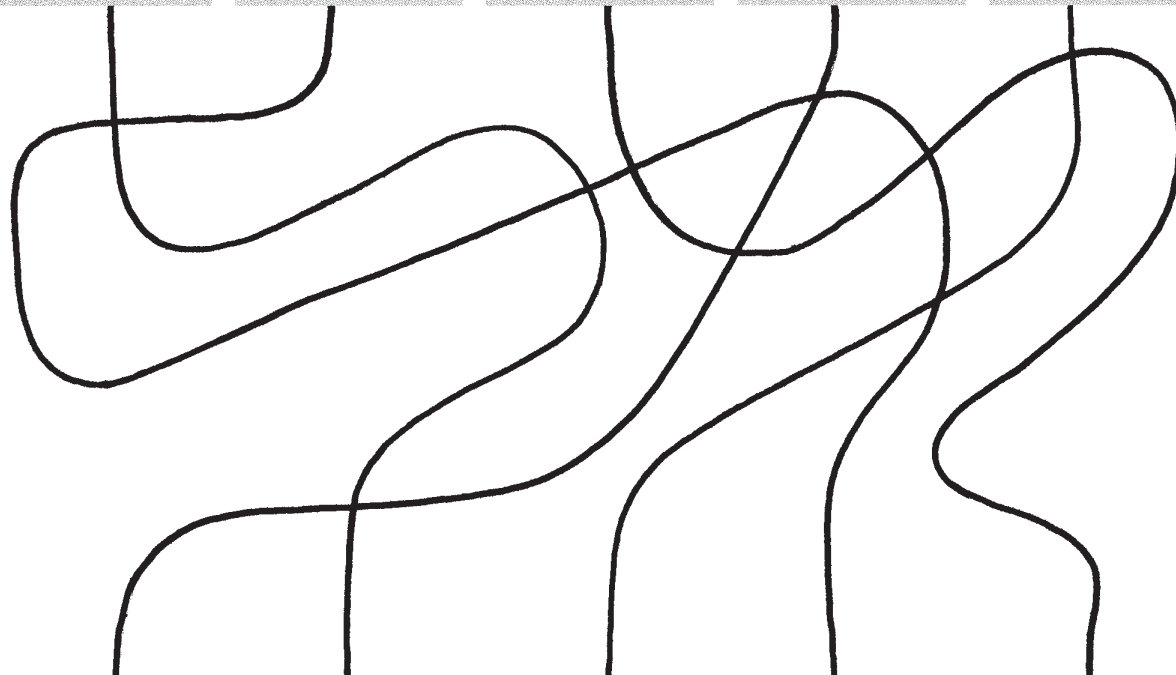
**HUBBARD**



**HENRY**



**MRS. FULLER**



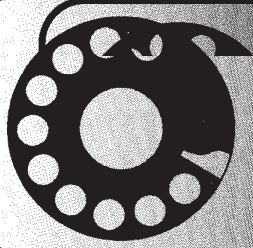
**Encouragement**

**Idea**

**Kindness**

**Assistance**

**Money**



# What's Next?



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**

\_\_\_\_\_.



**Mr. Hubbard exclaims, “You are supposed to be working on this harmonic telegraph! Forget the telephone!”**

# M H E I S D S D A E G N E

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

O	N	H	P	A	R	G	E	L	E	T	B
S	I	G	N	L	A	N	G	U	A	G	E
O	L	W	H	E	A	D	O	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	O	T	N	U	F	L	E	S	E	E
D	A	V	I	D	B	Y	F	P	O	N	H
T	G	N	I	E	B	O	P	H	N	T	C
R	V	I	B	R	A	T	I	O	N	O	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:

-----

*Hidden Message:*

Y \_ \_ \_ \_ \_ F \_ \_ \_ \_ \_

\_ \_ \_ \_ \_ S \_ \_ \_ \_ \_ Y \_ \_ \_ \_ \_ !



# POET'S PAGE

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 \_\_\_\_\_ .

