

Contact lenses



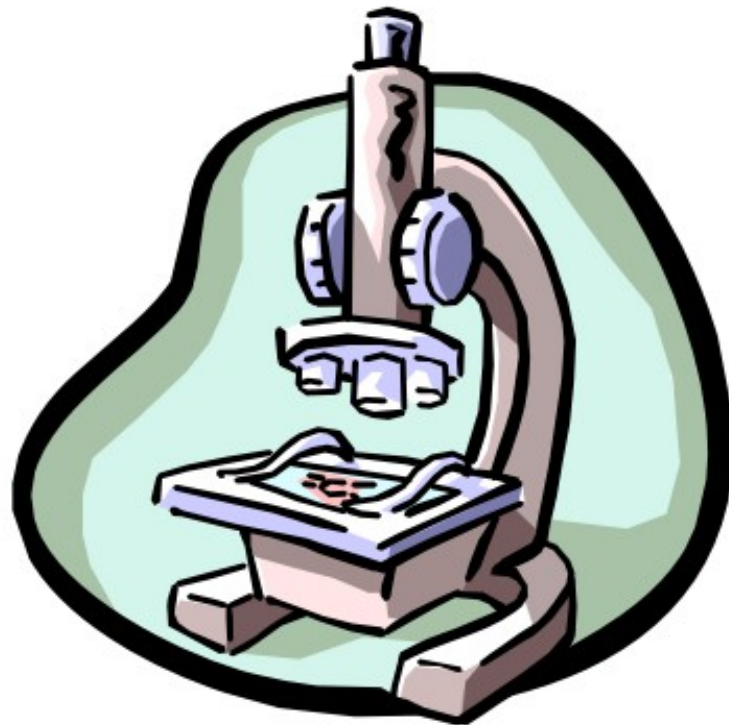
Contact lenses were thought of as early as 1508 when Leonardo da Vinci sketched and described several forms of them.



Leonardo da Vinci
(1452-1519)

