

Y

y. A value of the ordinate.

Yates correction. (Statistics) A correction for small samples in the calculation of chi-square in a 2-by-2 table, in which 0.5 is deducted from each figure exceeding expectation, and 0.5 is added to each figure that is less than the expected value. Assuming fixed marginal totals, which is rarely appropriate, the effect is to bring the distribution of the calculated chi-square nearer to the continuous distribution from which the usual chi-square tables are derived. *Compare* CORRECTION FOR CONTINUITY.

y-axis. The vertical axis on a graph.

y cell. A ganglion cell in the retina or lateral geniculate, with a large receptive field, which does not respond linearly to stimulation of on- and off-regions of its receptive field. It forms part of the MAGNOCELLULAR SYSTEM.

Y chromosome. One of the two chromosomes that determine sex, the other being the X CHROMOSOME; the XY pairing yields a male phenotype.

y coordinate. A value on the vertical axis of a graph.

yellow. *See* SPECTRAL HUES.

yellow-green. *See* SPECTRAL HUES.

yellow spot. A synonym for MACULA LUTEA.

Yerkes-Dodson law. The principle that performance on a task is an inverted U-shaped function of arousal (or motivation).

yes-no question. A question requiring a yes or no answer. *Contrast* WH QUESTION.

yes-no technique. A technique in which a signal (or two different signals) is presented and the subject has to say 'Yes' if he perceives the signal (or the difference between the two signals) and 'No' if he does not. Data obtained this way can be analysed by SIGNAL DETECTION THEORY.

yoga. A school of Hindu philosophy whose adherents practise mental and physical exercises to bring them into contact with some kind of ultimate reality. The exercises include contemplation and curious bodily postures; they are sometimes practised in the West to obtain relaxation and self-control.

yoked control. An experimental procedure in which the control and experimental subjects are paired. Within each pair the control subject receives the same stimuli, reinforcement, or punishment as the experimental subject, but without being allowed to make responses.

Young-Helmholtz theory. A theory of colour vision that is an early version of TRICHROMACY THEORY.