



Basic Paraoptometric Terminology

Paraoptometrics need to learn the skills and terminology necessary to help assist the doctor of optometry along with helping to manage the practice. Below are some basic terms every paraoptometric needs to know.

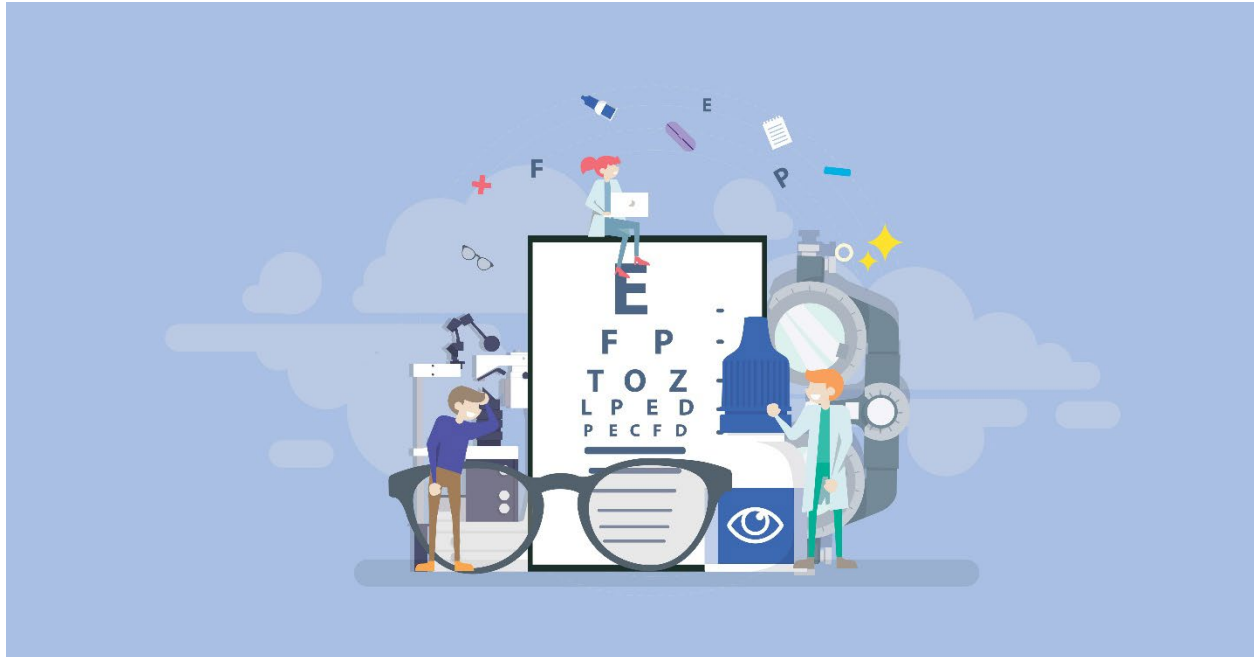


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BASIC BUSINESS TERMINOLOGY

Accounts Payable - Outstanding business obligations that are owed to others.

Accounts Receivable - Outstanding obligations owed to the business by others.

Accounting - A system that provides quantitative information about finances.

Assets - The value of everything a company owns and uses to conduct their business.

Business - An organization that operates with the intention of making a profit.

Business Plan - The ability to create business goals, how they are believed to be attained and the plan to achieve them.

Business to Business (B2B) - One business sells goods or services to another business.

Business to Consumer (B2C) - A business sells goods or services directly to the end user/consumer.

Cash Flow Statement - A picture of all cash inflows and outflows within the business.

Company - Usually considered a business that has employees.

Contract - A formal agreement to do work for pay.

Delivery - When a product is delivered to a customer completely finished.

Depreciation - The degrading value of an asset over time.

E-Commerce - Buying and selling over the internet.

Employee - A person working for a company.

Entrepreneur - Someone who organizes, manages and takes on the risk of starting a new business.

Expense - Money spent on supplies, equipment or other investments.

Finance - The management and allocation of money and other assets.

Fixed Cost - A one-time expense that does not vary with business volume.

Gross Profit - The percentage of business income before expenses.

Industry - A category of like businesses.

Just in Time (JIT) - A strategy to improve a business return on investment (ROI); such as regularly reviewing ROI, creating a new plan to obtain better return, eliminating, or improving areas of poor performance and reducing inventory and cost.

Liabilities - The value of what a business owes to someone else.