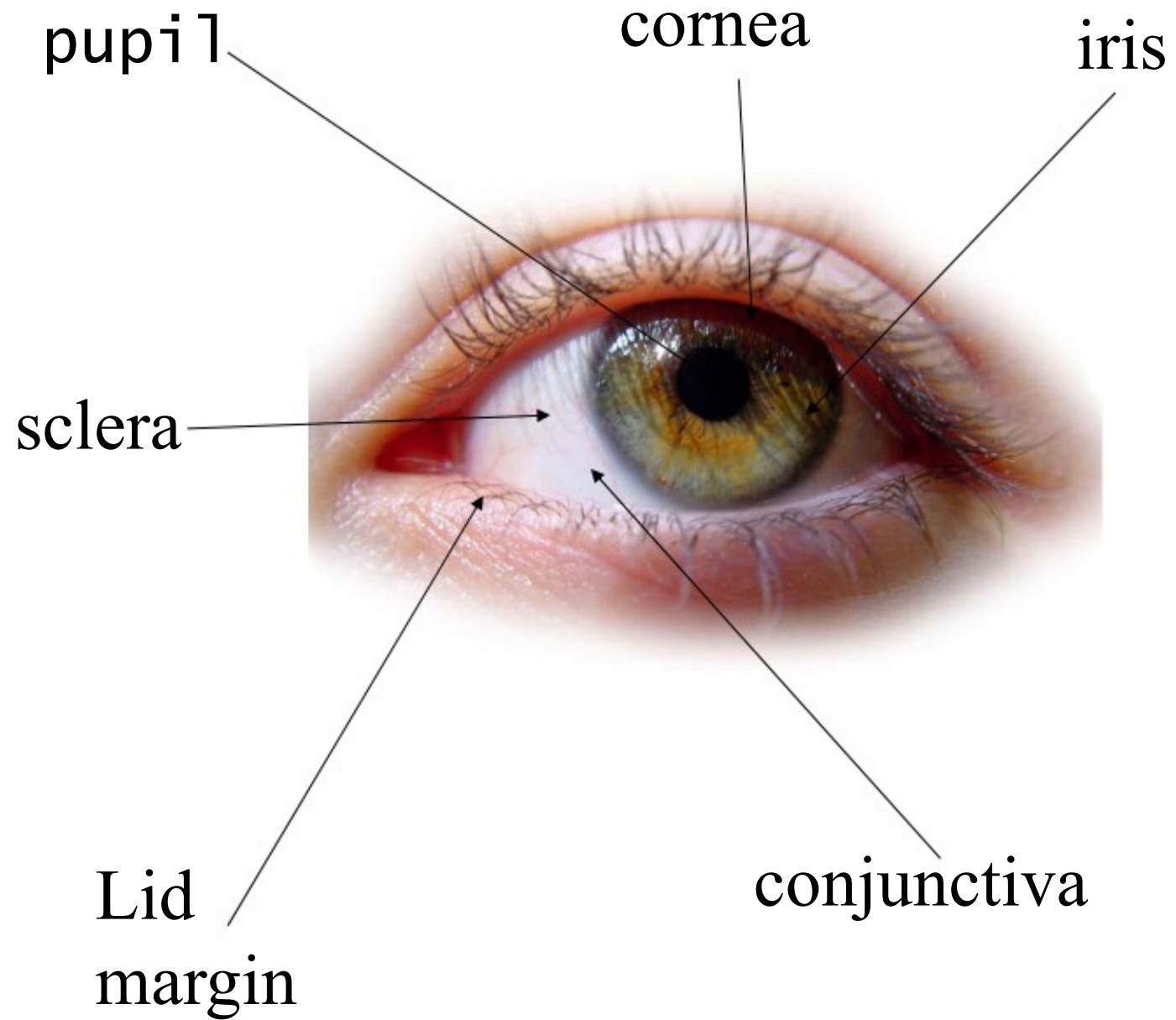


**Contact lenses are a
changing area of
optometry with new lenses
being constantly
developed**

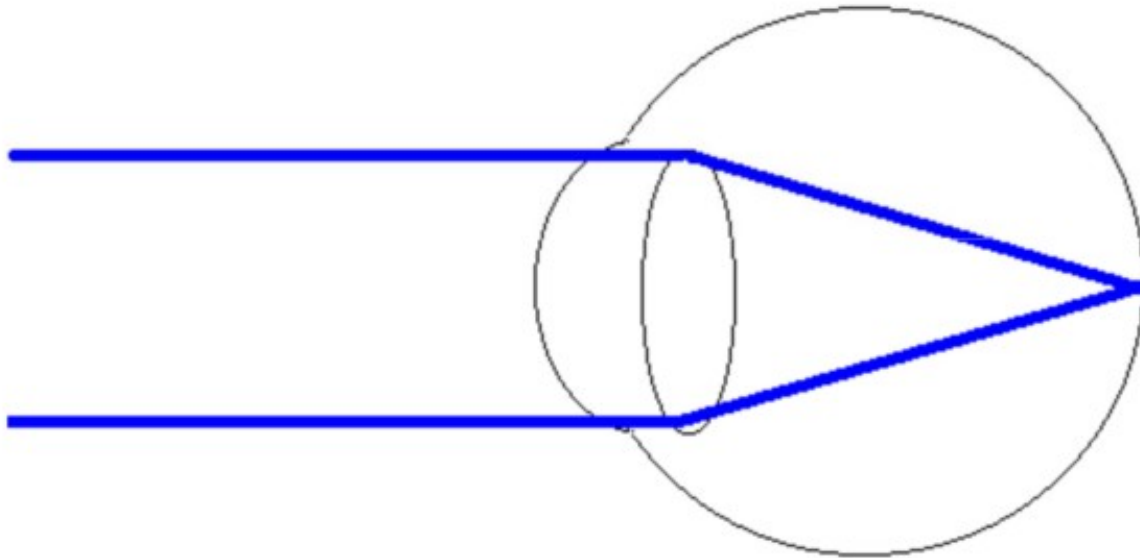


Refractive errors are corrected by contact lenses, which are placed directly on the cornea





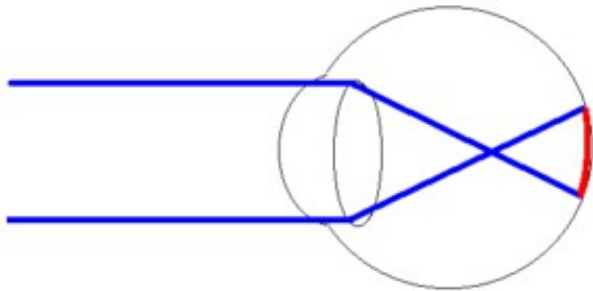
Normal focus



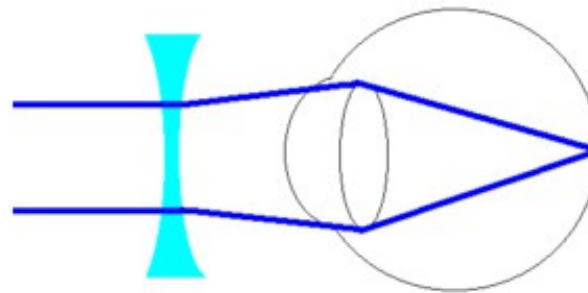
Short sightedness (Myopia)

- Distance vision blurry, near usually OK.

