

Глоссарий терминов и сокращений по оптическим линзам

<http://glossary-of-terms.ru/?do=g&v=340>

Английский

abbe value

A measure of the degree to which light is dispersed when entering a lens. the average range is 20 to 60. a lower abbe value causes greater dispersion of light resulting in chromatic aberration (color fringing) when viewed through the periphery of the lens. a higher abbe value results in less chromatic aberration.

accommodative vergence

A convergence response (to turn the eyes inward) which occurs as a direct result of accommodation (eye focusing). achromatism- the ability of the eye to adjust the focal power to see objects at different distances.

acuity

1. The ability to respond to faint sense impressions or to distinguish light differences between stimuli. adaptation/adaptive process – the maneuvers (conscious or unconscious, automatic or voluntary) by which the individual attempts to make organismic decisions as comfortable and gratifying as possible within the demands of that individual's environment. add power (addition) – the difference in spherical power between the distance and near corrections found in bifocals, trifocals, and progressive addition lenses to assist the eye's accommodation at a given distance. this power is needed for near vision. also referred to as add power or seg power.
2. Keeness of sight, hearing or intellect acupressure 6
3. N тонкость, острота, резкость (восприятия) sensory ~ психл. острота восприятий

adduction

1. Inward movement of the eye medially.
2. The movement of a part of the body towards the midline or towards a neighbouring part. compare abduction. see illustration at anatomical terms in supplement

adjustable nose pads

Type of bridge that consists of small pads made of plastic or silicone to help prevent slippage and aid in evenly distributing weight of glasses on bridge of the nose.

afferent fibers

Nerve fibers which carry impulses from the organs to the nerve centers.

after-image phenomenon

Ability of the eye to retain sight of an image during eye blinks. the most common example is seeing light after the flash of a camera.

against motion

Objects sighted through convex (plus) lenses move in an opposite (against) direction as the convex lenses are moved from side to side.

air tempering

The strengthening of a lens as a result of cooling a heated lens.

albinism

1. Pigmentation is deficient or absent. may occur in skin, hair, and eyes. ocular albinism is a pigmentation deficiency occurring mainly in the eyes. individuals with albinism including ocular albinism commonly have decreased visual acuity (20/70 – 20/200), strabismus, photophobia, and nystagmus. there is no known treatment. individuals may benefit from low-vision aids. treatment options for strabismus and nystagmus does apply to these individuals.
2. A condition in which a person lacks the pigment melanin and so has pink skin and eyes and white hair. it is hereditary and cannot be treated. vitiligo

ametropia 1. Eye disorders that prevent a clear image from forming on the retina (myopia, hyperopia, astigmatism). amblyopia exanopsia (lazy eye) – uncorrectable blurred vision due to a lack of use; the visual pathway fails to mature; an eye can become amblyopic from being crossed, having a large refractive error or having the brain suppress its vision. corrective lenses, vision therapy, or patching therapy may be prescribed. 2. A condition in which the eye cannot focus light correctly onto the retina, as in astigmatism, hypermetropia and myopia. compare emmetropia	
analytical examination A 21-point optometric examination. each point is a measurement of performance of a visual behavior pattern. these measurements, made through the application of prism and sphere, show the absorption of the potential of inhibition, measure the existing learned associations between patterns, and probe for the degree or organization existing in the visual pattern.	
aniseikonia The image of an object as seen by one eye is different in size and shape from the other one.	
anisometropia 1. Unequal different refractive errors of the two eyes. annealing - the heating of a material to a sufficiently high temperature with subsequent controlled cooling to relieve any internal stress and strains. 2. A state where the refraction in the two eyes is different	
anterior segment The space in front of the iris and behind the cornea, which includes cornea, conjunctiva, iris, lens and aqueous humor.	
anti-reflective coating A multi-layer thin coating applied to the lens surface to reduce the amount of reflection from the lens and increase light transmission.	
antimetropia One eye myopic (near sighted), the other hyperopic (far sighted).	
aphakia 1. A condition caused by the removal of the crystalline lens most often due to cataracts. 2. The absence of the crystalline lens in the eye	
aqueous humor A clear watery liquid in the chamber of the eye that flows between the cornea and the crystalline lens and nourishes both; secreted by the ciliary processes.	
ar stack Combined layers making up an ar coating (usually five or more). composition of layers can vary between ar coaters.	
asepsis 1. Free from, absence of infection or infectious material. 2. The absence of microorganisms which cause infection, usually achieved by sterilisation	
aspheric A lens that is not spherical. the lens surface is marked by a variety of elliptically changing curvatures. an aspheric design allows a lens to be much flatter without compromising the optics of the lens. the benefits: flatter lenses are less noticeable in frames, and make the wearer's eyes look more natural and less magnified or minified.	
aspheric compensation of power Power is compensated in each area of the lens by applying aspheric principles.	
asthenopia 1. Symptoms of "eye-strain" including headaches, tearing, itching, burning, and blurred vision. 2. Same as eyestrain	