Management - The act of organizing and conducting a business to accomplish goals and objectives.

Marketing - The process of promoting, selling and distributing a product or service.

Net Income/Profit - Revenues minus expenses.

Net Worth - The total value of a business.

Payback Period - The amount of time it takes to recover the initial investment of a business.

Payroll Taxes - Monies required by law to be withheld from an employee paycheck each pay period. This includes Social Security, Medicare, federal income tax, state unemployment tax and state income tax.

Product - Something produced or manufactured to be sold; a good.

Profit Margin - The ratio of profit divided by revenue displayed as a percentage.

Quality Assurance - Management of the quality of materials and service for maintaining a high standard of performance, such as coordination of proper data collection from patients, including history and insurance information.

Return on Investment (ROI) - A measurement of success of a project; the percent of profit earned on an investment, such as measuring how much time and expenses incurred by staff on a particular task.

Revenue - The entire amount of income before expenses are subtracted.

Sales Prospect - A potential customer.

Service - Work done for pay that benefits another.

Supplier - The person or company that provides goods or services needed to do a job.

Target Market - A specific group of customers at which a company aims its products and services.

Variable Cost - Expenses that change in proportion to the activity of a business.

BASIC MEDICAL AND VISION TERMINOLOGY

Accommodation – The ability of the eye to focus from distance to near.

Ametropia – Refractive condition in which, when accommodation is relaxed, parallel light rays entering the eye do not focus on the retina. Examples would be myopia, hyperopia and astigmatism.

Aphakia – Absence of the crystalline lens.

Aqueous humor – Clear fluid that is produced in the ciliary processes and fills the space from the posterior cornea to the anterior vitreous; maintains the intraocular pressure; nourishes the cornea, iris, and lens.

Asepsis – The practice to reduce or eliminate contaminants (such as bacteria, viruses, fungi and parasites) from entering the operative field in surgery or medicine to prevent infection.

Astigmatism – Optical defect in which the light entering the eye does not form a single point focus, but forms two focal points; corrected by use of cylindrical eyeglasses or contact lenses (spherical or toric).

Base curve – Measurement of the back curvature of a lens.

Bifocal – A lens that provides both distance and near correction.

Binocular – Simultaneous use of both eyes.

Biomicroscope – Instrument used for observing a fit of contact lenses, checking for foreign bodies in the eye and looking at all parts of the front of the eye.

Bulbar – Conjunctiva covering the eyeball.

Cataract – An opacity of the crystalline lens capsule.

Chief complaint – Patient's reason for the office visit.

Concave lenses – A lens that is thinner in the center and thicker at the edges; parallel light passing through this type of lens is diverged, or refracted, away from the midline; also known as a minus lens.

Confrontation fields – A technique used to screen for visual field defects using the fingers of the examiner.

Convex lenses – A lens that is thicker in the center and thinner at the edges; parallel light rays passing through this type of lens are refracted by each surface to converge toward the midline behind the lens; also known as a plus lens.

Diopter – Unit of refractive power; abbreviated with the letter "D."

Disinfection – To destroy harmful bacteria and viruses.

Edema – Swelling of tissues due to fluid influx.

Emmetropia – The power of the cornea and the lens at rest correspond with the axial length of the eye, so parallel light rays are appropriately refracted to focus on the retina.

Fluorescein – A dye used topically to evaluate corneal integrity and intravenously to evaluate blood vessel integrity. The tear film quality is best observed when a fluorescein drop is used.

Fovea – Central (1.5 mm) area of the macula; responsible for the sharpest vision, fine discriminations and high visual acuity. The area of highest concentration of cone cells and no blood vessels; also called fovea centralis.

Fundus – Interior portion of the eyeball that can be seen on ophthalmoscopy or photography. Includes the retina and optic disk.

Glaucoma – Intraocular pressure disease.

Hyperopia – A refractive condition in which, when accommodation is relaxed, parallel light rays entering the eye focus behind the retina; also known as farsightedness.

Indirect ophthalmoscope – An instrument used to take stereoscopic views of the fundus.

Intraocular pressure – Fluid pressure maintained in the eye by the aqueous humor; measured with a tonometer.

IOP – Intraocular pressure.

Keratometer – Instrument used to measure the corneal curvature.

Lensometer – Instrument used for determining the power of an eyeglass or contact lens.

Limbus – The area of the eye dividing the cornea from the sclera.

Macula – Central portion of the retina surrounding the fovea; responsible for acute central vision.

