

Compliments of
North Dakota School for the Deaf/
Resource Center for the Deaf and Hard of Hearing



Deaf History





Abbe Charles Michel de l'Epee - born in 1712 and known as the "Father of the Deaf." He developed a formal sign system then set up and funded by himself the first public school for the deaf in France.

1712

George Veditz - born in 1861 and known as a fierce defender for the preservation of American Sign Language and an advocate for the Deaf community to have its own culture. In 1910, he set out to film American Sign Language (ASL) in use in order to defend its value. This film is now regarded as one of the most important documentations in Deaf history.



1861

William Ellsworth Hoy - Born in 1862 and was the first deaf Major League Baseball player. He referred to himself as "dummy," despite him being one of the most intelligent and accomplished athletes of his time. Considered the forefather of baseball hand signals, Hoy relied on his third-base coach to raise his right arm to indicate a strike and his left arm to indicate a ball. Hoy finished his career in Los Angeles after playing a record 1,792 games. He died in 1961 at the age of 99.

1862

Abraham Lincoln signs Charter for Gallaudet University - In 1864 - the Civil War entered its third year and Gallaudet University's charger was signed by President Abraham Lincoln. That same year Edward Miner Gallaudet, the son of Thomas Hopkins Gallaudet, was made president of the institution. In 1869 when the first three students graduated, all received diplomas signed by then President of the United States Ulysses S. Grant. Since then, all Gallaudet diplomas are signed by the presiding U.S. President.



1864

Telephone invented - 1876 - Alexander Graham is credited with inventing the first practical telephone in 1876.

876

A.R. Spear, a deaf man from Minneapolis came to North Dakota and established a school for the deaf in Devils Lake on September 10, 1890.

1890



Electrical Hearing Aid Invented in 1937 - Prior to the 1930s, hearing aids were cumbersome and weighed several pounds. It wasn't until about 1937 that the old desktop model hearing aids was replaced with a carbon-based microphone powered by three and six volt batteries.

937

TTY Introduced - 1964 - Developed by Dr. Robert Haig Weitbrecht, a deaf educator and scholar born California in 1920, the teletypewriter (TTY) enables deaf people to use phone lines to call each other and type out their conversations. The first TTY conversation occurred in 1964 between Weitbrecht and James C. Marstars and appeared as, "Are you printing me now?" Let's quit for now and gloat over the success."



1964

Deaf History - continue

Program Captioning introduced - 1972 - What do the WGBH television station in Boston and Julia Childs have in common? Both helped launch the first nationally broadcast captioned program, "The French Chef," in 1972. Since then, closed caption legislation has included the establishment of the National Captioning Institute in 1980 and the historic Television Decoder Circuitry Act of 1990, in which all television screens 13 inches or larger have built-in closed caption decoding circuitry.





The cochlear implant is approved for clinical trials in people 18 and older - 1985 - The device is a mechanical prosthesis of sorts for the inner ear. It bypasses the bones of the inner ear, placing electrodes directly into the cochlea, where sound waves are absorbed and interpreted by the auditory nerve

Americans with Disabilities Act (ADA) - 1990 - One of the most important laws for deaf individuals signed into action, the Americans with Disabilities Act (ADA) prohibited discrimination against people with disabilities. Under the ADA, businesses, service providers, state and local agencies and employers are required to remove barriers that prevent a deaf person from participating.

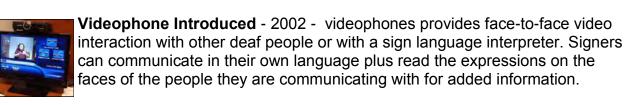




Text Pagers - 1990 - Due to the increased use of pagers, wireless telephones and personal digital assistants (PDAs) two-way text paging grows in popularity. Many networks providers begin offering service and equipment packages to capitalize on the innovation. In the years that soon follow, the technology will help shape the way deaf and hard of hearing communicates.

