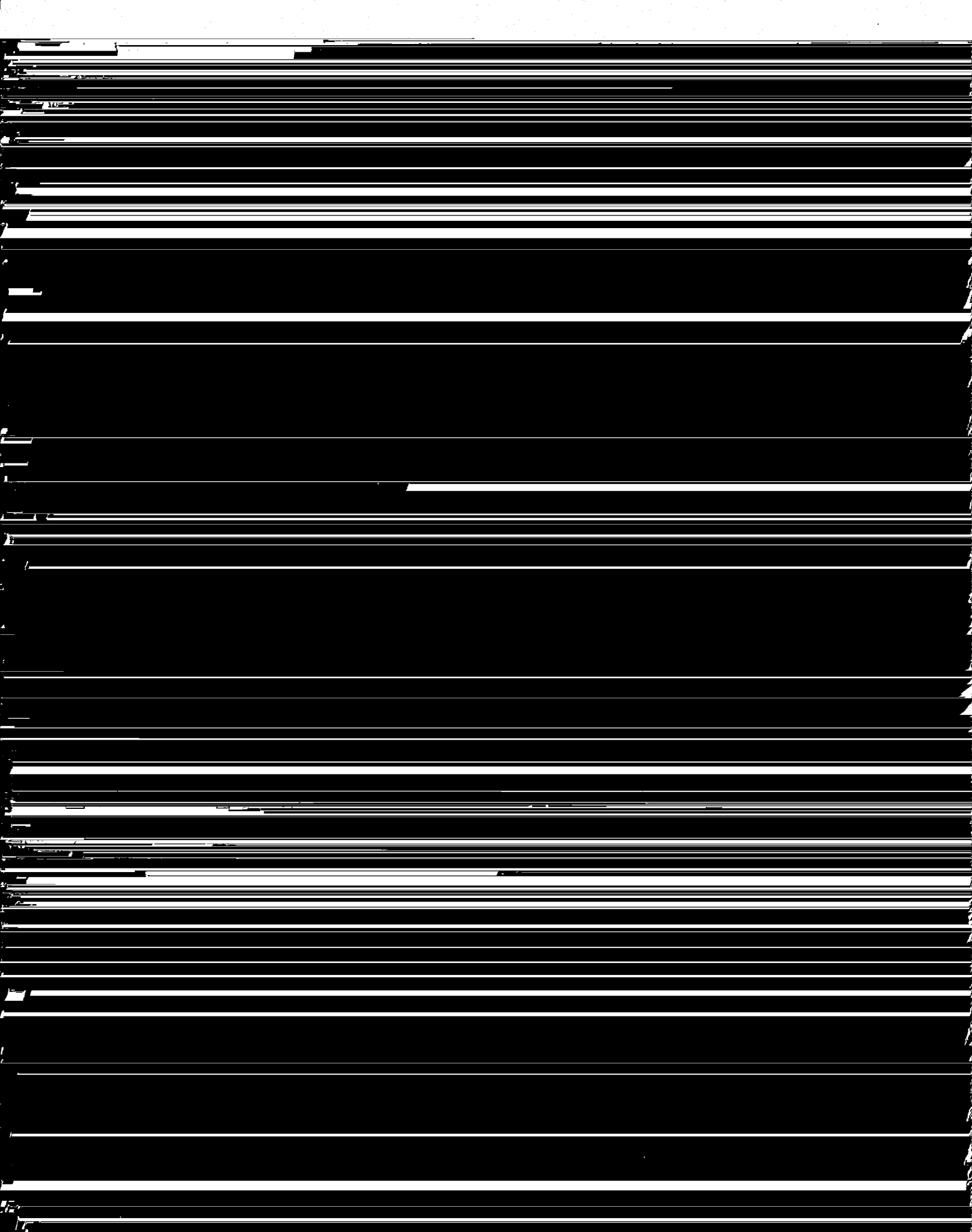


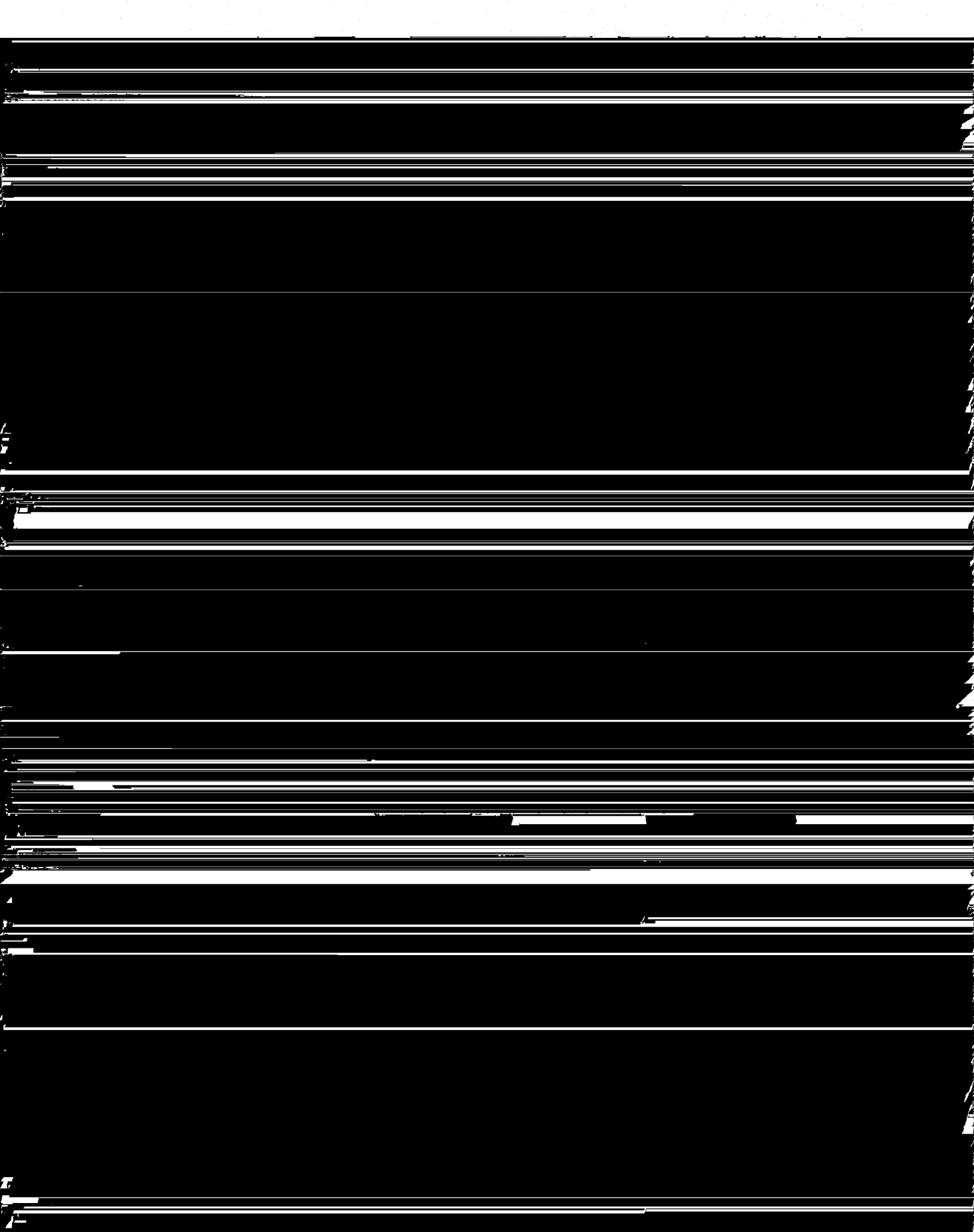
Behavioral Assessment of Hearing in Mice—Conditioned Suppression

UNIT 8.21D

Sound-measuring microphone, preamplifier and/or amplifier covering the range

6. 100 Hz () 1000 Hz () 10000 Hz () 100000 Hz ()