asymmetrical design A lens design that has contour line patterns positioned differently into the nasal and temporal area to produce a right and left lens design. this is eye specific so the lens can not be rotated to make a right or left lens.	
atoric lens Lens with astigmatic power in which at least one principal meridian is not spherical.	
automated refractor This method determines the eye's refractive error and the best corrective lenses to be prescribed by using a computerized device that varies its optical power mechanically and prints out the results.	
axis aligner plier Any device used for aligning a cylinder axis of a spectacle lens at its proper angle.	
axis cylinder That principal meridian which contains only the spherical power component of a sphero-cylinder lens. axis will intersect a spherical lens of minus power at its thinnest point and a spherical plus lens at its thickest point. axis optical - (x) – an imaginary line at right angles to the surface of a lens, which passes through the optical center. the meridian of least power 90° away from the meridian of greatest power in a cylindrical lens; used in correcting astigmatism.	
axis indicator of lensometer A device in which a scale from 0° to 180° can be aligned to give the axis of cylinder power on a spectacle lens. b “b” box measurement – in lens measurement, the longest vertical distance from the uppermost point to the lowermost point of a shape.	
balance lens A lens placed in a frame which looks like the lens for the opposite eye to balance cosmetics; similar in thickness and style with no specific rx power.	
barium glass Commonly used for a type of crown glass, one of the ingredients is barium oxide added for the purpose of increasing refractive index, while maintaining relatively low dispersion. barrel - (bbl) – (1) the component of a hinge that interlocks with the mating component of the hinge set, (2) a threaded closure device attached to a metal eyewire.	
baryta glass A type of glass containing lead for increasing the index together with barium to increase refractive index, while maintaining a relatively low dispersion.	
base curve The singular dioptric curve on the front surface of a lens. this curve is generally in place when the lens blank is manufactured and as such will control the selection of back curves necessary to produce a given prescription. this surface curve becomes the basis from which the other remaining curves are measured. when applied to lenses in general, the base curve is the group curve or the curve common to a group of lens powers. base down (bd) prism – a wedged shaped lens which is thicker at the bottom of the lens. prisms bend light in the opposite direction from its thicker edge so base down prism turns the light upward thus causing the eye to also move upward. this prism is used to measure an eye alignment and /or treat a binocular dysfunction (eye teaming problem). prisms are sometimes added to glasses to help improve eyesight due to a misalignment or visual field loss. base in (bi) prism – a wedged shaped lens which is thicker at the nasal area of the lens. prisms bend light in the opposite direction from its thicker edge so base in prism turns the light outward (toward the ear) thus causing the eye to also move outward. this prism is used to measure an eye alignment and /or treat a binocular dysfunction	

<p>(eye teaming problem). prisms are sometimes added to glasses to help improve eyesight due to a misalignment or visual field loss. base out (bo) prism – a wedged shape lens which is thicker on the outward edge of the lens, closest to the ear. prisms bend light in the opposite direction from its thicker edge so base out prism turns the light inward thus causing the eye to also move inward. this prism is used to measure an eye alignment and /or treat a binocular dysfunction (eye teaming problem). prisms are sometimes added to glasses to help improve eyesight due to a misalignment or visual field loss. base up (bu) prism – a wedged shape lens which is thicker on the upward edge of the lens. prisms bend light in the opposite direction from its thicker edge so base up prism turns the light downward thus causing the eye to also move downward. this prism is used to measure an eye alignment and /or treat a binocular dysfunction (eye teaming problem). prisms are sometimes added to glasses to help improve eyesight due to a misalignment or visual field loss.</p>	
<p>basic formula The subjective; it is the lens power that alters the light rays entering an eye and causes a change in the focusing mechanism in the greatest degree without causing a subjectively detected alteration in the convergence mechanism.</p>	
<p>baume gauge Used to check the specific gravity of a polishing solution.</p>	
<p>bevel edger A machine by which an uncut lens is given a bevel on its edge by a special lens grinding wheel. bi-centric grinding (slab off) – the process of grinding base up prism to correct vertical imbalance.</p>	
<p>bi-ocularity Using both eyes, but not together as a team.</p>	
<p>biconcave A lens style where both front and back surfaces are minus (concave).</p>	двояковогнутый
<p>biconvex A lens style where both the front and back surfaces are plus (convex).</p>	двояковыпуклый
<p>bifocal A lens with two focal points, one for distance vision and one for near. regular bifocals have a line between the prescriptions; progressive bifocals change gradually from the near to far prescriptions with no visible line on the lens.</p>	
<p>binocular pd The single measured distance from pupil center to pupil center. binocular (binocularity) vision – the blending of the separate images by each eye into a single image; allows images to be seen with depth.</p>	
<p>birefringence Type of lens aberration that is induced during the manufacturing process which results in chromatic aberration. a rainbow-like effect (sometimes called newton rings).</p>	
<p>bitoric lens A lens, both surfaces of which are ground and polished, in toric or cylindrical form. blank, molded – a lens blank that is unfinished on both sides when it arrives from the lens factory. blank, semi-finished – a lens blank that is ground and polished on one side to make a prescription.</p>	
<p>bleach A process to remove the tint from a dyed lens.</p>	выщелачивать
<p>blended bifocals A round style bifocal type lens designed so that there is no discernable line of demarcation between the distance portion and the reading portion. the blended area is visually nonusable.</p>	

blended myo-disc Lenses have a full field curved or plano front surface with a high minus bowl-shaped surface on the ocular side surrounded by a plano surface called a carrier.	
blepharitis 1. A condition that describes an inflammation of the eyelid margins characterized by a sticky crust that forms on the eyelids. 2. Inflammation of the eyelid	
blinding glare Reflected glare caused by light reflected off smooth, shiny surfaces blocking vision.	
blue blockers An orange colored tint formulated to block out ultraviolet radiation and reduce blue light which may be harmful to the eye.	
blue blur The condition of unclear vision due to the scattered blue light in the visible spectrum.	
bony orbit Either of two bony cavities in the skull containing an eye and its external structures; an eye socket.	
box measurement The measurement of a lens or frame by incorporating it within a square and then measuring the horizontal and vertical in millimeters.	
break point The point at which a person can no longer fuse (unite) two images into one. a blur point will occur before this point.	
brow-bar A plastic or metal piece attached to the upper eyewire of a frame front to position the frame away from the wearer's brow or to add stability to the frame design.	
build-up pads Plastic pads that are cemented to the bridge section of the eyewire to reduce the bridge size and raise the frame front. c	
c measurement The circumference of a lens.	
c-size Measurement needed for accurate lens sizing. the millimeter reading of the circumference of a given lens.	
c-sizer A mechanical device for measuring the circumference of a lens.	
cable temple An earpiece of metal, plastic, or combination thereof, with the portion in contact with the ear consisting of wound wire, with or without a core. this portion is typically bent in the shape of a semicircle to fit securely around the ear.	
calipers A hand-held mechanical measuring instrument in the form of pliers, having two legs or jaws that can be adjusted to determine thickness, diameter, caliber, and/or distance between surfaces. calipers are calibrated and measure in tenths of millimeters.	
canthus 1. The angle formed by the juncture of the eyelids. 2. A corner of the eye canula canula	
carrier lens The major portion of a lens that has a differing power component cemented or fused to it, creating the combined lens power.	
cataract lens Lenses used to correct vision after cataract surgery.	