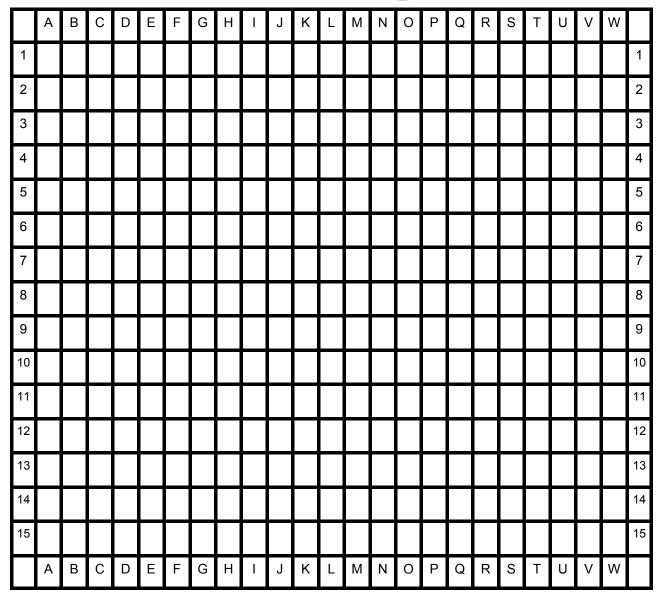
IP Relay - 2000 - Rather than rely on a TTY and a telephone to contact an operator, IP Relay utilizes a computer, the Internet and web browser to contact the IP relay operator who then calls and voices the conversations between the deaf or hard of hearing person and the hearing person.

2000 2002



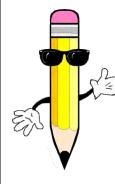
Technologies like texting, Skype, FaceTime, caption glasses, etc. continue to have large impacts on the Deaf community and their interaction with the world.

Best known sign in ASL?



What is the best known American Sign Language sign?

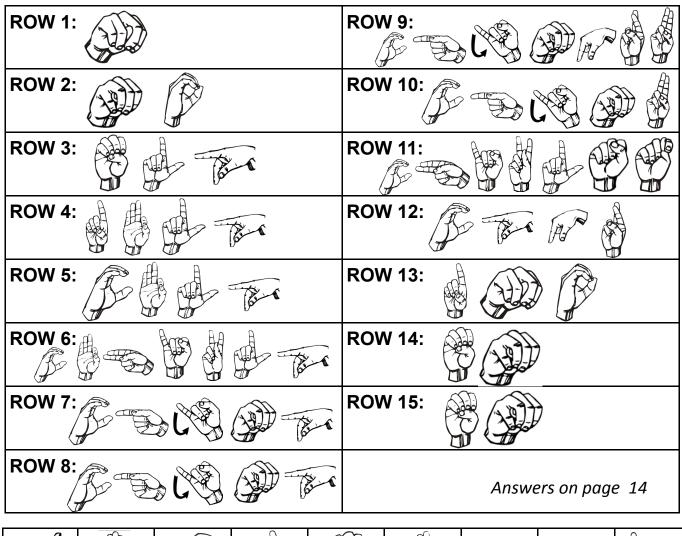
This sign is probably the best known sign. It has even been put on a postage stamp. It is made from combining three different signs.

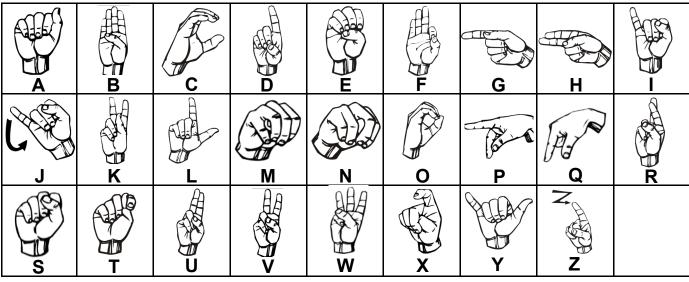


To solve the puzzle: Shade the boxes indicated for each row on the following page and watch the mystery picture appear! Pay close attention to which letters should be shaded and which should be left blank. If you use a pencil, you can erase a mistake.

