



2 D and 3 D Mashruuca Farshaxanka (Fasalada 7^{aad} iyo 8^{aad})

Dooroo Mid (A ama B).

Ardaydu waxay u shaqayn karaan kali ama koox (doorashada macalinka).

A) Qaabka Isha

Sawir/samee qaabka isha. Tusi anatomiga aasaasiga ee il fayaw ama dhaawacan adoo tusinaya qaybaha isha adoo isticmaalaya sawirka buug ama garaafik laga helay “Hal lammaane Indho ah” bandhigga Power Point-ka (xaashiyaha #3 ama #4) ama xidhiidhka internetka

<http://preventblindness.org/wiseabouteyes/lessons/eye/>,

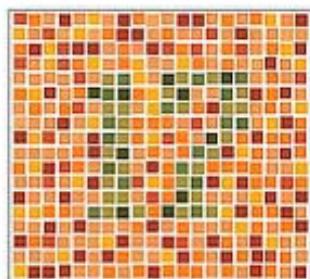
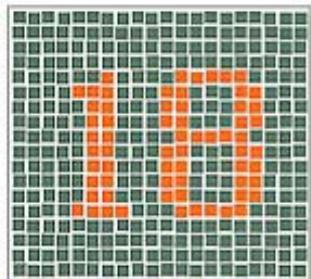
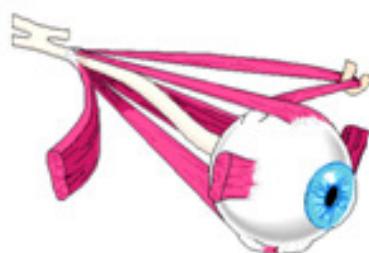
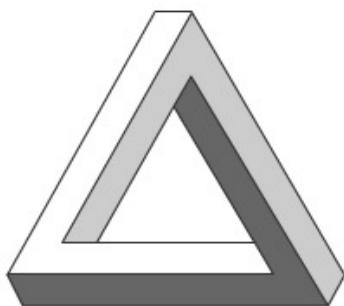
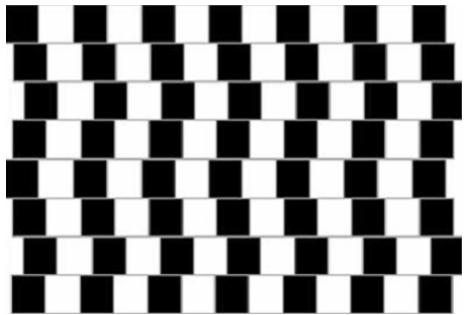
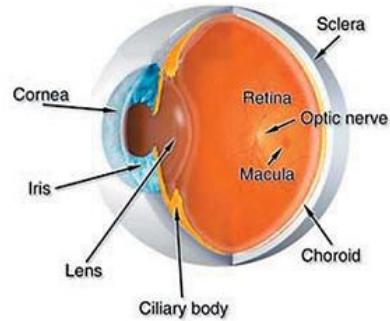
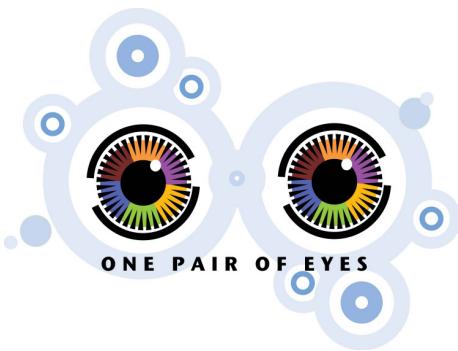
<http://www.preventblindness.org/vpus/glossary.pdf>, ama websaayd kasta oo ah “Cilmiga Tilmaamta Ardayga” ee xaashiyaha #96-98 ee PowerPoint-ka.

Sawir ama ranjiyee (2 D) ama dhis musawir (3 Dhinac leh) oo qaabka isha dadka ah adoo isticmaalaya ashyaawayaabo aad soo dooratay. Tusaaleyaasha qaar: Styrofoam, warqad xajiin leh, rabadh, ama xiitaa keeg nashqadee! Summadree ama awood u yeelo inaad sharaxdo qaab dhismeedka.

B) Xariijimaha Yaryar ilaa kuwa Waawayn

Abuur/samee sawir wayn oo ku tusinaya anatomiga isha, qalabka badbaadada, ama fikrado kale oo laga barto “Hal Lammaane Indho ah” sida baadhis indho la’anta midabka, gargaarka degdegga ah, dhaawac, infakshan/caabuq, iwm.

1. Iisticmaal sawir ilyar la xidhiidha (laga soo naqilay buug, jaraa’id ama internet, ama isticmaal tusaaleyaasha bogga xiga) ku dul sawir xiriijimo sax ah adoo si taxadar leh u cabbiraya calaamadaha $\frac{1}{4}$ " laynka taagan sawirka dhinaciisa, iyo calaamadaha $\frac{1}{4}$ " laynanka jiifa xagga sare iyo hoose ee sawirka dabadeedna adoo isku xidhaya calaamadaha si aad u samayso xariijimo leh laba jibbaarane ah $1\frac{1}{4}$ " x $1\frac{1}{4}$ ".
2. Tiri laba jibbaaraneyaasha. Tusaale, haddii sawirkaagii hore yahay 2" x 2" waxaad haysan doontaa xariijimo 8×8 ah oo 64 laba jibbaarane ah, midkasta yahay $1\frac{1}{4}$ " x $1\frac{1}{4}$ ".xajmi ahaan.
3. Si khafiifa ugu sawir xariijin wayn qalin qori tiro isku mida oo laba jibbaarane 1" ah.
Ogow: Wuxaad awoodi doontaa tan inaad leekaysiiso qiyaasta warqad $8\frac{1}{2}$ " x 11" ah (cidhif aad u yar leh) haddii sawirkaagii hore yahay 2" x 2" laakiin haddii sawirkaagii hore ka wayn yahay, waxaad u baahan doontaa warqad ka ballaadhan ama sabuurad!
4. U gudbi sawirka yar xagga ka xariijimaha waawayn adoo ku sawiraya qayb ka wayn laba jibbaarane yar oo kasta oo ku yaal xariijimahaaga yaryar laba jibbaarane u dhigma xariijimahaaga waawayn.
Wacan!
5. Awood u yeelo inaad sharaxdo caafimaadka isha ama afkaarta badbaadada ee sawirkaaga.



Various tests for color blindness **ADAM** <http://www.nlm.nih.gov/>