<p>cellulose acetate</p> <ol style="list-style-type: none"> 1. Common material used to make frame parts. also referred to as “zyl”. 2. A material of the ester family derived by conversion of cellulose; used in the production of synthetic lacquers, coatings, plastics, and thermal insulation. cellulose acetate butyrate (cab) plastic a plastic compound of cellulose acetate butyrate ester and plasticizer and other ingredients. 3. Acetate fiber 	<p>acetate fiber</p> <p>A manufactured fiber in which the fiber-forming substance is cellulose acetate (ftc definition). acetate is manufactured by treating purified cellulose refined from cotton linters and/or wood pulp with acetic anhydride in the presence of a catalyst. the resultant product, cellulose acetate flake, is precipitated, purified, dried, and dissolved in acetone to prepare the spinning solution. after filtration, the highly viscous solution is extruded through spinnerets into a column of warm air in which the acetone is evaporated, leaving solid continuous filaments of cellulose acetate. the evaporated acetone is recovered using a solvent recovery system to prepare additional spinning solution. the cellulose acetate fibers are intermingled and wound onto a bobbin or shippable metier cheese package, ready for use without further chemical processing. in the manufacture of staple fiber, the filaments from numerous spinnerets are combined into tow form, crimped, cut to the required length, and packaged in bales.</p>
<p>cemented segment</p> <p>An added power ophthalmic lens bound, usually by epoxy resin, to a carrier.</p>	
<p>center of rotation</p> <ol style="list-style-type: none"> 1. The imaginary point around which the eyeball pivots when moved. 2. Центр вращения center text within controlвыравнивание текста внутри элемента управления по центру 3. The point around which a shape or text block rotates. 	
<p>center thickness</p> <p>The front-to-back measurement of a lens at its optical or geometric center; usually expressed in 0.1 mm using a caliper.</p>	
<p>central retinal artery</p> <p>The blood vessel that carries blood into the eye; supplies nutrition to the retina.</p>	
<p>central retinal vein</p> <p>The blood vessel that carries blood away from the retina.</p>	
<p>cerium</p> <p>An oxide compound used for polishing a lens surface.</p>	<p>церий</p> <p>(лат . cerium), ce, химический элемент iii группы периодической системы менделеева, атомный номер 58, атомная масса 140,12, относится к лантаноидам. назван по малой планете церера (открыты почти одновременно). серый металл, плотность 6,789 г/см3, tпл 804 °с. основные минералы - монацит и бастнезит (ce, la...) fco3. главный компонент миш-металла. присадки церия (и его сплавов с лантаном) улучшают свойства стали, чугуна, сплавов алюминия, магния и др.</p>
<p>chalazion</p> <ol style="list-style-type: none"> 1. A small and frequently painful cyst of the eyelid resulting from a blocked meibomian gland. 2. Same as meibomian cyst 	

chamfering 1. Use of a tool to remove all residual lens material when drilling a hole. 2. Снятие фасок; срез кромок (в сапр)	скашивание
chassis 1. The metal eyewire and bridge components of a combination front that holds the lenses. chemical hardening (tempering) – a chemical process by which the lens is strengthened by timed treatment in a hot, ion-exchange bath chemically replacing, from each surface of the lens, small ions with larger ions into a thin, toughened surface layer. 2. Шасси; блок; корпус; монтажная панель; каркас 3. Шасси	marco . armazón
chuck 1. A padded metal or plastic circular piece used to support a lens during the edging process. 2. A device with adjustable jaws used for centering and holding a cutting bit, drill bit, etc. 3. A sea-shell. nickname for a boatswain, “old chucks.” also, an old word signifying large chips of wood. 4. The part of a diamond or rotary drill that grips and holds the drill rods or kelly and by means of which longitudinal and/or rotational movements are transmitted to the drill rods or kelly. compare automatic chuck. 5. The part of a rock-drill machine that grips or holds the drill rod or steel. 6. To throw away or discard. 7. Зажимной патрон (для крепления инструмента)	
ciliary muscles A band of muscle and fibers that are attached to the lens that controls the shape of the lens and allows the lens to accommodate (change focus).	
ciliary processes 1. The extensions or projections of the ciliary body that secrete aqueous humor. 2. The ridges behind the iris to which the lens of the eye is attached	
clip-on An apparatus that holds two lenses (usually colored) to filter different light wavelengths. a piece attached to a frame.	
colmascope A device which through use of polarized light, demonstrates strain existing in a piece of lens material.	
color perception test A test that measures the ability to identify and distinguish colors.	
color-coated lenses Lenses with a metallic oxide coating applied to surfaces by means of vacuum deposition. the coatings are deposited evenly across the surface regardless of prescription, so color is uniform.	
combination frame 1. A frame wherein the front consists of a metal chassis with attached trim. these trim parts are typically plastic, aluminum, or other metal, and are attached to the top portion of the chassis. 2. In light wood-frame buildings, a combination of a full frame and a balloon frame.	
compensated curve A curve computed to attain a desired vertex power considering the thickness factor. computer vision syndrome (cvs) – the complex of eye and vision problems related to near work that are experienced during or related to computer use. its symptoms include eyestrain, dry or burning eyes, blurred vision, headaches, double vision, distorted color vision, and neck and back aches.	