Fun with Fingerspelling

Use the key below to determine which boxes to fill in each row of the "Best Known Sign" page.



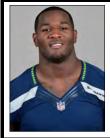


Have you seen or heard of these deaf individuals? Write the letter on the line in the appropriate box.



This young lady greets guests from world leaders to White House staff before meeting with the President of the United States.





This individual plays for the Seattle Seahawks. In January 2014, he was featured in the Duracell commercial ad: Trust your power.





This actress appeared in the second season of Grimm. She is also a model.





This woman was crowned Miss America in 1998.





This man is known as one of the "fathers of the Internet." He is hard of hearing.



This actor plays Emmett on the ABC Family's hit show "Switched At Birth."



6

- A. Heather Whitestone
- B. Kurt Ramborger
- C. Leah Katz-Hernandez
- D. Sean Berdy
- E. Ashley Fiolek
- F. Vinton Cerf
- G. Derrick Coleman
- H. Nyle Dimarco
- Stephanie Rogueras

Answers on page 14



This man is the first Deaf model to appear on America's Next Top Model: Cycle 22.



This athlete is the youngest motocross champion EVER.



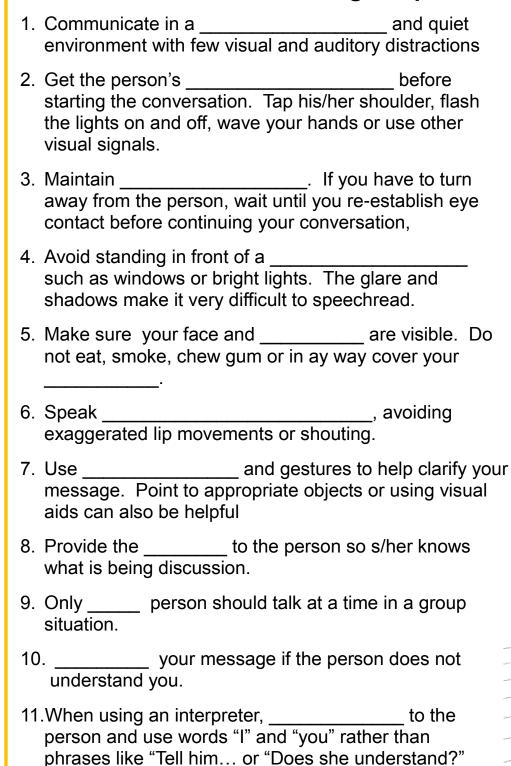


This man appeared on the Food Network's TV show, "Chopped." He is known as the Irish Chef.





Tips for communicating with Deaf and Hard of Hearing People





Use these word list below to complete the communication tips when talking to a person with a hearing loss.

- A. slowly and clearly
- B. light source
- C. Rephrase
- D. well-lit
- E. topic
- F. talk directly
- G. attention
- H. mouth (2x)
- I. one
- J. eye contact
- K. facial expressions





A look at Lip Reading

We've all lip read once upon a time. Whether it was to tell a friend where to meet after class or whether you saw someone say "I love you" on TV while muted, most of us have dabbled in lip reading without knowing it.

Lip reading, also known as speech reading, is more than looking at the lips of the speaker. Aside from the lips, the movements of the tongue, the jaw, the eyes, the face, the hands and the body are also followed. Knowing the context in which the speaker is speaking makes it easier for a person with a hearing loss to fill in the gaps about what is being said.