Short-sighted
focus



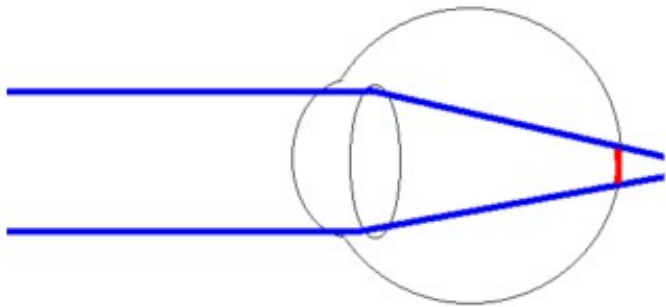
Short-sighted
correction



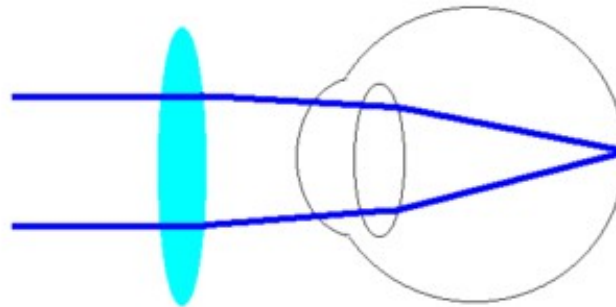
Long-sightedness (Hyperopia)

- Difficulty seeing clearly and comfortably up close.

Long-sighted
focus

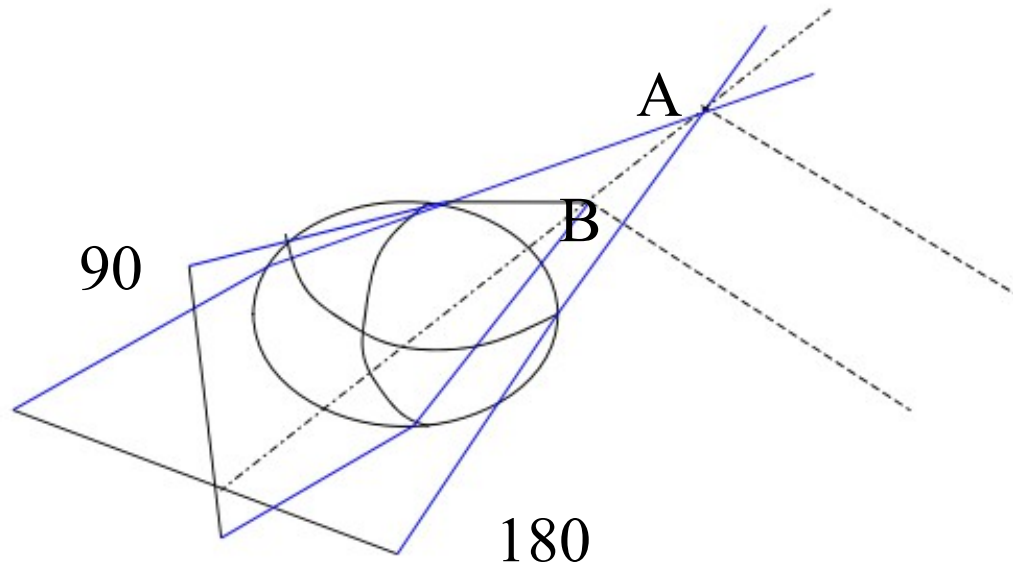


Long-sighted
correction



Astigmatism

- Irregular curvature of the eye (shaped more like a football than a basketball)
- Light in different planes focuses at different points