THIS POEM OFFICIALLY FINISHED BY POET: \_\_\_\_\_  
(your name here)

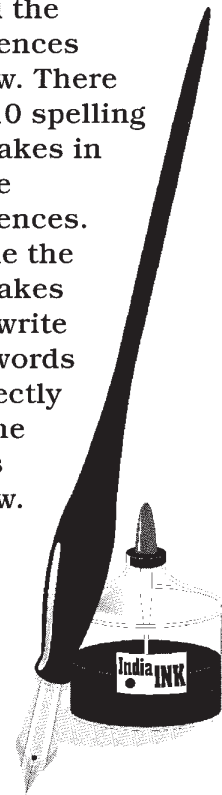
A+ 😊

# Find The Spelling Mistakes...

The man who first sent human speech over wirez was actually looking for a way to help daf peepel. 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
_____	_____	_____	_____

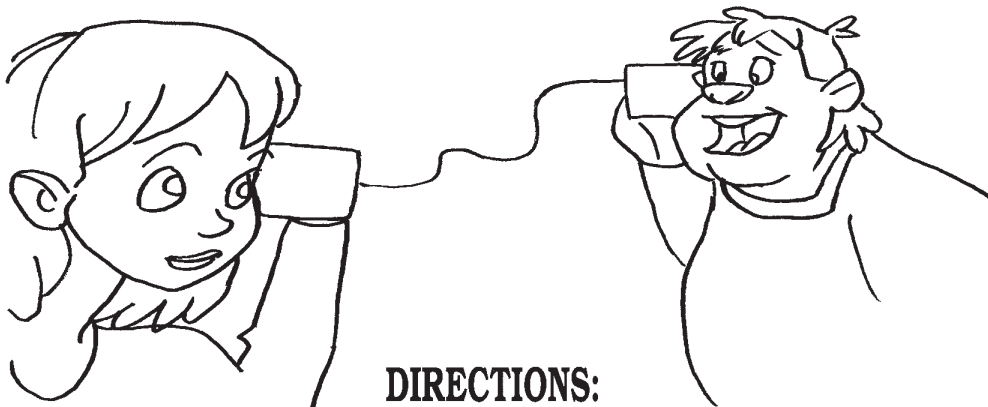


**Bell explains his new invention to Joseph Henry at the Smithsonian Institute.**

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**TIN CAN PHONE****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**

**DIRECTIONS:**

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.

# GOOD VIBRATIONS

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.



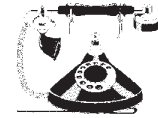
2. Hold the balloon against your lips and make a “coo” sound. Feel the balloon vibrate.

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?

# DISCONNECTED LINES

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

**Inventor**



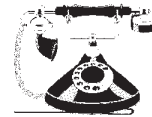
**Watson**

**Businessman**



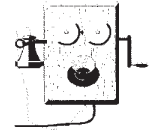
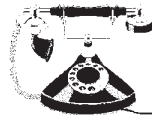
**Joseph Henry**

**Assistant**



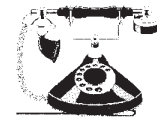
**For the Deaf**

**Smithsonian  
Institute**



**Telegraph**

**Boston School**



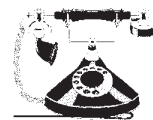
**David**

**Harmonic**



**Hubbard**

**Student**

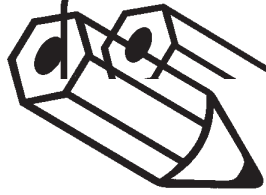


**Bell**



**Hubbard listens closely to the voice over the telephone.**

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Letters

# SHUFFLE!

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

# ALEXANDER GRAHAM BELL

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.)

<p><b>3 Letter Words - 1 point each</b></p> <p>___ words x 1 = ___ points</p>	<p><b>4 Letter Words - 2 points each</b></p> <p>___ words x 2 = ___ points</p>
<p><b>5 Letter Words - 3 points each</b></p> <p>___ words x 3 = ___ points</p>	<p><b>6 Letter Words - 4 points each</b></p> <p>___ words x 4 = ___ points</p>

**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!

# PUZZLING

## POETRY

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? \_\_\_\_\_



**“We did it, Mr. Watson! We did it!”**

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# TRUE

OR



# FALSE

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

# ALEXANDER GRAHAM BELL

## QUESTIONS

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?



