

HANDOUT LIST
LOW INCIDENCE MODULE

<u>Handout</u>	<u>Slide #</u>	<u>Topic</u>
A	2	IDEA Definition of Low Incidence Disability
B	11	Facts & Myths Quiz
C	11	Facts and Myths about Hearing Loss
D	13	Spelling Test
E	30	Hearing Technology Daily Performance Check
F	44	Anatomy of the Eye and Ear
G	56	Low Vision Simulations – Math Problems
H	59	Visual Clutter Examples
I	90	Parable of the Blind Men and the Elephant
J	99	Case Study – Katie

DEFINING A LOW-INCIDENCE DISABILITY

The information below is from the following government Web site:

<http://idea.ed.gov/explore/home>

In IDEA Statute: TITLE I / D / 662 / c / 3, the Federal Government **defines a low-incidence disability** as:

“(A) A visual or hearing impairment, or simultaneous visual and hearing impairments, (B) a significant cognitive impairment, or (C) any impairment for which a small number of personnel with highly specialized skills and knowledge are needed in order for children with that impairment to receive early intervention services or a free, appropriate, public education.”

Statute: TITLE I / D / 662 / c of the IDEA describes

(c) **Low Incidence Disabilities; Authorized Activities** as follows

- (1) In general.--In carrying out this section, the Secretary shall support activities, consistent with the objectives described in subsection (a), that benefit children with low incidence disabilities.
- (2) Authorized activities.--Activities that may be carried out under this subsection include activities such as the following:
 - (A) Preparing persons who--
 - (i) have prior training in educational and other related service fields; and
 - (ii) are studying to obtain degrees, certificates, or licensure that will enable the persons to assist children with low incidence disabilities to achieve the objectives set out in their individualized education programs described in section 614(d), or to assist infants and toddlers with low incidence disabilities to achieve the outcomes described in their individualized family service plans described in section 636.
 - (B) **Providing personnel from various disciplines with interdisciplinary training that will contribute to improvement in early intervention, educational, and transitional results for children with low incidence disabilities.**
 - (C) **Preparing personnel in the innovative uses and application of technology, including universally designed technologies, assistive technology devices, and assistive technology services--**

- (i) to enhance learning by children with low incidence disabilities through early intervention, educational, and transitional services; and
 - (ii) to improve communication with parents.
- (D) Preparing personnel who provide services to visually impaired or blind children to teach and use Braille in the provision of services to such children.
- (E) Preparing personnel to be qualified educational interpreters, to assist children with low incidence disabilities, particularly deaf and hard of hearing children in school and school related activities, and deaf and hard of hearing infants and toddlers and preschool children in early intervention and preschool programs.
- (F) Preparing personnel who provide services to children with significant cognitive disabilities and children with multiple disabilities.**
- (G) Preparing personnel who provide services to children with low incidence disabilities and limited English proficient children.**

(3) Definition.--In this section, the term 'low incidence disability' means --

- (A) a visual or hearing impairment, or simultaneous visual and hearing impairments;
 - (B) a significant cognitive impairment; or
 - (C) any impairment for which a small number of personnel with highly specialized skills and knowledge are needed in order for children with that impairment to receive early intervention services or a free appropriate public education.
- (4) Selection of recipients.--In selecting eligible entities for assistance under this subsection, the Secretary may give preference to eligible entities submitting applications that include 1 or more of the following:
- (A) A proposal to prepare personnel in more than 1 low incidence disability, such as deafness and blindness.
 - (B) A demonstration of an effective collaboration between an eligible entity and a local educational agency that promotes recruitment and subsequent retention of highly qualified personnel to serve children with low incidence disabilities.
- (5) Preparation in use of Braille -- The Secretary shall ensure that all recipients of awards under this subsection who will use that assistance to prepare personnel to provide services to visually impaired or blind children that can appropriately be provided in Braille, will prepare those individuals to provide those services in Braille.

ACTIVITY:

**FACTS AND MYTHS QUIZ
ABOUT HEARING LOSS**

QUESTIONS

- | | | | |
|-----|------|-------|---|
| 1. | True | False | It is not possible to test a baby's hearing. |
| 2. | True | False | Babies begin to hear as soon as they are born. |
| 3. | True | False | One in five babies in neonatal intensive care has a hearing problem. |
| 4. | True | False | Children who have hearing losses need to receive amplification and therapy by age two years if they are going to develop normal speech and language skills. |
| 5. | True | False | Deafness is often more socially isolating than blindness. |
| 6. | True | False | Using hearing aids will solve the communication challenges of most children with hearing loss. |
| 7. | True | False | People with hearing losses just need to have sounds made louder. |
| 8. | True | False | Loud sounds from music, firecrackers, guns, power tools, or engines can cause permanent hearing loss at any age. |
| 9. | True | False | Pediatricians can diagnose a hearing problem in a child. |
| 10. | True | False | Hearing aids are not designed for children. |