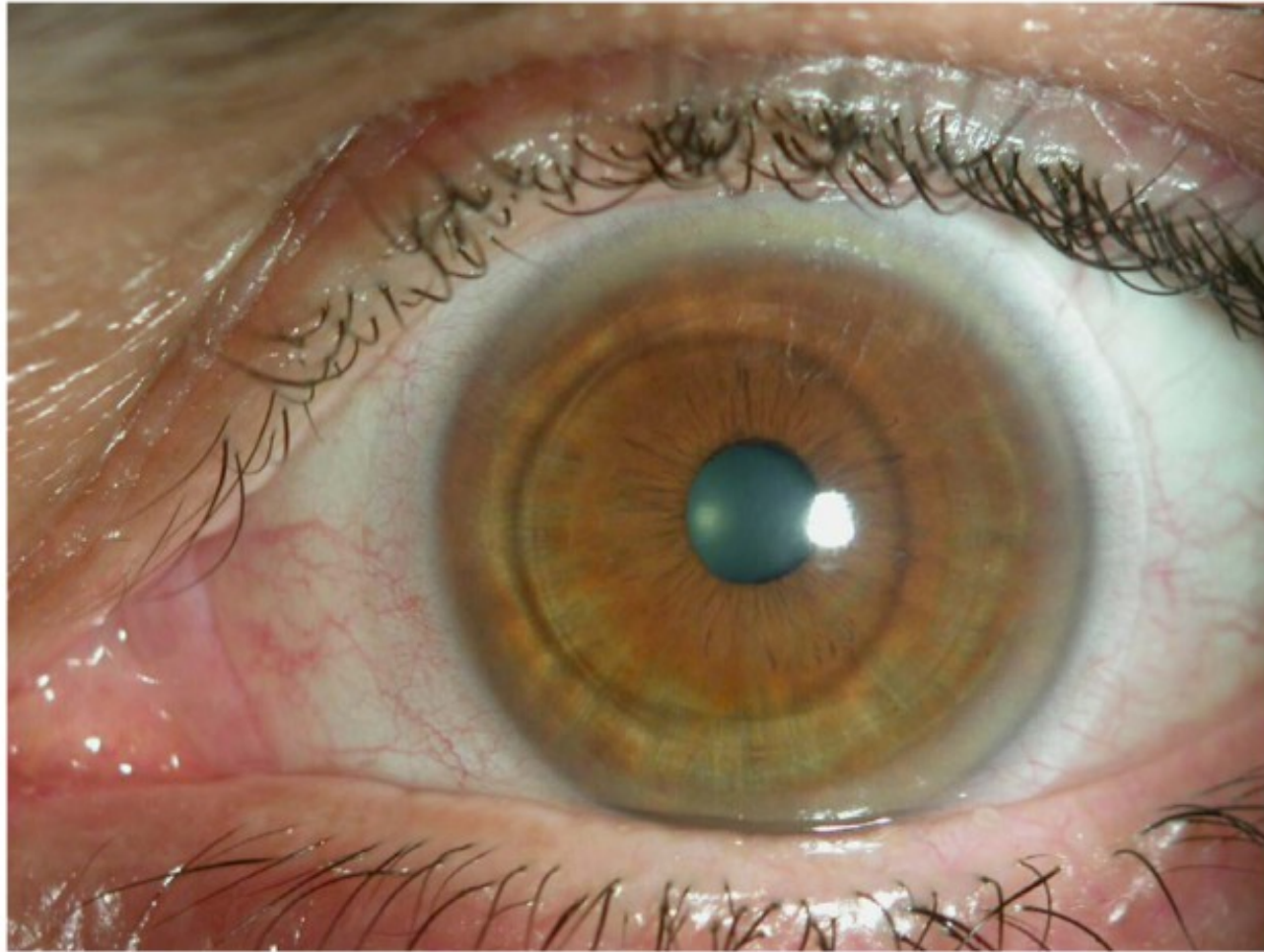
There are many types of contact lenses

- RGP lenses
- Soft lenses
 - Disposable or non-disposable
 - Coloured or clear
 - Spherical or toric
 - Extended wear
 - Multifocal

RGP lenses (rigid gas permeable)

- Smaller than size of cornea
- May be less comfortable than soft lenses initially
- Very effective in correcting astigmatism

RGP contact lens



Soft lenses

- Most commonly used (90%)
- Made from hydrogel plastic material containing water
- Are 1-2mm larger than cornea
- Easy to adapt to

Soft contact lens



Spherical lenses

- Correct short or long-sightedness
- Cheapest, most comfortable lenses
- Easy to get in disposable form

Toric lenses

- Correct astigmatism
- Lens is specially weighted to conform to irregular cornea
- More expensive than spherical
- Some are available in disposable



Disposable lenses

- Daily, two-weekly or monthly replacement
- Very simple cleaning (no cleaning for daily)
- Latest designs and materials
- Very popular

Coloured lenses



Handling tint

- Useful when inserting or removing

Enhancing tint

- Makes light coloured eyes more vivid

Opaque tint

- Can change brown eyes to blue

Extended wear lenses

- New technology
- Made from silicone material which transmits oxygen well
- Can wear for up to thirty days without removing
- Will not suit all people - your optometrist will advise