contrast sensitivity 1. The ability to perceive differences between an object and its background. 2. The ability to detect the presence of differences in luminance; the reciprocal of the contrast threshold. contrast threshold 1. the minimum perceptible contrast for a given state of adaptation of the eye. 2. the luminance contrast which can barely be detected by an observer.	
corneal abrasion 1. A cut or scratch on the cornea. 2. A scratch on the cornea, caused by something sharp getting into the eye	
corneal astigmatism Defect in the curvature of the cornea whereby light rays passing through the cornea produce aberrations and are not focused on the retina.	
corneal reflection Method of measuring the distance from the pupil, using light reflected from the cornea to the center of the nose.	
corneal reflex Irritation of the cornea resulting in reflex closure of the eyelids.	
corneal topography Mapping or examination of the surface of the cornea.	
corrected curve A curve designed to partially or totally correct either or both the marginal astigmatic error and the marginal spherical error.	
corridor length The distance between the fitting cross and the point of full add power on a progressive lens.	
cover test 1. A test of eyeball alignment in which each eye is covered with an occluder (eye cover) and then uncovered to observe eye movements. 2. A test for a squint in which an eye is covered and its movements are checked when the cover is taken off cowper's glands cowper's glands / ku pʔz &Indz/ plural	
cribbing 1. Removal of excess lens material on the edge. 2. When a horse grabs on something, usually its fence or stall, and swallow air. it is a bad habit that is hard to correct.cribbing is mentally addictive and learned from other horses that crib. 3. A vice whereby a horse anchors its teeth onto an object, arches its neck, pulls backward, and swallows air. it can cause the horse to lose weight, suffer tooth damage, and other physical disturbances.	
cross curve The strongest curve of a toric surface; lies in the meridian 90 degrees from the base curve.	
cross eye 1. See strabismus. 2. Same as convergent strabismus (informal)	
cruxite Trade name of a glass pink tint.	
curve top A bifocal lens with the top line of the segment slightly curved instead of straight.	
custom coating Prescription lenses ordered with a coating that is processed from a semifinished blank and then coated.	
cylinder axis The meridian in which the sphere power functions alone.	

<p>cylinder lens A compound lens with a toric surface with the two separate dioptric meridians 90° apart. may be recorded in (-) or (+) power. it is always followed by an axis, the direction in which there is no power of the cylinder. a prescribed amount of power that is added or subtracted to the lens sphere power to create two different powers in the principal meridians. d datelite 14 x 35 trifocal – an occupational trifocal designed for computer use with a wider (35 mm) and deeper intermediate seg (14mm) with intermediate power of 50-66% in the trifocal area.</p>	
<p>datum line 1. A line at the midpoint between the top and bottom of a lens, also referred to as the 180° line. unless otherwise specified, optical centers are ground on this line. “dbc” – distance between centers. “dbl” - distance between lenses – the closest distance between lenses. the figure is needed to compute decentration and is measured from the closest nasal point of one lens to the closest nasal point of the other lens. this measurement may be different than the marked bridge number on the frame. 2. Базовая линия; база; ось координат</p>	reference line.
<p>decenter 1. To place out of center. 2. To remove centering or shoring.</p>	
<p>decentration The act of moving the optical center of a lens away from the geometric center of a shape or frame for the purpose of aligning the optical center over the pupil. the lens may also be displaced away from the wearer's line of sight for the purpose of creating prismatic effect. degree (?) – the 360th part of the circumference of a circle. the unit used for specifying the position of the axis of a cylinder or the location for the base of a prism.</p>	
<p>depth perception The ability to judge relative distances of objects.</p>	
<p>depth perception test A test to measure the ability of the vision system to discern the relative distances of various objects. (also called a “stereopsis test”.) descemet's membrane – the lining of the posterior portion of the cornea.</p>	
<p>developmental vision analysis More comprehensive than a routine eye exam, examination will evaluate all of the patient's visual abilities such as a visual acuity, eye focusing skills, eye teaming skills, eye tracking skills, visual motor skills, and visual perceptual skills.</p>	
<p>diabetic retinopathy 1. Weakens and causes retinal changes in the small blood vessels that nourish the eye's retina, the delicate, light sensitive lining of the back of the eye. these blood vessels may begin to leak, swell or develop brush-like branches. 2. A disease of the retina, caused by diabetes</p>	
<p>didymium A specific tinted glass lens used for wearer exposed to a soda ash or sodium flare. often used for “glass blower” occupation.</p>	
<p>diffuse glare Reflected light that does not produce a clearly discernible image, i.e., a hazy, bright light.</p>	
<p>digital surfacing Precise surface cutting using single point turning; cutting height is controlled at all points of the lens.</p>	
<p>dilation 1. A process by which the pupil is temporarily enlarged with special eye drops (mydriatic); allows the eyecare specialist to better view the inside and back of the eye. diopter (d) – a unit of measurement of the refractive power of the lens. a lens whose focal point is one meter has a power of one diopter. a lens whose</p>	<p>дилатация (лат. расширение) — увеличение диаметра (пищевода, кишки); расширение (канала шейки матки), увеличение (сердца за счет растяжения стенки его полостей).</p>