FACTS AND MYTHS QUIZ ABOUT HEARING LOSS

ANSWERS

1. **False** It is possible to test a newborn baby's hearing accurately.
2. **False** The ear's development is complete in the 20 week old fetus. Research indicates that babies begin to hear before they are born. Pregnant women can experience their babies kicking in rhythm to music about three months before they are born.
3. **True** One in five babies in neonatal intensive care has a hearing problem.
4. **False** Children who have hearing losses need to receive amplification and therapy by 6 months of age if they are going to develop normal speech and language skills.
5. **True** Deafness is often more socially isolating than blindness. Socialization requires communication, and hearing losses can greatly interfere with one's ability to communicate and interact with others.
6. **False** Using hearing aids helps, but it does not solve all the communication challenges faced by either children or adults with hearing loss. Assistive listening devices, FM systems, cochlear implants, speech and language therapy, tutoring, and special listening strategies are often needed to meet the communication needs of children with hearing impairments.
7. **False** Louder isn't always better. Loud sounds can be uncomfortable and distracting, and they can sound distorted to someone with a hearing problem. People who need hearing aids need to have them adjusted carefully to amplify only the pitches (frequencies) where it is necessary and beneficial. They also need to have loud sounds dampened or "compressed" to keep them in a comfortable range where it will not cause further harm to their hearing.
8. **True** Loud sounds from music, firecrackers, guns, power tools, or engines can cause permanent hearing loss at any age.
9. **False** Pediatricians can diagnose problems such as ear infections, but they are not trained to evaluate hearing, speech, or language problems in children. Audiologists are the professionals who evaluate and diagnose disorders of hearing.
10. **False** Hearing aids are commonly designed with children in mind. They can come with tamper resistant controls, fun colors, glitter and decals! Special hearing aid care kits and accessories designed for children are also available.



Department of Audiology and Speech Pathology

UNIVERSITY OF ARKANSAS AT LITTLE ROCK
UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES

2801 South University Little Rock, Arkansas 72204 501.569.3155

UAMS

Speech, Language and Hearing Clinic

FACTS AND MYTHS ABOUT HEARING LOSS

MYTH: Acute infections such as measles, mumps, and meningitis are the most common causes of sensorineural hearing loss.

FACT: The most common causes of sensorineural hearing loss are loss of hair cells in the cochlea from aging and long term exposure to loud noise. Disease or trauma affecting the inner ear, neural structures, or nerve pathways leading to the brain stem can also cause sensorineural hearing loss.

MYTH: Most hearing loss stems from conductive problems, such as those caused by otitis media (middle ear infection) or ear wax, that affect the transmission of sound waves from the outer and middle ear to the inner ear.

FACT: Most hearing loss results from sensorineural problems that originate in the inner ear, neural structures, or neural pathways leading to the brain. In pure conductive hearing loss, transmission of sound to the inner ear is partially or totally limited. Causes of conductive hearing loss include anything that blocks the external ear (such as ear wax), thickening or perforation of the tympanic membrane, or pathophysiologic changes in the middle ear affecting one or more of the ossicles.

MYTH: Hearing loss is relatively uncommon in the United States.

FACT: Whether acquired or congenital, hearing loss is the most common disability in the United States. One out of every five Americans suffers some degree of hearing loss.

MYTH: Blindness is more socially isolating than deafness.

FACT: A person with hearing loss may feel excluded from group conversations and engage only in one-on-one conversations. Lack of communication can make one feel even more "in the dark" than a person who's visually impaired.

MYTH: "I'm too old to benefit from hearing aids."

FACT: No matter what your age, you rely on hearing to maintain connection to the world. The philosopher Emmanuel Kant once said, "Not being able to see isolates you from objects. Not being able to hear isolates you from people." Hearing is a critical part of the quality of life for people of all ages.

MYTH: People with age-related hearing loss (presbycusis) tend to lose low- to mid-frequency sounds.

FACT: Mid to high frequencies tend to fade first for people with presbycusis. This results in difficulty hearing normal speech patterns and sounds. Those with presbycusis may complain of not understanding what's been said, especially in noisy environments. When speaking to people with presbycusis, slow down slightly and don't shout. Shouting just makes speech sound distorted.

MYTH: "My type of hearing loss cannot be helped."

FACT: That may have been true 30 or 40 years ago, but today nearly all hearing loss — the kind that's brought on by age or exposure to noise — is very responsive to treatment in the form of technically advanced hearing instruments. In almost all cases, sensorineural (nerve related) hearing loss can be helped through the use of hearing aids. Some types of hearing loss may be medically corrected. Hearing loss that cannot be corrected through medical treatment can benefit from the many advances in hearing aid technology. With modern technology, over 95% of patients with hearing loss can successfully wear hearing aids.

MYTH: "Hearing aids are too expensive."

FACT: The cost of digital hearing aid technology is much more affordable than most people realize. Cost is also relative to the perceived value you get from hearing aids. For many the improved quality of life and relationships make it one of the best investments they could ever make. Better hearing through technology is within the reach of most people. The real issue is quality of life, and what it's worth to you. While good hearing instruments are seen as expensive, putting a price on a better life experience is hard to do. You have to weigh the benefits and make your own decision. However you choose to look at it, treating hearing loss and enjoying the benefits is still relatively inexpensive compared to treating most health problems.

MYTH: If you're hearing impaired, it just means sounds aren't loud enough.