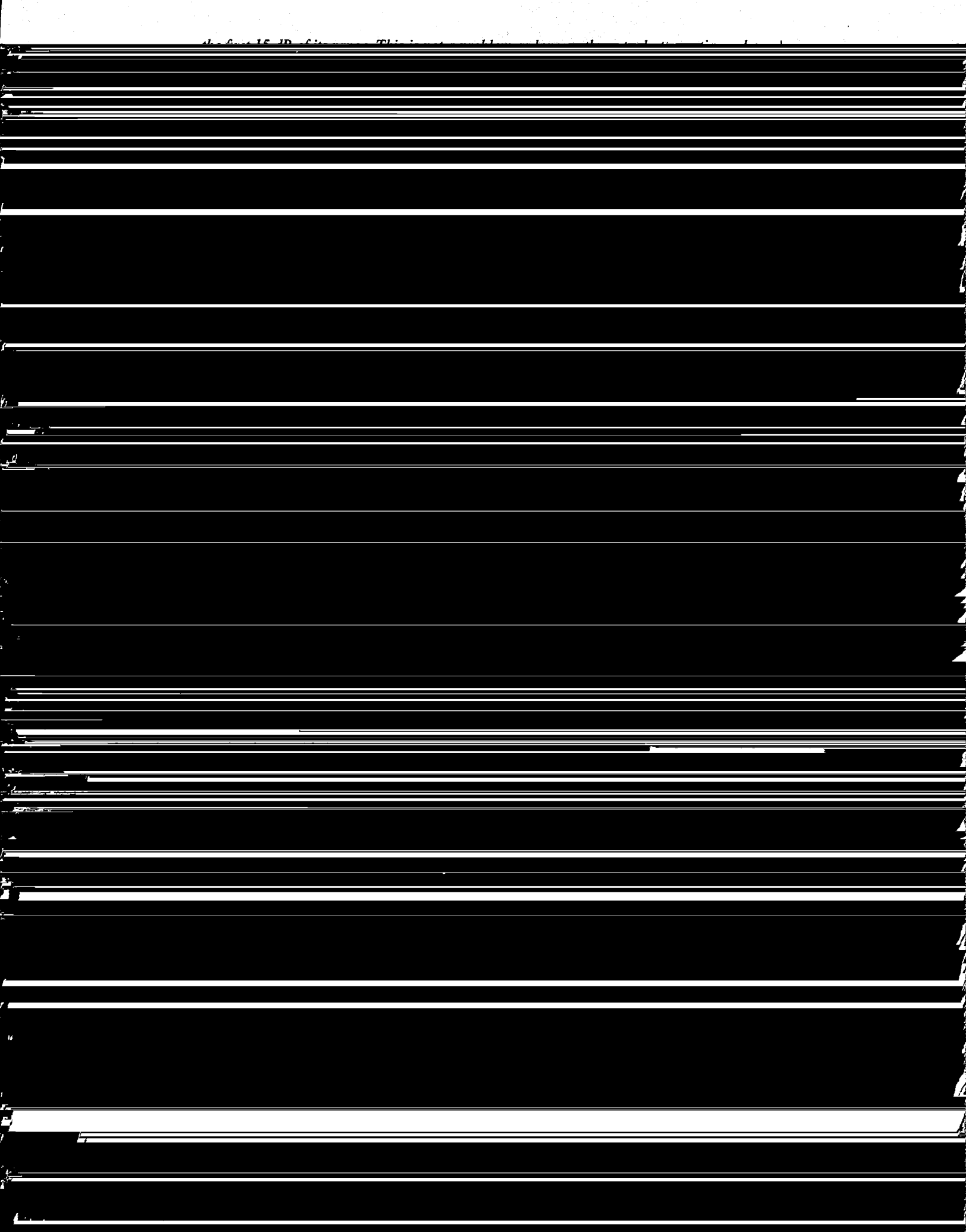




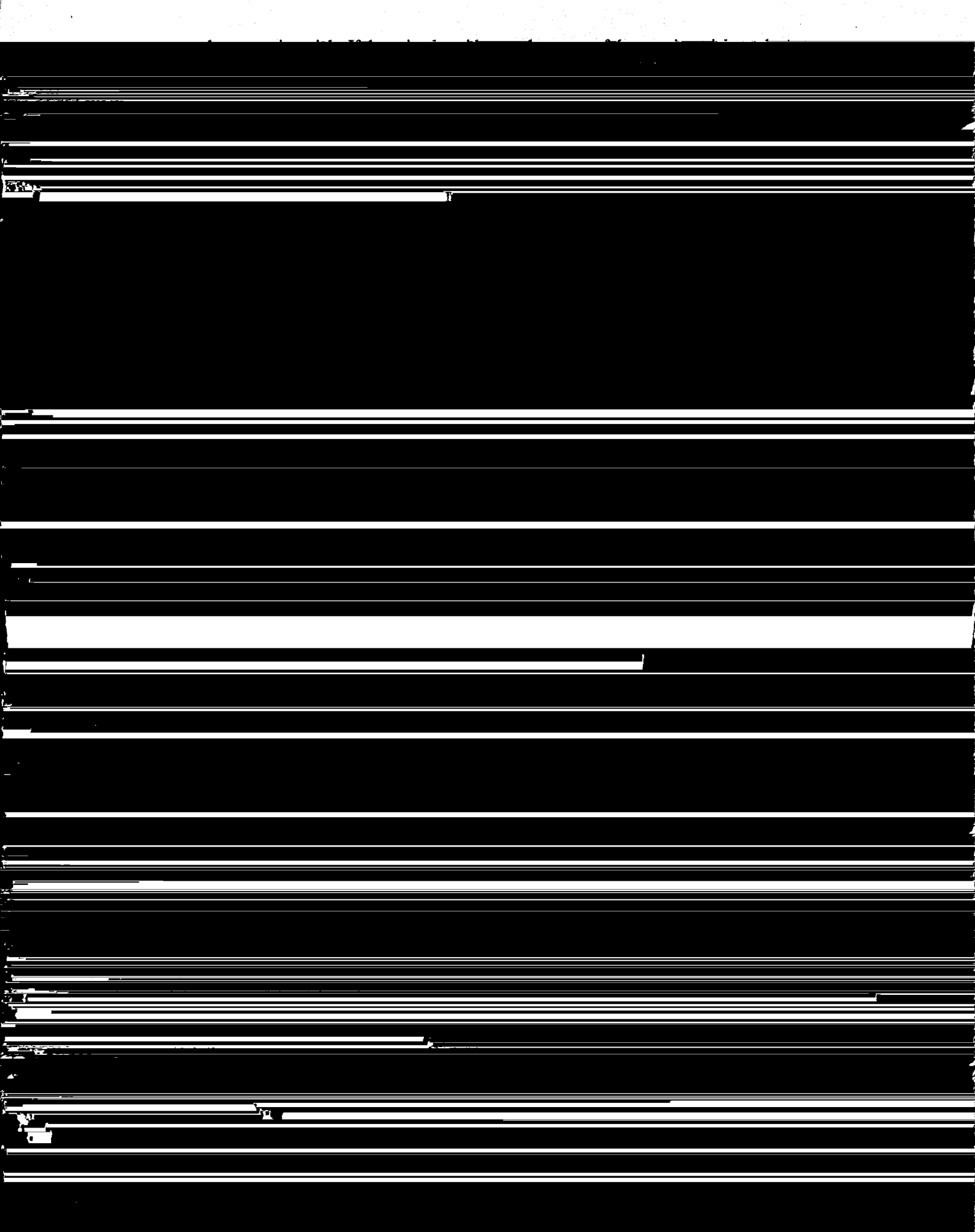
Program computer for behavioral testing

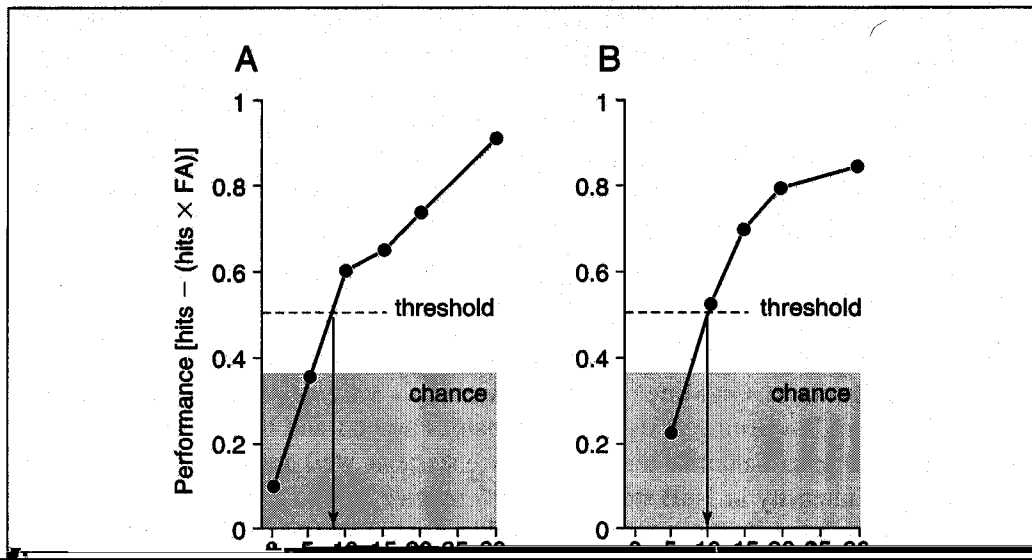
11. Program the computer to present a series of 2-sec trials in which a tone is presented

14. In signal detection terms, an avoidance response to a warning trial is referred to as a "hit" whereas a response to a safe trial is a "false alarm." Express each animal's