Macular degeneration – A disease of the eye, involving loss of structure and function of the macula.

Minus lenses – A lens that diverges light.

Monocular – Use of only one eye.

Myopia – A refractive condition in which, when accommodation is relaxed, parallel light rays entering the eye focus in front of the retina; known as nearsightedness.

Ocular Adnexa - Part of the external part of the eye examination to rule out any abnormalities or ocular conditions in the adjacent structures of the eye, such as eyelids, lashes, eyebrows, lacrimal apparatus, tarsal plates, orbit, extraocular muscles and conjunctiva.

Ophthalmoscope – An instrument used in examining the interior of the eye.

Palpebral – Conjunctiva that lines the inside of the eyelids.

Pantoscopic angle or tilt – The angle the frame front makes with the temples when viewed from the side; lower rims are closer to the face than the upper rims.

PD – Pupillary distance.

Perimetry – The study of the visual fields.

Peripheral vision – The visual fields representing side vision.

Phoropter – An instrument used for determining the refractive state of the eyes.

Photophobia – Symptom causing pain on viewing a light; light sensitive.

Plus lenses – A lens that converges light.

Polymethylmethacrylate (PMMA) – A clear plastic material used for rigid contact lenses; first material used after glass.

Presbyopia – The condition in which lost elasticity of the lens leads to the inability to accommodate.

Prism – A lens that bends light.

Pseudophakia – Term used for aphakic correction after a lens implant.

Pupillary distance – The distance between the centers of the pupil of each eye.

Radiuscope – An instrument that measures the curvature of a contact lens.

Refraction – Altering of the pathway of light as it passes from one medium to another.

Retinoscope – An instrument used to perform refraction.

Retroscopic angle or tilt – The angle the frame front makes with the frontal plane of the wearer's face when the lower rims are farther from the face than the upper rims.

Segment height (Seg) – The vertically measured distance from the lowest point on the lens or lens opening to the level of the top of the seg.

Slit-lamp examination – Examination of the eye performed using a biomicroscope.

Sphincter – A ring-like band of muscle fibers that constricts a passage or closes a natural orifice.

Triage – System of sorting and prioritizing.

Trifocal – A lens that provides correction for distance, intermediate and near.

Vertex distance – The distance from the back surface of the lens to the front of the eye.

PREFIXES/SUFFIXES/ROOT WORDS

Prefixes and suffixes (syllables added to the beginning or the end of words) give special meaning to the root. Knowing these can increase your optometric terminology.

| PREFIX | Meaning |
|--------|------------------------|
| A, An- | without |
| Ab- | away |
| Ad- | to, toward |
| Aniso- | different |
| Anti- | against |
| Bi- | two |
| Di- | two |
| Ex- | away from, out of |
| Hyper- | excessive, above, over |
| Hypo- | under, below |
| Intra- | within |
| Para- | beside, beyond, around |
| Peri- | surrounding |
| Retro- | backward |
| Sub- | under, below |

| SUFFIX | MEANING |
|---------------|---|
| -ectomy | cutting out, excision |
| -ia | diseased or abnormal state |
| -itis | inflammation |
| -meter | measurer |
| -ologist | one who studies or practices |
| -ology | study of |
| -oma | tumor, swelling |
| -opia | vision condition |
| -osis | abnormal condition |
| -pathy | disease |
| -phobia | abnormal fear of or aversion to specific things |
| -scope | instrument used for examination |
| -al, ic, -ous | pertaining to |

| Root Word | Meaning |
|---------------------|--------------------|
| blephar | eyelid |
| chrom | color |
| conjunctiv | conjunctiva |
| cor, core, pupil | pupil |
| corne, kerat | cornea |
| dipl | two, double |
| irid, iri | iris |
| ocul, ophthalm | eye |
| opt | vision |
| orth | optical nerve head |
| papill | disease |
| path | light |
| phot | retina |
| retin | sclera |
| scler ton | tension, pressure |

DIRECTIONAL TERMINOLOGY

Anterior – Located on or near the front of an organ.

Posterior – Located on or near the back of an organ.

Superior – Situated above or directed upward.

Inferior – Situated below or directed downward.

Medial – Pertaining to the middle or the midline.

Lateral – Pertaining to the side or a position farther away from the midline.

O.D. – Latin abbreviation for oculus dexter, which means right eye.

O.S. – Latin abbreviation for oculus sinister, which means left eye.

O.U. – Latin abbreviation for oculus uterque, which means both eyes.