FACT: In most cases, individuals with hearing loss can hear people talking, but experience difficulty in understanding what is being said. Other times the individual just experiences difficulty with certain voices or when there is competing background noise. That's because hearing isn't only about loudness or decibel level. Typically, hearing loss has more to do with the frequency of the sound — that is, its pitch, than its loudness. When hearing loss occurs, it's harder to hear higher pitches, especially when there is background noise to complicate the picture, such as conversation in a noisy restaurant. Only certain speech sounds are missing for most individuals with hearing loss. Making all sounds louder can just make understanding more difficult. This is why carefully fit and precisely adjusted hearing aids are needed to amplify the necessary frequencies to make speech clearer, and not just louder.

MYTH: “My hearing loss is normal for my age.”

FACT: Hearing loss is not normal at any age. However, hearing loss is more prevalent among older adults than in the general population. Approximately one third of adults over 65 years of age experience some degree of hearing loss.

MYTH: The invisible hearing aids worn in the ear are the best hearing aids to purchase.

FACT: Not always. While this style hearing aid has some advantages, there are many styles of hearing aids. Not everyone can benefit equally from every type of circuit or every style of hearing instrument. All styles of hearing aids can be made with digital signal processing and “state of the art” circuitry. What is most important is that hearing aid purchasers obtain the features that best accommodate their type of hearing loss and individual listening needs.

MYTH: “I would be the first to know if I did have a hearing loss.”

FACT: The truth is, hearing loss happens gradually and the signs are subtle at first. Our own built-in defenses and ability to adapt make it difficult to self-diagnose. A professional hearing screening or evaluation can provide a more definitive answer. It is typical for individuals with mild or even moderate hearing loss to be unaware of their hearing problem, even though people close to them are very aware that the individual has hearing difficulties. Hearing loss in most cases happens very gradually and is almost always painless. The individual with hearing loss does not realize how much she or he is missing and how it is affecting their quality of life.

MYTH: All hearing aid providers are the same.

FACT: Only audiologists are university trained and have at least a Masters degree in Audiology. In most cases they are certified by the American Speech-Language-Hearing Association or by the American Board of Audiology. Today’s hearing aids are much more complex than in the past. To use them correctly requires a complete understanding of an individual’s hearing loss and the expert counseling provided by a licensed, certified audiologist.

MYTH: Only a few people are truly hearing impaired; the statistics don’t apply to me or those close to me.

FACT: With 28 million reporting hearing loss in this country alone, or one in 10 people, odds are good that you or someone you know is indeed affected by hearing loss, especially if you’re over 60.

MYTH: Living with hearing loss is not a big deal.

FACT: There are many psychological effects from hearing loss, including frustration, withdrawal, and depression. Trouble communicating with others creates a strain on relationships and a loss of self esteem. It’s far better to deal with hearing loss than to pretend it isn’t happening, or to ignore the effect it is having on those around you.

MYTH: Hearing instruments are obvious and unattractive.

FACT: While it's true that hearing instruments don't enjoy the fashion status of a pair of glasses, new technology has made these devices remarkably discreet. Many people can wear hearing instruments that are either tucked well behind the ear or are almost hidden in the ear canal. Many styles are often disguised by hairstyles, as well. Hearing instruments come in a variety of colors to match skin tone, hair color, or fashion preferences. They can also come in fun colors and patterns for children or adults who want to enjoy them. The popularity of cell phone technology and small, personal stereo systems has made hearing aids much more inconspicuous, and hearing aids are now being made compatible with these new communication technologies.

MYTH: Hearing instruments don't work.

FACT: Hearing instruments won't restore lost hearing or stop the progression of hearing loss related to health problems or a lifetime of loud noise. And because hearing is as much a function of the brain as it is the inner ear, hearing aids aren't the whole story in hearing better. But smart, new technologies, including the ability to amplify sound selectively, do help most people to hear better in most situations. Even so, it needs to be said that no hearing instrument, no matter how sophisticated, will work unless you are willing to wear and adapt to it.

MYTH: Hearing loss and hearing instruments are a sign of old age.

FACT: People of all ages wear hearing aids, even infants! Actually, a person's hearing loss is probably more noticeable than wearing a hearing aid. Always saying, "What?" or responding incorrectly to misunderstood conversation is much more apparent than wearing a hearing aid in your ear. This is especially true when you consider some of the almost invisible hearing aids that are available with today's technology. Things are changing. Hearing loss is no longer the province of the elderly, and neither is wearing a hearing instrument. Many of the baby boomers now experiencing hearing loss will undoubtedly invest in better hearing sooner than later. And, as a culture, we're increasingly showing our preference for treatment over doing nothing. — Witness the popularity of such investments in life as laser eye surgery and hormone replacement therapy, to name a few. Indeed, doing nothing to help yourself may be seen as a more obvious sign of old age than the problem itself.

Hearing loss is more common than you might think!

DEMOGRAPHICS:

- 28 million Americans are hearing impaired, and an estimated 500 million experience hearing loss, worldwide.
- Three newborn infants in 1000 have a significant, congenital, permanent, bilateral, hearing loss. Among newborn infants needing intensive care, one in five has a significant hearing loss.
- In the U.S., one out of twelve 30-year-olds is already hearing-impaired, and one in eight 50-year-olds has a hearing loss.
- After President Bill Clinton was fitted for hearing instruments, more than 1 million other baby boomers identified themselves as experiencing hearing loss.
- There are more baby boomers aged 45-64 with a hearing loss (10 million) than there are people over the age of 65 with a hearing loss (9 million).
- Of the 10 million Americans aged 45 to 64 who have a hearing loss, 6 out of 7 do not yet wear hearing instruments.

