

L3

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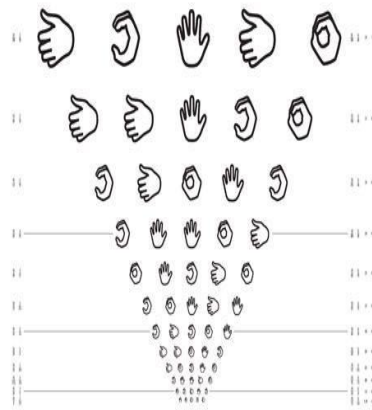
جامعة المستقبل
قسم تقنيات البصريات

طب عيون الاطفال

Visual acuity tests in children

❖ Hand test or Handy Eye Chart:

- The test relies on a child's ability to see a printed symbol of a hand positioned in one of three gestures: a thumbs-up gesture, a thumbs-down gesture or a victory sign (also sometimes recognized as a peace symbol). Progressively smaller font sizes of the symbols are presented to the child, and the result of the test is provided in a descriptive manner as the smallest sized symbol that the child can identify and the distance at which the symbol was held for the child to identify it.



❖ Sheridan gardener test.

➤ Comprehensive

- Includes:
- Orthotic Booklets 6/60-6/18 Red cover
- 6/18-6/6 Yellow Cover
- 6/6-6/3 Green Cover
- Near vision Blue Cover
- OAT Hamlin Chart
- The Sheridan Gardiner Test - Complete
- Contains near vision, distance and reduced Snellen tests which are all based on shape matching. The reading test has print sizes ranging from N5 to N48.
- The examiner shows letters of different sizes (corresponding to different levels of Snellen acuity) from a distance of 6 meters, to a child who holds a card with the same letters. Older children will point to the letter and turn the card to show it to the examiner.



❖ Fookes cube test (Lang Fixation Cube):

➤ Description

- These Lang Fixation Cubes have 5 different pictures each and with every turn of the cube, show a different picture. The images are colorful and engaging, and ideal to attract the attention of young children during vision testing.



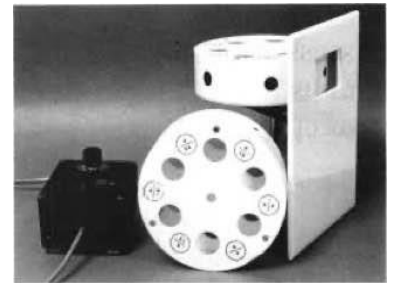
❖ Worth's ivory-ball test:-

- In 1896 Claud Worth introduced the 'ivory-ball test', which could be used for testing vision in children who are old enough to walk, usually between the ages of 1 and 3 years. It consists of a set of five ivory balls varying in size from 0.5 ins to 2.5 ins (cover image).



❖ Catford drum test :

- Was introduced by Olive and Catford.
- It is an objective method to evaluate the objective visual acuity by inducing optokinetic nystagmus. The motor driven drum consists of separated black dots of various sizes on a white background projected through a screen measuring 4*6 cm.
- Based on observation of Pendula Eye movements
- Testing distance is 60 cm
- It comprises of white cylinder marked with black dots of increasing size corresponding to visual acuities
- The drum is masked by a screen except for a rectangular aperture which exposes a single spot
- Spot is made to oscillate horizontally and stimulates eye movement



❖ Optokinetic Nystagmus Test (OKN) :

- Optokinetic nystagmus drum has been proposed as a method of measuring visual acuity in children.
- It has been used for assessing visual function in infants, hysterical patients, and malingerers. It is also of value in the diagnosis of disorders of the central nervous system.
- In this test, nystagmus is elicited by passing a succession of black and white stripes through patient's field of vision.
- When the subject views rotating strip drum his/her eyes involuntarily follow a strip which slow eye movement (pursuit movement) then return with fast eye movement (saccade movement) to fixate the new strip.