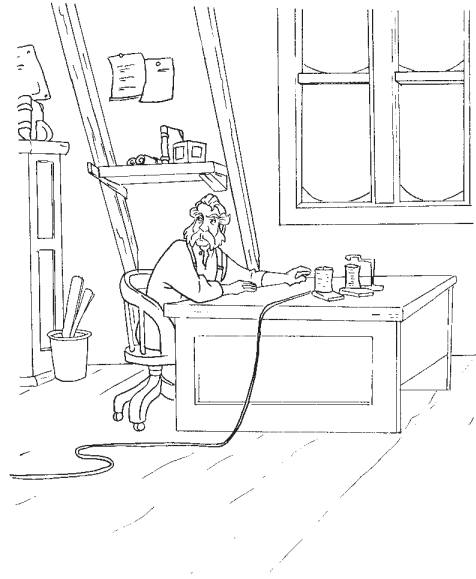
**Alexander Graham Bell is the inventor  
of the telephone.**

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# FUN THINGS TO THINK 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 KEY (cont'd)

**HOME SWEET HOME — PAGE 15**

- Scotland
- Canada
- United States
- Boston

**SAY IT WITH SIGNS — PAGE 17**

*Bell wanted  
to help  
deaf people.*

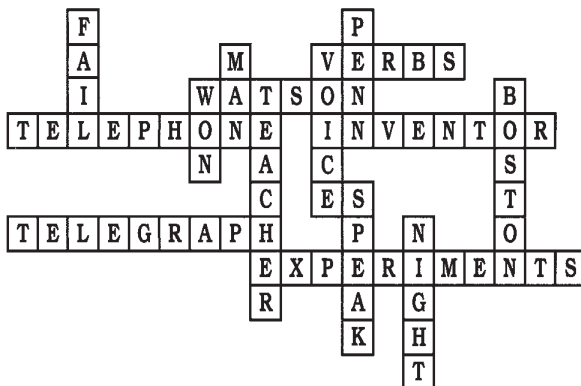
**MAKE A SOUND — PAGE 18**

- 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**

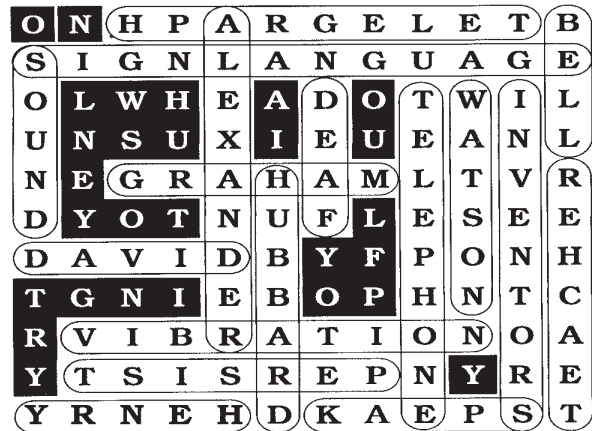
- MIME - Idea*
- WATSON - Assistance*
- HUBBARD - Money*
- HENRY - Encouragement*
- MRS. FULLER - Kindness*

**WHAT'S NEXT? — PAGE 27**

4, 2, 5, 3, 6, 7, 1, 8.

SCOTLAND

**HIDDEN MESSAGE — PAGE 29**



*YOU ONLY FAIL WHEN  
YOU STOP TRYING!*

**POET'S PAGE — PAGE 30**

- Day
- Come
- Call
- Train
- Play
- Alone

ANSWER KEY (cont'd)

**FIND THE SPELLING MISTAKES — PAGE 31**

furst - FIRST  
wirez - WIRES  
daf - DEAF  
peepel - PEOPLE  
brot - BROUGHT  
too - TO  
lurn - LEARN  
sine - SIGN  
studie - STUDY  
heering - HEARING

**DISCONNECTED LINES — PAGE 35**

Inventor	BELL
Business	HUBBARD
Assistant	WATSON
Smithsonian Institute	JOSEPH HENRY
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  |
| 2. T | 6. F | 10. T |
| 3. F | 7. T | 11. T |
| 4. 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!"*

# Certificate of Achievement

This certifies that

\_\_\_\_\_ has mastered the

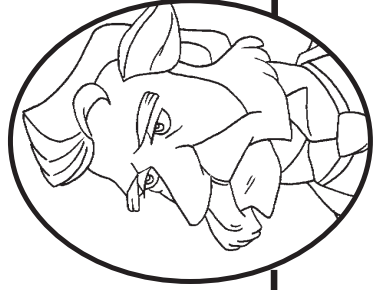
## Alexander Graham Bell

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| Benjamin Franklin    | Leonardo da Vinci     |
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| William Bradford     | Marco Polo            |
| Pocahontas           | Galileo               |
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