HEARING LOSS FACTS:

- Hearing loss is second only to arthritis as the most common complaint of older adults.
- Only about 10% of hearing losses are helped by surgery or other medical treatment.
- Approximately 95% of hearing losses can be treated with the use of hearing instruments.
- Only 16% of physicians routinely screen for hearing loss.
- More than a third of all hearing loss is attributed to noise: loud music, loud workplaces, firearms, and loud recreational equipment.
- Noise above 80-90 decibels on average over an 8-hour workday is considered hazardous.
- Firearms, music, vacuum cleaners, airplanes, lawnmowers, power tools and many appliances are louder than 80 decibels and potentially hazardous to hearing with prolonged exposure.
- A live rock concert produces sounds from 110 to 120 decibels or more, — easily high enough to cause permanent damage to hearing over a 2- to 3-hour period.
- Thanks to the above, we're all losing our hearing at a younger age than we were 30 years ago.

WHAT CAN I DO ABOUT HEARING LOSS?

While hearing loss isn't reversible, most age or noise related loss can be managed and often compensated for. Sometimes that means medication or surgery. But just as eyeglasses are used to correct most vision problems, hearing instruments are used to treat most kinds of hearing loss. Any treatment starts with a screening of your hearing by a physician or audiologist. Once you know the nature and extent of the hearing loss, you'll be able to make your own decisions about treatment.

**Call the UALR/UAMS Speech and Hearing Clinic for an appointment:
(501) 569-3155**

SPELLING TEST

Name: _____

Front of Room ☐Rear of Room ☐

The first 10 words are given in quiet, and the second 10 words are in background noise. Each word will be said twice. If you are not sure what the word is, try to spell it phonetically.

You will score your own test based on the number of letters correct in each word.

<u>Quiet Condition</u>	<u>Correct Answer</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Score: Number of letters correct: _____ out of 28

<u>Noise Condition</u>	<u>Correct Answer</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Score: Number of letters correct: _____ out of 27

SPELLING TEST ANSWER KEY

LOW INCIDENCE DISABILITY MODULE

Refer to Handout D.

Task Instructions:

- A. The first 10 words are given in quiet, and the second 10 words are in background noise. Each word will be said twice. If you are not sure what the word is, try to spell it phonetically.
- B. Administer the test by clicking on each of the sound clips.
- C. After completion, refer to the above Answer Key to provide the answers and allow participants to score their own tests. Participants may record their scores based on the number of letters correct.
- D. Compare the scores of those in the front of the room with those in the rear.
- E. After the test, explain:

The words were given in Spanish to simulate what it is like for a child who is still developing language to try to understand and learn language in a fast-paced and often noisy classroom.

Students with hearing impairments are at a significant disadvantage academically, because limited exposure to language, distance, noise and other distractions all interfere with their ability to access information.

<u>Quiet Condition</u>	<u>Translation</u>
1. perro	dog
2. mesa	table
3. cometa	kite
4. queso	cheese
5. almuerzo	lunch

<u>Noise Condition</u>	<u>Translation</u>
1. gato	cat
2. silla	chair
3. globo	balloon
4. carne	meat
5. desayuno	breakfast

Handout E

Month/Year:

Check all applicable equipment:

☐	Right hearing aid	☐	Receiver coupled to right HA	☐	Headset receiver
☐	Left hearing aid	☐	Receiver coupled to left HA	☐	Personal amplification
☐	Cochlear implant	☐	Transmitter/microphone	☐	Classroom sound system
☐	Bone conduction aid	☐	Ear level receiver	☐	Other:

Change noted (student or equipment)

☐ YES ☐ NO (Explain on back) ☐ REPAIRS NEEDED
☐ NO ☐ YES (Explain on back)

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 27 28 29 30 31

OK
Corrected

O O

O O

Student	mm
can detect	oo
these sounds	ee
from 3 feet.	ah
Vary order of	sh
presentation	ss
each day.	silence

[illegible]

Student	ah
can identify	silence
these sounds	ee
from 3 feet.	ss
Vary order of	oo
presentation	sh
each day.	mm

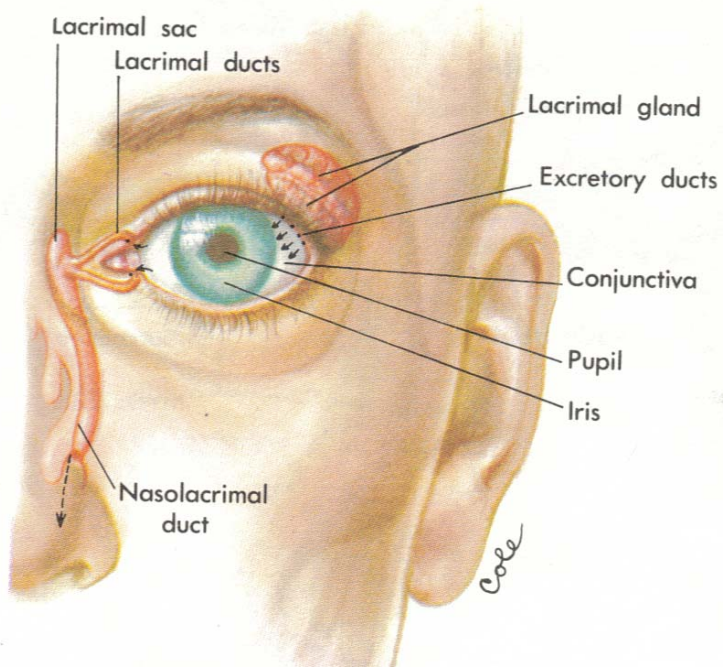
[illegible]

(Distance between examiner and student should be 6 feet or greater.)