Drawbacks of Lip Reading:

- Lip reading is difficult for people who have never heard the spoken language clearly.
- In a group environment, where several people are talking at the same time, it is difficult to follow
 the lip movements of all the speakers. So the deaf person may fail to understand where the
 conversation is headed.
- Glottal consonants are impossible to follow; they don't require lip movement, but are articulated inside the mouth or throat.
- Lip-reading reading requires the lip reader to concentrate and focus on the speaker's lips to follow every word spoken. This can get rather wearisome. Many deaf people may prefer using other communication means like gesturing, miming, writing or sign language.

And most importantly.....

 Many speech sounds have the same facial and mouth positions. This makes it hard for the lip reader to distinguish the sounds. According to language experts, only about 30 to 40% of English sounds are distinguishable from sight alone.

Although most people with hearing loss rely on seeing the face in helping to communicate, each individual have different skills levels at lip reading and because many speech sounds have the same facial and mouth positions, it only part of the puzzle a person with a hearing loss uses to understand what is being said.

Pick a partner and try "lip reading" these words. Each person gets a card (A and B). Say the words listed without any voice while the other person guesses what that word is. How well did you do?

Person A love laugh tough	Person A very ferry bit sit	Person A pat mat bat beat	Person A
Person B raft ref chef	Person B	Person B	Person BYou did what to the chef's tortoise?Meet the ref's daughter?

Assistive Technology for People who are deaf or Hard of Hearing is a recent phenomenon

It is sometimes easy to forget that people who are deaf or hard of hearing did not have access to the telephone network until the TTY was developed in the 1960s and nationwide relay services began in the 1990s. The phone had been around since the late 1800s.





Similarly, closed captions for television were developed in the 1970s, became available on a limited, voluntary basis in the 1980s with the use of closed caption decoder equipment, and were finally required and made available through built-in television caption decoder systems in the 1990s.





Likewise, going to the movies was not possible until the development of captioned film prints in the 1980s and caption display systems in the late 1990s. The exclusion of generations of deaf and hard of hearing people is something to be remembered so as not to be repeated.

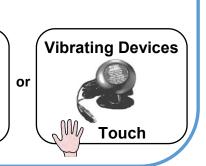
How do they....

- Know when the phone is ringing?
- Wake up to an alarm clock?
- Hear someone at the door?
- Hear fire alarms/smoke detectors?
- Hear a baby crying?

Lamps

Visual

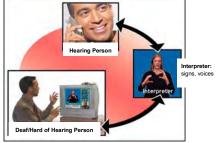
People with hearing loss may only need to amplify the alerting sound to hear it. Others may need the alarm sounds to be visual or feel it. They do this by connecting their phones, alarm clocks, doorbell, fire alarms/smoke detectors and baby monitors to:



At the same time, and perhaps due in part to this history, people who are deaf or hard of hearing were early and

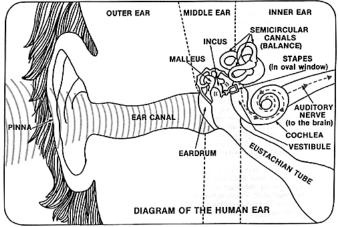
eager adopters of accessible text-based communication and information systems, such as pagers, e-mail, instant messaging, and the Internet, as well as early adopters of videophones.

Today, we have assistive listening technologies, real-time captioning services, Internet captioning applications, movie caption display systems, a wide range of relay services that provide access to the telephone network, digital televisions with digital captions, and video remote interpreting services.



Relay services typically has a third party participant who either types, voices or signs according to who is talking and what device is being utilized.

The ear and hearing



http://www.gallaudet.edu/images/clerc/ear.gif

Your outer ear is shaped just right to catch sounds. These sounds are called 'sound waves'. They travel into your ear and down the tube called the "ear canal". Now the sound waves are in your middle ear.



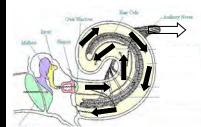
Stretched over the end of the ear canal is the eardrum. The sound waves bounce onto the eardrum, making it move back and forth, or vibrate.



The three smallest bones in your body, the malleus, incus and stapes are attached to the eardrum. When the eardrum moves, it makes these tiny bones move too. They continue to move the sound to your inner ear.



