

Ear and hearing | Read, compare, question

Study reference, not a clinical procedure authorization. Use models and supplied results. No canal insertion, irrigation, loud exposure or classmate diagnosis. No extra submission.

Locate the route

AC uses outer/middle-ear transmission plus cochlear/neural detection. BC bypasses outer/middle transmission but still needs cochlear/neural function. Unmasked BC may come from the more sensitive cochlea. [1, 2, 11]

Look, using a model

Otосcopy examines canal and eardrum. Normal-looking: intact, translucent/pearly gray, not bulging, slightly concave. Classic light reflex in an otoscopic view: patient right about 5 o'clock; left about 7. Redness/reflection alone cannot diagnose infection. No canal insertion or wax removal by students. [3, 4, 5, 6, 7, 22]

Rinne and Weber, 512 Hz

Rinne AC perceived longer/better than BC: positive, normal OR sensorineural loss. BC as long/longer: negative, possible conductive component; profound unilateral sensorineural loss can give a false negative. Simple unilateral Weber: toward affected side in conductive loss; toward better side in sensorineural loss. Midline can reflect normal OR symmetric impairment. Mixed/uncertain results need formal audiometry. [8, 9, 23]

Read the chart

Hz increases logarithmically to the right; dB HL increases downward. One octave = the physical span of 20 dB. Higher thresholds mean poorer sensitivity; 0 dB HL is not silence. A no-response arrow is an equipment-limit response, not an exact threshold. [10]

Compare, then describe

$ABG(f) = AC(f) - BC(f)$, same frequency. Practice flag: 15 dB or more, using reliable ear-specific results. ASHA's 10 dB BC-masking indication is a different rule. Normal-range BC + AC gap supports conductive; elevated AC/BC without significant gap supports sensorineural; elevated BC + additional gap supports mixed. Pattern does not prove cause. [2, 11, 12]

Choose a next step

Aids amplify sound; implants bypass damaged hair cells and stimulate nerve fibers. Neither restores normal hearing. Consider professional assessment, aided speech, anatomy, communication goals and preference. Captions/remote microphones and other access supports may help. Sudden hearing change: seek immediate medical attention. [15, 16, 17, 18, 19, 20]

Symbols: unmasked AC right O/red, left X/blue; masked AC right triangle/red, left square/blue. Unmasked mastoid BC right <, left >; masked right [, left]. Shapes identify conditions without color. [10, 21]

ASHA/Clark, dB HL: normal -10 to 15; slight 16-25; mild 26-40; moderate 41-55; moderately severe 56-70; severe 71-90; profound 91+. [12]

For this practice, PTA means the air-conduction average at 500, 1000 and 2000 Hz, calculated separately for each ear. Display one decimal. To apply the integer Clark bands, round the unrounded average to the nearest whole dB; an exact .5 rounds upward. Always report important individual-frequency thresholds too.

Older course resources may use 20 or 25 dB HL as a normal-limit convention. This reference and its constructed practice cases use the explicitly named ASHA/Clark bands. For assigned work, use the classification chart supplied by that lesson if it differs; never mix cutoffs. This reference does not change the paper quiz or its grading.

Source numbers refer to the illustrated guide. Current required lessons:

October 12 | Open the complete Schoology lesson

October 13 | Open the complete Schoology lesson

October 16 | Open the complete Schoology lesson