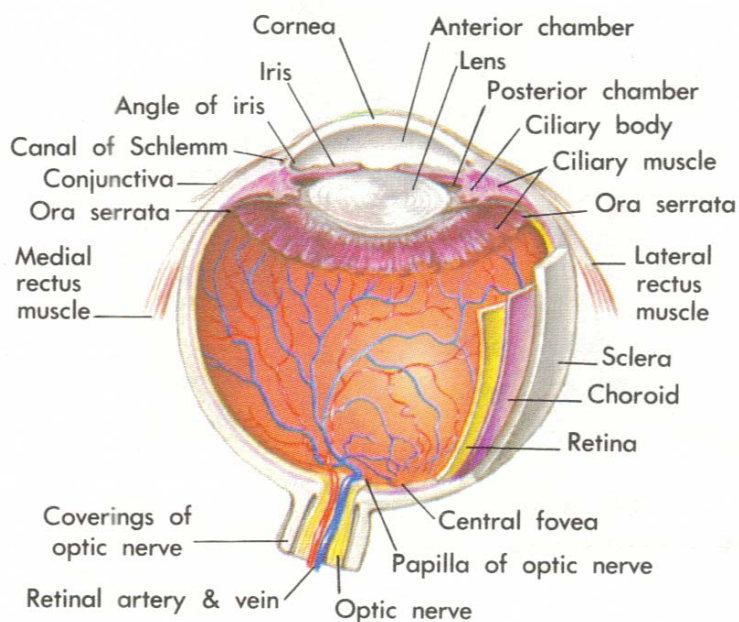
[illegible][illegible]