focal length is one-fourth of a meter has a power of four diopters. 2. Растяжение временного интервала	
diplopia 1. Double vision; normally the object which is being observed is single and objects in front and behind this object are seen double (diplopia). 2. A condition in which someone sees single objects as double. also called double vision	
direct field of vision That portion of the field which is seen by the macula.	
direct glare 1. Relatively bright light that is not reflected, but emanates from a source such as the sun, oncoming automobile headlights, or other light source. 2. Glare resulting from high brightness or insufficiently shielded light sources in the field of view or from reflecting areas of high brightness.	
direct occlusion Covering the non-amblyopic eye.	
dispensing The art of selecting a frame, taking measurements, filling the lens prescription, and fitting a pair of glasses.	
distance acuity The eye's ability to distinguish an object's shape and detail at a far distance, such as 20 feet (6 meters).	
distance vision Vision when looking at distance objects.	
distometer Measures vertex distances (front of the eye to the back of the lens).	
double concave lens A biconcave lens of special form having hollow surfaces of equal radii on both sides of the lens.	
double convex lens A biconvex lens of special form having bulging surfaces of equal radii on both sides of the lens.	
double segment bifocals Lenses with segments at the top and bottom of the lens. suited for those who require near focal length above and below the head.	
down bend The drop or downward bend of the tip end of a temple (earpiece) to fit over and around the ear; also known as the ear bend.	
drop ball test A low-velocity, impact resistant test, commonly using a solid steel sphere freefalling 50 inches. for a.n.s.i. z-80 standards, a 5/8 inch steel ball falling 50 inches; for a.n.s.i. z87standards, a 1-inch steel ball falling 50 inches.	
drusen Tiny yellow or white deposits in the retina or optic nerve head.	
dry eye syndrome Itching, burning, and irritation of the eyes. caused by lack of quality or quantity of tears to lubricate eyes. may prescribe "artificial tears" to alleviate.	
duction test A test of the eye's ability to turn inward or outward while maintaining single, binocular vision with the gradual introduction of progressively stronger base-in or base-out prisms.	
dyseidetic Poor sight recognition of words. a form of dyslexia. e	

earpiece 1. A component of a spectacle frame designed to assist its stabilization by extending over the external ear. 2. The part of the phone used for listening.	
eccentric fixation The person fixates the image of regard with an area other than the fovea (center of the retina that produces the sharpest eyesight) area of fixation.	
ecp Abbreviation for eyecare professional.	error correcting program; enhanced capabilities port
edge coat Solid color coat applied on the edge of a lens to hide thickness and eliminate ring reflections seen in the lens. usually color selected matches the frame color closely.	
edge polishing The grinding process on edge of lenses leaving a finished clear edge rather than a white frost.	
edged lens A lens that has been ground to prescription and cut to the size and shape of an eyeglass frame.	
edger A machine used to reduce a lens to a desired size and shape of a frame with a desired edge contour.	
edging 1. Edging a lens means hogging it down from its original circular shape to the precise size and shape needed for it to fit into the wearer's frame. effective diameter (ed) – two times the longest radius of any given shape or lens. this value will give the smallest theoretical diameter needed to cut out any given shape, assuming the center of that blank was superimposed over the geometric center of the shape. ed's are especially critical in high rxs to determine appropriate blank size and lens thickness. 2. Using the edge of the climbing shoe on a foothold. in the absence of footholds, smearing is used.	
effective power See vertex power.	
emery 1. The abrasive used for grinding a lens surface. 2. A granular form of impure carborundum; used for grinding and polishing glass, stone, and metal surfaces.	наждак 1. (тюрк .), мелкозернистая горная порода, в которой корунд находится в тесном срастании с другими минералами (магнетитом, сульфидами и хрупкими слюдами). изготавливают простейшие абразивные изделия (шлифовальные круги, наждачные шкурки и т. д.). 2. Биржа nasdaq.
emmetropia 1. Theoretically normal eyesight. refractive condition of the eye in which the rays of light come to a point of focus perfectly on the retina. 2. The correct focusing of light rays by the eye onto the retina giving normal vision. compare ametropia	
endothelium 1. The inner most layer of the cornea. 2. A membrane of special cells which lines the heart, the lymph vessels, the blood vessels and various body cavities. compare epithelium, mesothelium	
endpiece That part of a frame where the frame front is joined with the temple.	

epithelium 1. The outer most layer of the cornea. 2. The layer or layers of cells covering an organ, including the skin and the lining of all hollow cavities except blood vessels, lymphatics and serous cavities. compare endothelium, mesothelium comment: epithelium is classified according to the shape of the cells and the number of layers of cells which form it. the types of epithelium according to the number of layers are: simple epithelium (epithelium formed of a single layer of cells) and stratified epithelium (epithelium formed of several layers of cells). the main types of epithelial cells are: columnar epithelium (simple epithelium with long narrow cells, forming the lining of the intestines); ciliated epithelium (simple epithelium where the cells have little hairs, forming the lining of air passages); cuboidal epithelium (with cube-shaped cells, forming the lining of glands and intestines) and squamous epithelium or pavement epithelium (with flat cells like scales, forming the lining of the pericardium, peritoneum and pleura).	epitelio
equithin prisms A procedure grinding base down prism ou (both lenses) to arrive at a thinner, more pleasing lens. equithin can be used on any prescription but is especially effective on plus distance prescriptions, progressive lenses, and executive style multifocals.	
esophoria The tendency of the eye to turn inward or nasally.	
esotropia 1. A condition of misalignment of the eyes in which one or both eyes turn inward or nasally. 2. A type of squint, where the eyes both look towards the nose. also called convergent strabismus	
executive bifocal A one-piece bifocal that incorporates the total bottom portion of the lens for close vision with a visible dividing line across the entire lens. it is thicker and heavier than flat top styles and discouraged because of these drawbacks.	
executive d-seg trifocal A plastic trifocal with a flat top 25 mm seg style set inside the intermediate executive style area.	
executive trifocal There are two ledges across the lens that represent the bifocal and trifocal area for distance, intermediate, and near viewing areas.	
exophoria The tendency of the eye to turn outward.	
exotropia 1. Divergent strabismus. a condition of the eye turning laterally or templeward of one or both eyes. 2. Same as divergent strabismus	
expanded visual fields Wider, larger, or more precise vision in the field of view.	
extraocular Outside or external to the eye.	
extraocular muscles The muscles attached to the outside of the eyeball which control eye movement. each eye has six muscles that are coordinated by the brain.	
eye hand coordination The ability of the eyes to guide the hands, also called visual motor integration.	
eye lids Movable folds of tissue that protect the eye from injury, excessive light, and distribute the tear film over the cornea and conjunctiva.	

