PRK
Surface ablation surgery

Step 1 – Outer layer preparation
The eye is anesthetized with drops. A diluted alcohol solution is applied to the cornea to loosen the outer layer (skin cells).

Step 2 – Outer layer removal
The skin cells are then removed using a manual instrument.

Step 3 – Corneal sculpting
An excimer laser sculpts the corneal tissue within a matter of seconds to correct for near or far-sightedness and/or astigmatism.

Step 4 – Eye protection
Finally, a protective bandage lens is placed over the eye until the skin cells heal within a few days.

LASIK
Flap surgery

Step 1 – Flap creation
The eye is anesthetized with drops. Femtosecond laser pulses are used to create a flap within the front portion of the cornea. Skin cells remain largely intact.

Step 2 – Flap is folded back
The prepared flap is folded back like the page of a book, exposing the inner corneal tissue to be treated.

Step 3 – Corneal sculpting
An excimer laser sculpts the corneal tissue within a matter of seconds to correct for near or far-sightedness and/or astigmatism.

Step 4 – Flap is repositioned
Afterward, the flap is returned to its original position. The skin cells at the edge of the flap need only 4–5 hours to heal.

SMILE
Minimally invasive

Step 1 – Lenticule creation
The eye is anesthetized with drops. A contact-lens-shaped piece of corneal tissue, called a lenticule, is created inside the intact cornea using the femtosecond laser.

Step 2 – Lenticule removal
The femtosecond laser creates a small tunnel-incision. The lenticule is dissected and removed through the small tunnel incision with minimal disruption of the skin cells.

Step 3 – Impairment is corrected
Removing the lenticule changes the shape of the cornea, thereby correcting nearsightedness. The skin cells at the edge of the tunnel incision need only 1–2 hours to heal.
PRK, LASIK, SMILE: How Do They Differ?

**PRK**
If PRK has been recommended for you, this means that you are a candidate for refractive surgery. However, the thickness of your cornea is not suitable for either LASIK or SMILE. After the healing process is complete, patients who have PRK can expect to have excellent vision, comparable to patients who have LASIK or SMILE.

**After PRK, you can expect:**
- A protective bandage contact lens will be placed during surgery. It will need to be removed after 4 days.
- Longest visual recovery time. It will take about 1 week to feel comfortable driving, particularly in unfamiliar areas.
- Intermittent light sensitivity, scratchiness, tearing for 4 days following the procedure.
- Risk for dry eye, can be noticeable up to 1 year.
- Same accuracy and likelihood of achieving 20/20 vision (95%).

**LASIK**
If LASIK has been recommended for you, this means that you are a candidate for refractive surgery. LASIK is commonly used for patients with sufficient corneal thickness, who have an average level of near - or far - sightedness and any level of astigmatism. This has been the most common option for patients over the last 15 years.

**After LASIK, you can expect:**
- Fastest visual recovery time.
- Patients usually report excellent vision within 24 hours.
- Light sensitivity, scratchiness, tearing for 4-5 hours following the procedure.
- Risk for dry eye, can be noticeable up to 1 year.
- Same accuracy and likelihood of achieving 20/20 vision (95%).

**SMILE**
If SMILE has been recommended for you, this means that you are a candidate for refractive surgery. SMILE is a great option for patients with moderate to high myopia (nearsightedness) but without astigmatism. Additionally, SMILE is a great option for patients with a high risk of developing dry eye.

**After SMILE, you can expect:**
- Medium visual recovery time.
- Minimally invasive, fast, and least discomfort after surgery.
- Light sensitivity, scratchiness, tearing for 1-2 hours following the procedure.
- Lowest risk for dry eye.
- Same accuracy and likelihood of achieving 20/20 vision (95%).