ANATOMY OF THE EYE

THE LACRIMAL APPARATUS AND THE EYE



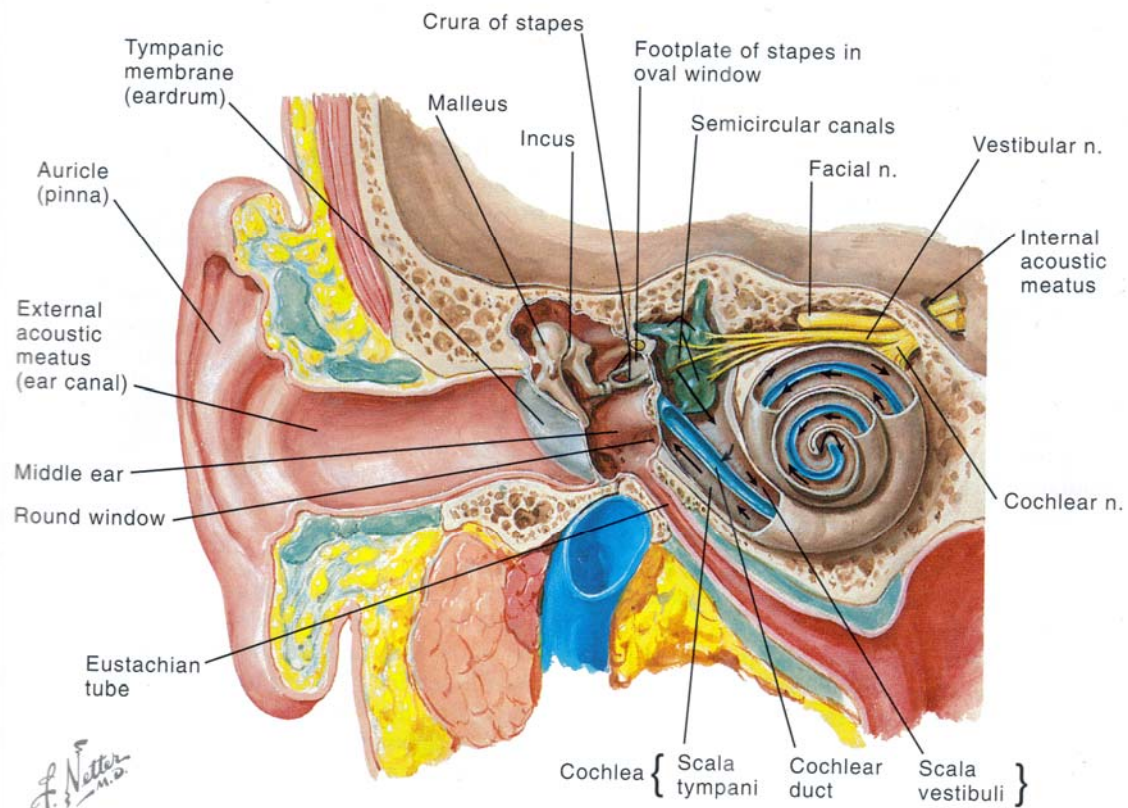
THE LACRIMAL APPARATUS



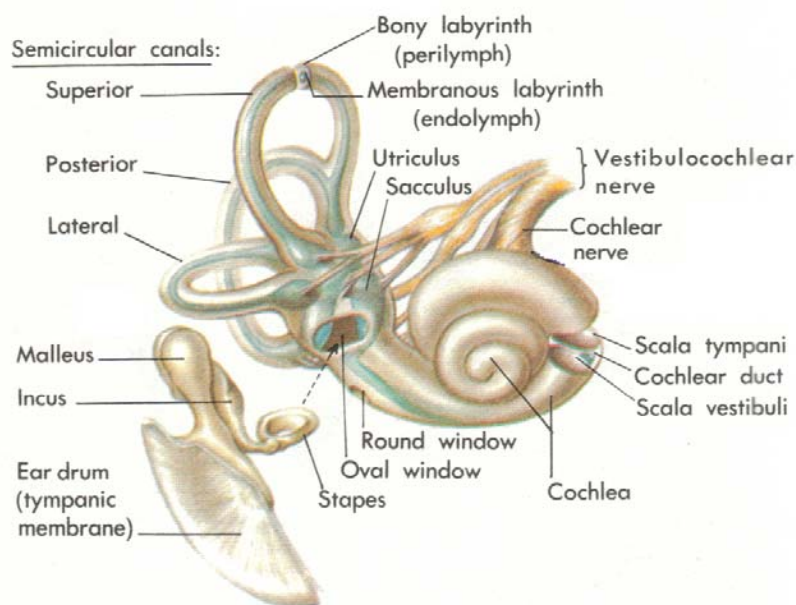
HORIZONTAL SECTION OF THE EYE

ANATOMY OF THE EAR

Pathways of Sound Conduction



THE ORGAN OF HEARING

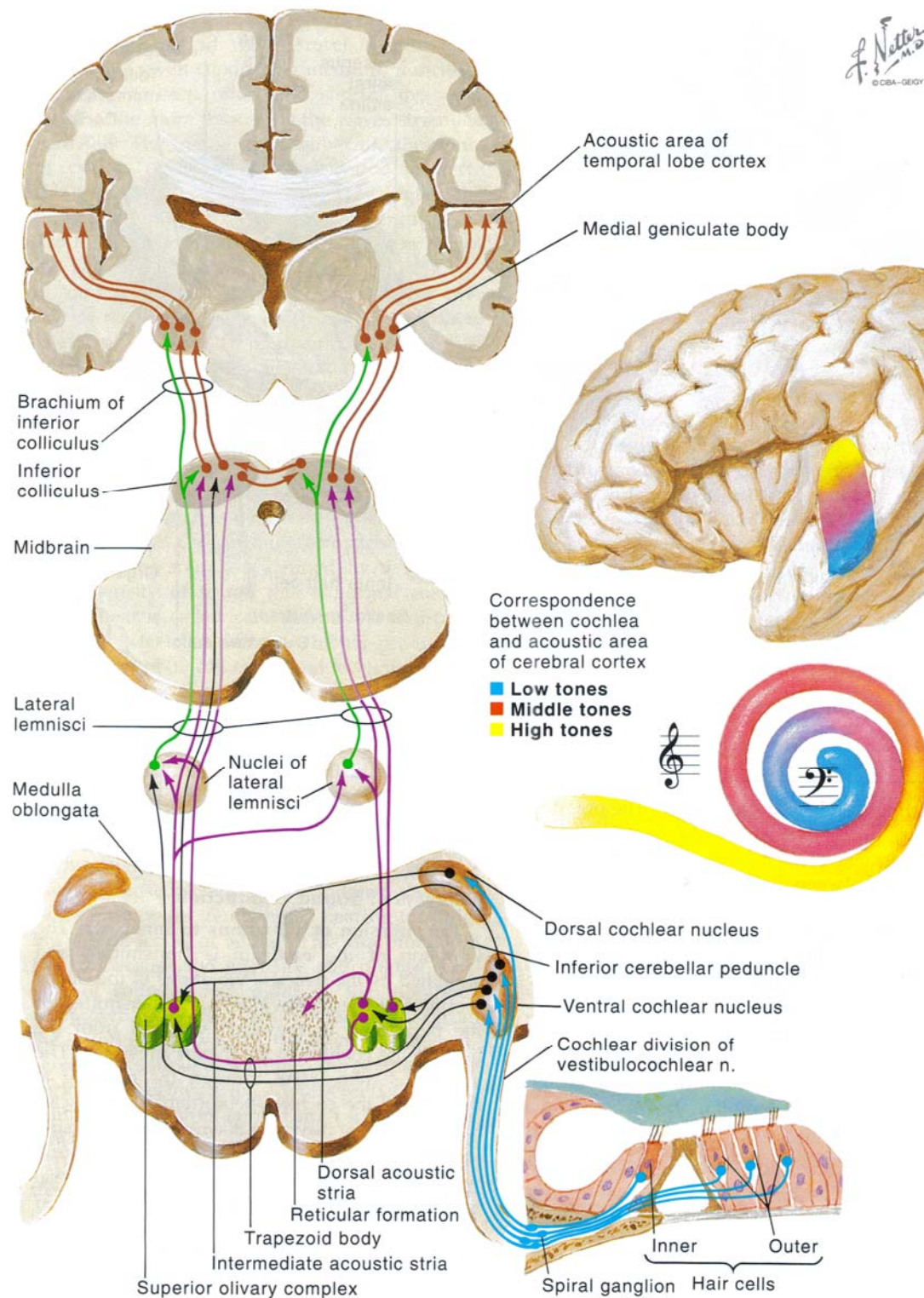


THE MIDDLE EAR AND INNER EAR

AUDITORY BRAINSTEM PATHWAY

THE PATH OF THE HEARING AND BALANCE NERVES FROM THE EAR TO THE BRAIN

Afferent Auditory Pathways



ACTIVITY:

SIMULATIONS OF LOW VISION

Try on as many different pairs of low vision goggles as possible during this activity. Complete a few math problems with each pair of goggles on.