eye piece of lensometer The telescopic portion of the instrument that can be focused to the individual eye's error in order to see the adjustment of the power wheel.	
eye size Size of lens hole measured with a millimeter ruler on a frame from edge to edge to inside frame.	
eye tracking The ability of the eyes to smoothly and effortlessly follow a moving target.	
eyewire The part of the frame that encircles the lens and holds it in place. f	
face form The gentle wrap of a frame front necessary to parallel the roundness of the head.	
faceted lens Prescription lenses fabricated with highly polished and beveled edges.	
factory coating Coatings applied to large batches of lenses where the rx is already established on the lens.	
far point That point upon the visual axis of the eye which is sharply imaged on the retina when the accommodation is relaxed. the far point of a normal eye lies at infinity.	
fd trifocal Traditional near flat top segment positioned on a full lower portion intermediate lens.	
fine motor skills The ability to coordinate hand and finger movements.	
fining The grinding procedure yielding a satin smooth finish immediately prior to the polishing stage of lens surface.	
finished uncut lens An ophthalmic lens that has been ground and polished on both sides to a specific prescription power and thickness; has been edged rendered impact resistant, if necessary, and prepared for insertion or mounting into a frame.	
fitting cross The location on a progressive addition lens that is normally fit in front of the pupil center; denoted by two ? inch lines crossed at right angles to each other on a lens layout chart. it is usually 2-4 mm above the major reference point (mrp) or optical center of the lens.	
fitting triangle In spectacle optics, a geometric construction from the three points where spectacles contact or put pressure against the head. the apex of the triangle is the pressure point on the crest of the nose, and the base of the triangle is the two pressure points just above the external ears, on each side of the head. when nose pads are used, there will actually be two pressure points at the apex of the triangle rather than one.	
flash mirror A highly reflective coating on lenses that is added for both cosmetic and performance reasons.	
flat-top bifocal A type of multifocal in which the segment is flat on top. also know as a "d" seg or straight top.	
flint glass A glass to which lead has been added resulting in both higher index and dispersion.	

fluorescein angiography A test to examine blood vessels in the retina, choroids and iris. a special dye is injected into a vein in the arm and pictures are taken as the dye passes through blood vessels in the eye.	
focimeter An optical instrument for determining vertex power, axis location, optical center, errorfree point, and prism power at any given point on an ophthalmic lens; also called lensometer or vertometer.	
form constancy The ability to recognize two objects that have the same shape but different size or position. this ability is needed to tell the difference between “b” and “d”, “p” and “q”, “m” and “w”.	
form fit bridge The nasal bearing surface consisting of two pads and a connecting strap or one solid piece of plastic made of clear acrylic or silicone based material.	
franklin bifocal The initial multifocal lens made by uniting the upper half of a distance power lens and the lower half of a near power lens in one frame; the two half lenses are independent of each other.	
fresnel prism A series of narrow prisms molded into one piece of soft plastic that has the effect of one prism. these prisms are cut and applied directly to the lens surface. they are an alternative when prism is required and a standard lens can not be ground or when lenses will be too thick and heavy, if surfaced. in addition, they can be removed without remaking a lens when a patient's prism correction is undergoing several changes over a period of time.	
frosted lens A translucent lens surface that allows light to enter the eye without crisp, sharp optics.	
full field lens Lens in which the zone of the prescription optics extends to the edge of the lens. fused segment - is produced by imbedding a piece of glass of greater density into a crown lens. generally, the segment is placed on the convex side of the lens and the curves on this surface are uniform over the entire area.	
fusing 1. The uniting of two pieces of lens material by means of high temperature. 2. Слияние 3. 1. melting. 2. uniting, as by melting together.	слияние 1. Слияние , соединение 2. Процесс образования более крупной капли воды путем объединения двух или большего числа сталкивающихся капель.
fusion test Determines the eyes ability to unite the images from each eye into a single image.	
fusional vergence A convergence response which serves to maintain (fusion) the union of images from each eye into a single image. the eyes will turn with a slow smooth tonic movement or a fast jumping movement called phasic. g	
generating A rapid roughing process to quickly remove material from a lens. accomplished by cutting tools on a machine. generator, free-form – a type of computercontrolled generator with at least three axes of movement that can cut most continuous lens surface shapes to a level of precision and smoothness that requires only minimal polishing with a free-form polisher. generator, traditional – a type of generator with either two or three axes of movement that can cut only basic spherical and spherocylindrical lens surface shapes to a minimal level of smoothness that requires additional fining with a cylinder machine.	зацепления