Multifocal contact lenses

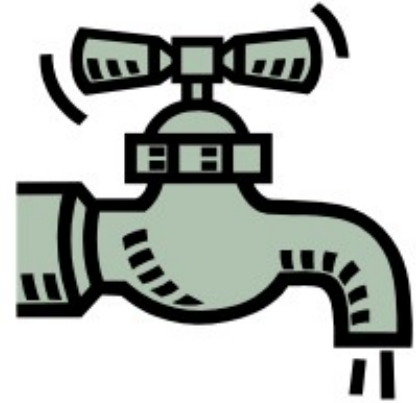
- Can wear one reading lens, one distance
- Can have dual focus lenses
- New technology - slightly more expensive
- Available as a disposable lens

Advantages of contact lenses over glasses

- Better field of view
- No fogging up
- No one has to know you have refractive error
- No frames - eg, useful for sport
- Sometimes the vision is better



Hygiene is extremely important with contact lenses

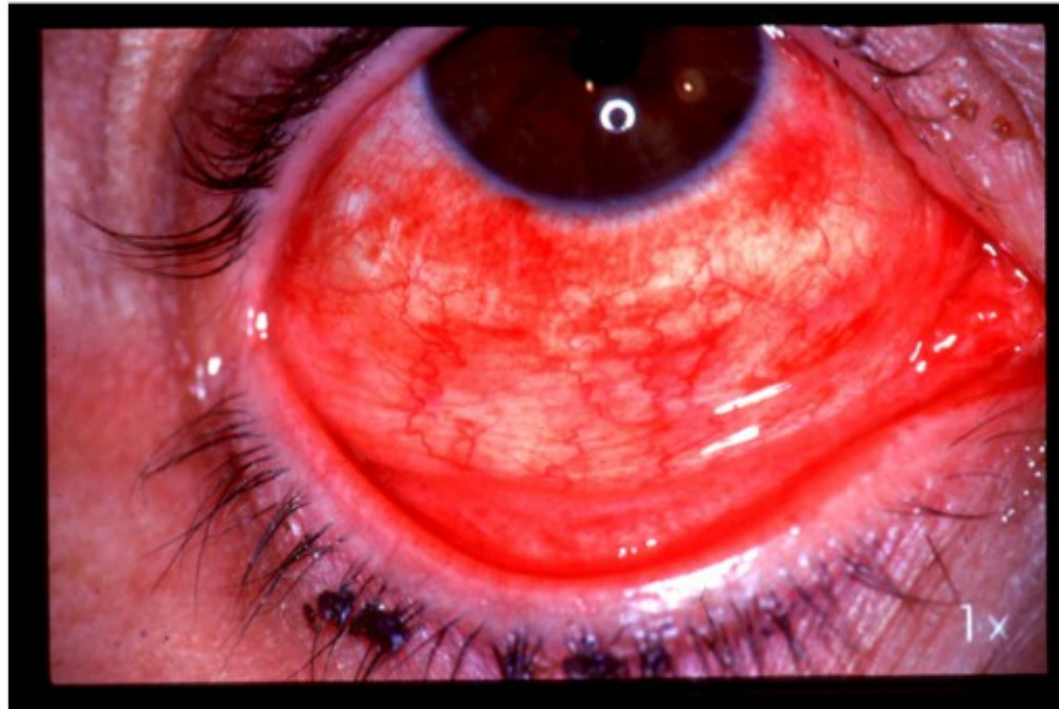


Always wash your hands before touching lenses

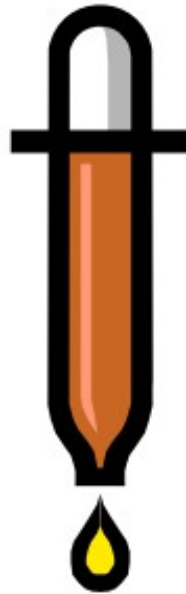
If lenses are not clean, bacteria can stick to them

A tiny scratch on the eye can get infected

**If you have a sore, red eye
take your lenses out and
go to see your optometrist
ASAP**



**If properly looked after,
the chance of having an
infection with contact
lenses is extremely low**



Consultations for contact lenses

□ **Contact lenses need to be fitted to each individual eye**

□ **Several tests are required for:**

- measuring and trying the lenses
- teaching insertion and removal
- after care

□ **Your optometrist can advise you about the tests are required**

Optometrists

- Detect and diagnose problems with eye health
- Prescribe glasses or contact lenses, if required
- Diagnose and treat problems with focusing



Optometrists

- Are university educated and regularly undertake continuing professional education
- No referral is required

To find an optometrist

□ Yellow pages

□ NZ Association of Optometrists

www.nzao.co.nz

0800 439 322