$12 + 56 = \underline{\quad}$

$23 + 4 - 9 = \underline{\quad}$

$2 \times 6 = \underline{\quad}$

$93 - 7 = \underline{\quad}$

$55 \times 2 = \underline{\quad}$

$17 - 3 = \underline{\quad}$

$4 \times 8 = \underline{\quad}$

$47 - 5 = \underline{\quad}$

$19 - 3 = \underline{\quad}$

$9 - 5 + 3 = \underline{\quad}$

$11 \times 7 - 3 = \underline{\quad}$

$22 \div 11 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$3 \times 13 = \underline{\quad}$

$23 + 34 = \underline{\quad}$

$2 + 65 - 11 = \underline{\quad}$

$2 \times 43 = \underline{\quad}$

$86 - 3 + 7 = \underline{\quad}$

$23 - 9 = \underline{\quad}$

$39 - 25 = \underline{\quad}$

$20 \times 16 = \underline{\quad}$

$4.3 + 8.5 = \underline{\quad}$

$2.5 + 3.8 = \underline{\quad}$

$3.2 + 2.7 = \underline{\quad}$

$39 - 11 + 2 = \underline{\quad}$

$41 - 13 = \underline{\quad}$

$16 \times 3 = \underline{\quad}$

$21 - 32 = \underline{\quad}$

$200 - 128 = \underline{\quad}$

$25 \div 5 = \underline{\quad}$

$65 + 58 = \underline{\quad}$

$150 \div 3 = \underline{\quad}$

$16 \div 4 = \underline{\quad}$

$97 - 16 = \underline{\quad}$

$142 \times 2 = \underline{\quad}$

$96 \div 3 = \underline{\quad}$

$2 \times 82 = \underline{\quad}$

$48 - 67 = \underline{\quad}$

$76 - 39 = \underline{\quad}$

$19 - 4 + 2 = \underline{\quad}$

$58 + 23 - 5 = \underline{\quad}$

$99 - 23 = \underline{\quad}$

$127 - 3.5 = \underline{\quad}$

$42.5 - 37.2 = \underline{\quad}$

$23.8 + 22.1 = \underline{\quad}$

VISUAL CLUTTER EXAMPLES

Refer to Low-Incidence Disability Module slide # 59.

- A. This worksheet is quite cluttered. The color streaks may be confusing to students with visual or cognitive problems. The numbers are small and tend to blur. The problems are too close to each other. The problems may be clearer and more effective without the pictures.

Decimal Locksmith



The number on the lock is the target number.
Put an X on the two keys with numbers whose sum or difference is the target number.

1.

2.

3.

4.

5.

6.

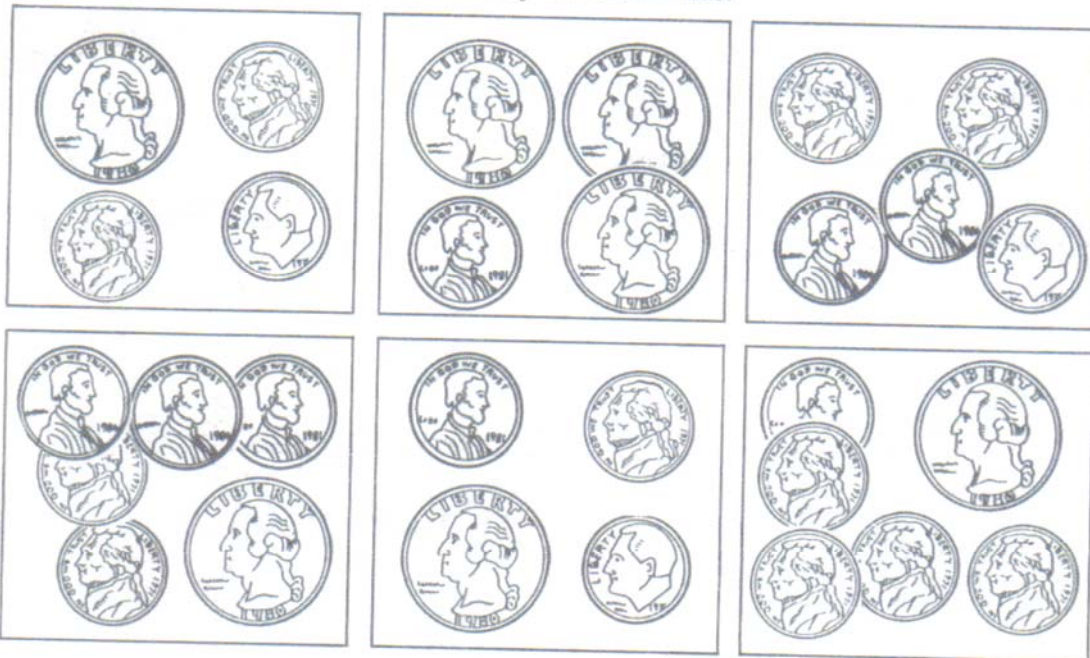
- B. This worksheet is somewhat cluttered. The drawings of the coins are not clear. Students with visual or cognitive problems may need to feel the coins or see their colors in order to tell them apart. This worksheet would be more useful if real coins were provided.