geometric center (1) the point of a lens that is midway between the top, bottom, nasal and temporal edges. this point is most always different from the ground optical center; (2) the intersection of the horizontal and vertical center lines of a box that circumscribes the lens shape.	
ghost image 1. In spectacle optics, an unwanted secondary image formed by internal reflections from the rear or by reflection from the anterior surface of the cornea and a second reflection from the ocular (eye) surface of a spectacle lens. 2. Фантомное изображение	фантомное изображение побочное изображение паразитное изображение;
glass beads Small balls of glass used in a frame warmer to provide an even, constant heat to the frame.	
gonioscope 1. A magnifying device used in combination with strong illumination and a contact lens for examining the angle of the anterior chamber of the eye. 2. A lens for measuring the angle of the front part of the eye	
gradient mirrors Primarily used for driving or reading outdoors. this mirror helps reflect the intensity of the sun above while leaving a slight lighter area below for better visability of the dashboard or reading material.	
half eye A frame designed in such a manner that the wearer may look over the top using natural vision for distance and the correction on the bottom for close vision.	
hand stone A rotating wheel composed of a material than can grind a lens and not chip it using the stone and applying a lens edge to its surface.	
hard design A progressive lens design typically having large clear distance and reading zones. in order to create these distinct areas, all of the unwanted surface astigmatism is forced to the periphery. the result is a closely packed surface astigmatism, on either side of the corridor, between the 180° line and the reading area.	
hard resin A thermostat resin material from which plastic lenses are cast. also referred to cr-39 or plastic.	
hemianopsia Blindness of half the visual field of one or both eyes.	
heterophoria 1. Tendency of the eyes to deviate from their normal position of visual alignment. a muscular imbalance exists; however, a person can overcome it and still maintain approximately normal single binocular vision. 2. A condition in which if an eye is covered it tends to squint	
heterotropia 1. The eyes are abnormally turned. 2. Same as strabismus	
hex nut A small hexagon nut used on the end of a post or screw in order to retain a lens in a frame or frame parts together.	
hidden hinge An imbedded hinge anchoring device which allows elimination of shields.	
hide-a-bevel A specific type of bevel used for cosmetic appearance. it is a flatter bevel generally used on strong minus lenses.	

high index lens Lens with a refractive index greater than 1.57 made from this material with more efficient light-bending ability (high index of refraction) than hard resin or crown glass. the result is a thinner, and in most cases, a lighter lens.	
horizontal meridian The 180° meridian on a cylindrical surface.	
hydrophobic coating The top layer of modern coatings designed to repel oils and dirt and other debris on the lens surface. it provides smudge resistance, cleanability, and surface durability.	
hypermetropia 1. Refractive error or optical defect of the eye in which parallel rays of light, as from a distant light source, strike the retina before coming to a focus. 2. A condition in which someone sees more clearly objects which are a long way away, but cannot see objects which are close. also called longsightedness, hyperopia	
hyperopia 1. Farsightedness; the ability to see distant objects more clearly than close objects; may be corrected with glasses or contact lenses. 2. Same as hypermetropia	
hyperphoria A tendency of one eye to turn above the other eye, causing eyestrain. sometimes improved by prism ground in lenses.	
hypertropia One eye is actually turned above the other.	
hypotropia 1. Downward deviation of one eye. i 2. A form of squint where one eye looks downwards	
image jump The apparent sudden displacement of an object that occurs when the fixation axis passes abruptly from one viewing area of a nonprogressive multifocal lens to another. this may be exaggerated in high power lenses, but can be minimized by proper segment choice.	
in chamber The action or application takes place inside the vacuum chamber during coating application process.	
in situ 1. Latin for "in the situation." allows wearer to wear frame as they would wear it normally before making lens measurements. 2. In place, as in cast-in-place concrete. 3. На месте in-situ testing 1. контроль на рабочем месте; 2. контроль встроенными средствами 4. In its natural place or position; in geology, said specifically of a rock, soil, or fossil when in the same relative position as when originally formed or deposited. 5. In a natural or original position	на месте
in-mass photochromic Lenses in which the photochromic material is dispersed evenly throughout the substrate.	
incident ray A ray of light is said to be an incident ray before it strikes a lens or prism. after passing through the lens or prism, the ray is said to be the emergent ray, or the refracted ray.	
induced prism The prism power created when the optical center of a lens is out of coincidence with the wearer's visual axes, or when the visual axes intersects any point on a lens with refractive power, away from the optical center.	

intermediate seg The middle lens in a trifocal set for a focus shorter than distance but longer than near. the usual focus is half the bifocal power, which allows the wearer to focus at arm's length.	
interpupillary distance The linear distance between fixation axis of the wearer's eye or centers of the pupil with eyes focused at distance.	
interval of sturm Separation between two focal lines of an astigmatic image. intraocular lens (iol) – a synthetic lens implanted after cataract surgery to replace the damaged crystalline lens. intraocular pressure (iop) – pressure of the fluid inside the eye; normal iop varies among individuals.	
inverted image Visual impression of an object as formed by a lens or mirror, in which the upper and lower portions of the image appear as exchanged.	
iostropic Having equal refractive power (index of refraction) in all directions.	
iritis 1. Inflammation of the iris. 2. Inflammation of the iris	
isochromatic Possessing the same color throughout.	
isocoria Equally in size of the two pupils.	
jaeger test Measurement of visual acuity at the reading distance. k	
keratometer 1. An instrument used to measure the curves of the cornea; also known as an ophthalmometer. 2. An instrument for measuring the curvature of the cornea	
keratometry 1. Measurement of the curvature of the anterior surface of the cornea. 2. The process of measuring the curvature of the cornea	
keyhole bridge A bridge design for a front that does not permit continuous contact between the nose and the front in the nasal crest area. resembles an keyhole with a circular arc at the top of the opening in an antique door.	
kryptok A fused lens with a round top bifocal 22 mm in diameter. l	
lacrimal gland 1. The small almond-shaped structure that produces tears; located just above the outer corner of the eye. 2. A gland beneath the upper eyelid which secretes tears. also called tear gland	
lacrimation 1. Product of tears. 2. The production of tears	
lag of accommodation A measure of the eye's ability to focus accurately on a given target. the dioptric difference between the eye's focusing response and the stimulus to focus.	
laminated lens A lens formed by two or more layers of refracting material firmly joined together for special optical or safety purposes.	