The inner ear has the cochlea. Cochlea is Greek for 'snail', which is exactly what it looks like - a snail's shell. The cochlea is about the same size as a pea. This is where you 'hear' different sounds.



There are three 'tubes' in the cochlea. The top and bottom canals protect the middle canal. The middle canal is where the sound is heard. Each tiny hair in the cochlea sends a different sound message to the brain. When all the hairs are 'working' properly, then the brain gets all the right sound information and your hearing is fine.

Information and drawings taken from: http://www.deafis.org/culture/ear.php



						R	G	I	Α					
					С	Р	0	٧	U	Χ				
				Т	0	W	Α	В	D	D	J			
			Н	С	С	Ε	F	K	I	L	Α	K		
		F	J	S	Н	Α	Χ	Q	Т	W	Χ	R	Υ	
		В	Т	G	L	Χ	Р	I	0	S	S	N	Χ	Find and circle
	I	N	Υ	Χ	Ε	Н	I	Χ	R	Χ	Р	Т	R	the words below
Q	N	I	В	R	Α	I	N	G	Υ	Т	S	Р	Н	that are part of the ear.
F	С	Χ	U	Τ	С	Z	N	I	Ν	Ε	Ε	U		auditory nerve
Υ	U	J	Q	Χ	J	Р	Α	D	Ε	Z	Р			brain
	S	0	Χ	K	M	N	٧	0	R	Н	Α			cochlea
	Ε	Χ	Z	0	G	Q	D	С	٧	Υ	Т			ear drum
		Z	R	В	M	Α	L	L	Ε	U	S			incus
			٧	Χ	L	S	В	W	Р	F	K	U		malleus
				Ε	Α	R	D	R	U	M	W	L		pinna
					M	0	Ε	Α	D	K	Р	N		,
						W	Χ	F	M	С	٧	U	Ε	
							Н	N	С	Χ	J	R	L	
								Χ	٧	D	Α	G		
									I	M	В			

(What is the shape formed by all the letters?) Write that word on the line above.

Write the order in which sound travels down the ear to the brain on the lines on the right.

Answers on page 14

Buzz Word: EAR

"put a bug in "all ears" someone's ear" "ears of corn" "has a tin ear" "your ears must "to be wet behind be burning" the ears" "can't make a silk "play it by ear

Match the following letters to the box with the "ear" phrase above by writing the letter in the corresponding box provided.

A. Insensitive to the appropriateness of language they are using

purse out of sow's ear'

- B. Cannot make a good quality product using bad quality materials
- C. Give someone a hint about something
- D. Proceed gradually, depending on the situation; improvise
- E. Something you say to someone who is being talked about
- F. Kernels on a cob
- G. Willing to pay attention and will to consider the other person's words
- H. Inexperienced or immature

Buzz Word: EAR



13.

"turn something on it's ear"



10.

"walls have ears"



14.

"smiling from ear to ear"



11.

"fall on deaf ears"



15.

"coming out of one's ears"



12.

"keep your ear to the ground"



16. □

"steam was coming out of my ears"



Continue your skills of matching the following definitions with the "ear" phrase above by writing the letter in the corresponding box provided.

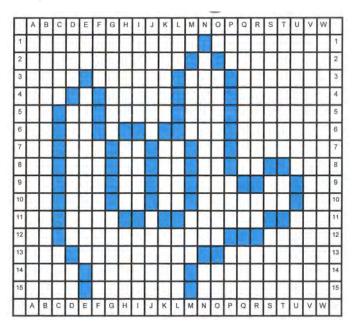
- To talk to someone endlessly
- J. To pay attention to what is happening so you know about any changes in a situation
- K. To smile a lot because you are very happy
- L. To change the type of activity in a surprising and exciting way

- M. That person is very angry or upset
- N. Be ignored or disregarded
- O. Conversation is easily overheard or someone is listening
- P. Overabundant, more than can be managed