Collections of Money

LESSON

25

Six children emptied their pockets.
The pictures show the coins they have.
Tell how much money each child has.



1. Brett said, "I do not have any quarters." Brett has _____ c.
2. Juan said, "All of my coins are different." Juan has _____ c.
3. Maria said, "I have more than one quarter." Maria has _____ c.
4. Carla said, "I do not have any pennies." Carla has _____ c.
5. Jason said, "I have four nickels." Jason has _____ c.
6. Lisa said, "I have more pennies than nickels." Lisa has _____ c.

- C. This worksheet is not cluttered. There is adequate space between the problems. It would be easy to enlarge using a photocopier or scanner.

Number Facts



Divide.

The answer is a number fact.

- | | | | |
|-----------------------|--|------------------------|---|
| 1. $9\overline{)90}$ | The number of dimes equal to one dollar | 2. $3\overline{)93}$ | The number of days in December |
| 3. $4\overline{)48}$ | The number of eggs in a dozen | 4. $2\overline{)52}$ | The number of letters in the alphabet |
| 5. $3\overline{)396}$ | The number of rooms in the White House | 6. $6\overline{)600}$ | The number of years in a century |
| 7. $8\overline{)816}$ | The number of stories in the Empire State Building | 8. $5\overline{)250}$ | The number of states in the United States |
| 9. $7\overline{)280}$ | The number of nickels in a roll of nickels | 10. $2\overline{)176}$ | The number of keys on a piano |

PARABLE OF THE BLIND MEN AND THE ELEPHANT

This version of the ancient story from India is in the form of a poem by John Godfrey Saxe (1816-1887).

It was six men of Indostan
To learning much inclined,
Who went to see the Elephant ~ (Though all of them were blind),
That each by observation might satisfy his mind.

The First approached the Elephant,
And happening to fall
Against his broad and sturdy side, at once began to bawl:
"God bless me! but the Elephant is very like a wall!"

The Second, feeling of the tusk,
Cried, "Ho! what have we here?
So very round and smooth and sharp? ~ To me 'tis mighty clear
This wonder of an Elephant is very like a spear!"

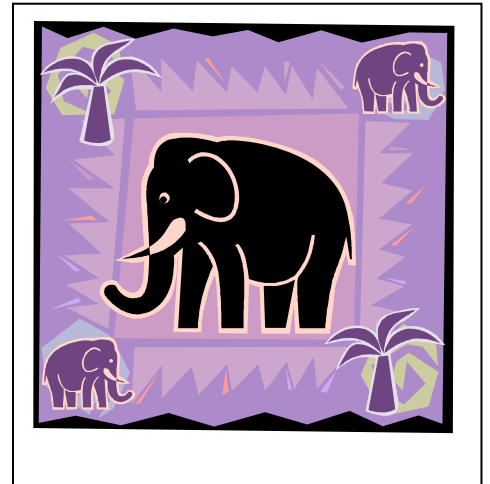
The Third approached the animal,
And happening to take
The squirming trunk within his hands, thus boldly up and spake:
"I see," quoth he, "the Elephant is very like a snake!"

The Fourth reached out an eager hand,
And felt about the knee.
"What most this wondrous beast is like ~ is mighty plain," quoth he;
"'Tis clear enough the Elephant is very like a tree!"

The Fifth who chanced to touch the ear,
Said: "E'en the blindest man
Can tell what this resembles most; ~ Deny the fact who can,
This marvel of an Elephant is very like a fan!"

The Sixth no sooner had begun
About the beast to grope,
Than, seizing on the swinging tail ~ that fell within his scope,
"I see," quoth he, "the Elephant is very like a rope!"

And so these men of Indostan
Disputed loud and long,
Each in his own opinion ~ Exceeding stiff and strong,
Though each was partly in the right ~ And all were in the wrong!



*Truth can be stated in different ways and
perception depends upon the perceiver.*

ACTIVITY:

CASE STUDY ~ KATIE

Case Description

- ⦿ Katie is 10 years old.
- ⦿ Her mother acquired Rubella while pregnant.
- ⦿ Katie has a profound hearing loss and has worn hearing aids since age 12 months.
- ⦿ She is legally blind and wears very thick glasses.
- ⦿ She uses a combination of oral language, sign language and Cued Speech to communicate.
- ⦿ Katie's speech intelligibility is fair. She receives speech-language therapy twice a week.
- ⦿ She has a severe problem with her short term memory.
 - If you show her a picture of an apple, she can name it, "apple." As soon as you turn over the picture & ask her what it was, she says, "I don't know." Show her again, and she says "apple." Turn it back over and ask what the picture was and she can't remember. This happens repeatedly with everything she tries to learn.

Questions to Discuss

1. What is Katie's primary disability?
2. What accommodations or educational programming would you want to use?
3. What assistive technology would you recommend for Katie?