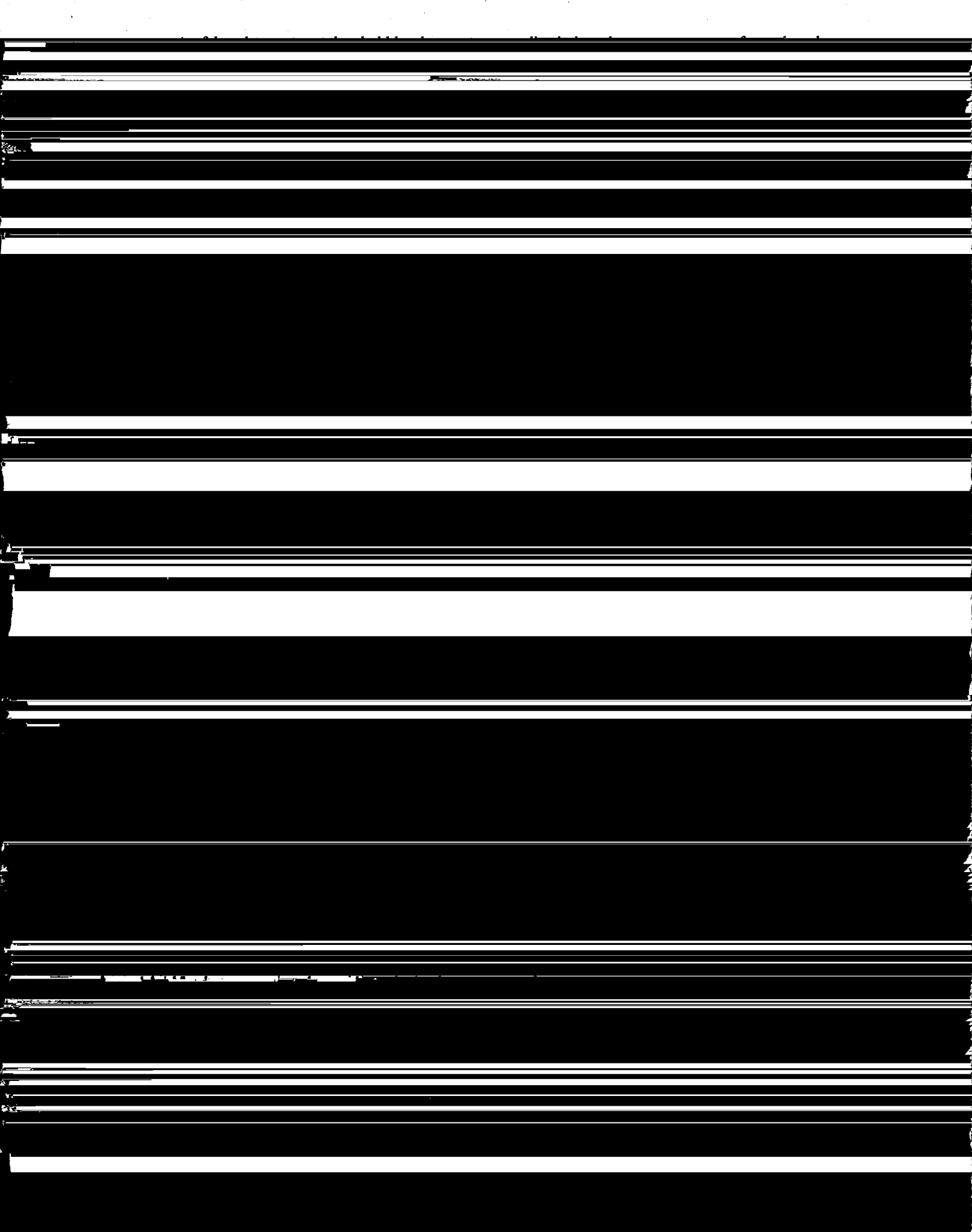
If working with mice suspected of having a hearing loss, a higher intensity may be





Analyze and interpret data

A psychophysical function can be generated by plotting an animal's performance for a



Because it can be difficult to accurately give an animal the ~2 ml it will need, one solution is to give it a piece of a fresh, sweet apple, starting with 1.5 g of apple for every 1 ml of water it needs to maintain body weight and adjusting the amount as needed. An alternative source of fluid is a substance such as Transcel

Mouse hearing range

Humans and mice have substantially different, although overlapping, hearing ranges. At a level of 60 dB SPL, the human hearing range extends from 31 Hz to 17.6 kHz (a range of ~9 octaves), with a best sensitivity of about -10 dB at 2 to 4 kHz (Jackson et al. 1999)

previously mentioned, it can be used to de-

Heffner, H.E., and Heffner, R.S. 2001. Behavioral