Answer Key:

Best known sign in ASL/

Page 4-5



What is the best known American Sign Language sign? The I Love You sign is probably the best known sign. The sign blends the handshapes for the letters I, L and Y into one handshape











Fun with Fingerspelling (page 5)

Row 1: N Row 9: C, G, J, M, Q, R, U

Row 2: M, O Row 10: C,G, J, M, U

Row 3: E, L, P Row 11: C, H, P, K, L S, T

Row 4: D, F, L, P Row 12: C, P, Q, R

Row 5: C, F, L, P Row 13: D, N, O

Row 6: C, F, H, P, K, L, P Row 14: E, M

Row 7: C, G, J, M, P Row 15: E, M

Row 8: C, G, J, M, P

Deaf Individuals Page 6

1. C, 2. G, 3. I, 4. A, 5. F, 6. D, 7. H, 8. E, 9. B

Communication Tips (Page 7)

- 1. D (well-let)
- 2. G (attention)
- 3. J (eye contact)
- 4. B (light source)
- 5. H, H (mouth, mouth)
- 6. A. (slowly and clearly)
- 7. K (facial expressions)
- 8. E (topic)
- 9. I (one)
- 10. C (Rephrase)
- 11. F (talk directly)

The Ear (Page 10)



What is the shape formed by all of the letters?

An Far

The order in which sound travels down the ear to the brain:

- 1. pinna
- 2. ear drum
- 3. malleus
- 4. incus
- 5. stapes
- 6. cochlea
- 7. auditory nerve
- 8. brain

Buzz Word: EAR (Pages 12-13)

1. G, 2. A, 3. E, 4. B, 5. C, 6. F, 7. H,

8. D, 9. I, 10. O, 11. N, 12. J, 13. L,

14. K, 15. P, 16. M

How to access services from North Dakota School for the Deaf/ Resource Center on Deaf and Hard of Hearing

Families, school districts, area education agencies, other interested individuals and North Dakota School for the Deaf/Resource Center on Deaf and Hard of Hearing (NDSD/RCDHH) work together to provide appropriate services...

For on-site school-age programs:

- Contact your local school district
- Contact North Dakota School for the Deaf. Superintendent: 701-665-4400 Toll Free: 1-800-887-2980
- Tour North Dakota
 School for the Deaf's
 campus with your area
 education agency and local
 school district staff
- Work with your school district to schedule an IEP meeting to determine placement that includes a NDSD/RCDHH representative.



A Division of the ND Department of Public Instruction, Kirsten Baesler, Superintendent

Parent-Infant Programs & Outreach Regional Offices

Program Coordinator

1401 College Drive North Devils Lake, ND 58103 (701) 665-4400 Toll Free: 1-800-887-2980

Northwest

Memorial Hall 500 University Avenue West Minot, ND 58701 (701) 858-3357

Southwest

418 East Broadway, Suite 228 Bismarck, ND 58501 (701) 328-3987

Northeast

1401 College Drive North Devils Lake, ND 58301 (701) 665-4420

Southeast

1321 23rd Street South, Suite A Fargo, ND 58103 (701) 239-7374

To access Outreach Services:

Contact the designated person listed below for each service area:

Parent-Infant Program:

(For birth to age five)
Carol Lybeck......701-665-4400
Carol.Lybeck@k12.nd.us

School Age Services:

(Assessments & Consultations)
Carol Lybeck...701-665-4400
Carol.Lybeck@k12.nd.us

Adult Services:

Pam Smith......701-665-4401 Pam.Smith@k12.nd.us

Interpreting/Communication

Lilia Bakken......701-665-4423 Lilia.Bakken@k12.nd.us

Dual Sensory/Deafblind

Sherri Nelson.....701-237-7376 shnelson@nd.gov

Summer Camps

Linda Ehlers......701-237-7374 Linda.A.Ehlers@k12.nd.us

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