laser engravings Etchings or engravings on progressive lenses to denote the position of the fitting cross, add power, etc.	
lasik A surgical procedure using a laser to reshape the cornea to correct refractive errors.	
lateral gradient tint A cosmetic tint darker temporally and fades toward the center. its application is for wearers with unusually narrow pds.	
lazy eye 1. See amblyopia. 2. An eye which does not focus properly without an obvious cause (informal) amblyopia ldl abbr lethal dose ldl abbr low-density lipoprotein	
legal blindness In the u.s., (1) visual acuity of 20/200 or worse in the better eye with corrective lenses (20/200 means that a person must be at 20 feet from an eye chart to see what a person with normal vision can see at 200 feet) or (2) visual field restricted to 20 degrees diameter or less (tunnel vision) in the better eye.	
lens bevel The edge of a lens shaped like a "v". the bevel helps to secure the lens after it has been inserted in the frame.	
lens clock (base curve clock) – a small, round clock-type object with three prongs, when placed on a lens it gives the power of the lens surface. used to determine base curves primarily. also called a sagitta gauge.	
lens corridor The channel of an ophthalmic progressive lens joining the distance viewing area and the total reading power area.	
lens difference In spectacle optics, the numerical difference expressed in millimeters between the horizontal a and vertical b measurements.	
lens groove The angle formed by the v-shape of an eyewire groove to accommodate a beveled lens. lensometer– an instrument to determine the prescription of any given curve lens; also known as a focimeter or vertometer.	
lens pattern A template, used in lens edging equipment to generate correct peripheral shape and geometric center location.	
lens power The diopter power or prescription of a lens.	
lens retention The ability of a front to keep a lens from dislodging from the eyewire groove under force.	
lens stop In a lensometer, a mechanical holder to position the lens at a fixed position, thereby providing a uniform measuring aperture.	
lens washer Very thin nylon beveled material to fit between a lens and an eye wire to hold the lens in more snugly.	
lenticular aspheric Usually plastic cataract lenses ground so that the overall weight and thickness is reduced and to eliminate lens distortions are eliminated.	
lenticular lens A strong power ground into a reduced area of the lens to limit thickness. the remainder of the lens is called a carrier and provides no refractive correction but gives dimension to the frame for mounting. before high plus aspherics, these lenses had a	

higher usage but they are still often the only option for some aphakic patients without a lens implant.	
library temple An earpiece without an ear bend or down bend.	
light adaptation Ability of the eye to adjust itself to an increase in the intensity of light.	
light perception The ability of a person to recognize the presence of a luminous source.	
limbus 1. Circular zone where the cornea joins the sclera (white of the eye). 2. An edge, especially the edge of the cornea where it joins the sclera (note: the plural is limbi.)	лимб 1. Составная часть круга угломерного, представляющая собой плоское кольцо с нанесенными на боковой поверхности радиальными штрихами (шкалой), делящими окружность на равные части (градусы, минуты). при измерении угла лимб остается неподвижным. 2. Плоское металлическое кольцо, разделенное на градусы и его доли, служащее для отсчета величин углов в астрономических, геодезических и других приборах. 3. (от лат . limbus - кайма), 1) плоское кольцо с нанесенными на боковой поверхности штрихами, делящими окружность на равные части (градусы и т. п.); служит для отсчета углов в угломерных инструментах. 2) видимый край диска солнца, луны, планеты.
longe-range vision Usually from 50 inches to infinity.	
major meridians These are the two meridians made up of the meridian of axis power and the meridian that is 90 degrees from the axis. major reference point (mrp) – the point on a lens that satisfies all optical qualities. the point on a where the complete measure of a prism required is present.	
marginal astigmatism When a narrow beam of parallel rays strikes a lens obliquely, rays in the two opposite meridians focus at different points. the distance between the two focus points equals the degree of astigmatism caused. this troublesome error caused lens manufacturers to develop a corrected curve lens series. the idea is if specific curvatures are controlled for specific corrections, then marginal astigmatism can be controlled.	
mark-up 1. Marking of a reference line on a lens during the surfacing process to define how optical characteristics are to be ground into a lens. 2. An increase in the price of something, especially from the price a trader pays for something to the price he sells it for. in the context of transfer pricing, one method to estimate an arm's length price for transactions between affiliated companies is to increase the supplier's cost by an appropriate profit mark-up (cost-plus method).	
marking device of lensometer A device mounted on a lensometer that is used with an ink pad to mark the center and the direction of the axis of the cylinder in a lens.	
marking pins Small metal, spring-mounted pointed pins on a lensometer, inked and used to mark the major reference point and horizontal lens bisector on an ophthalmic lens.	

mastoid bend The curvature in the down bend of the temple (earpiece) adapting to the mastoid curvature (depression) beyond the ear.	
mechanical center The geometric center of an optical lens.	
meibomian glands A variety of glands located in the eyelid. they secrete an oily substance to keep the eye lubricated and the tears from overflowing the lid margins.	
melanin 1. A pigment that gives hair, skin and eyes its color. nature uses melanin to protect the tissue of the eye from sunlight damage. melanin absorbs the color in proportion to their potential damage. it is lost with aging. 2. A dark pigment which gives colour to skin and hair, also found in the choroid of the eye and in some tumours	melanina
mid-range vision Usually from 30 inches to 50 inches; arms-length range.	
millimeter A subunit of linear measurement; one thousandth of a meter; abbreviated mm.	
miniaturization 1. When an image is smaller through the lens than its original object size. 2. Миниатюризация	
minimum lens thickness There is a limit to how thin a lens can be surfaced. this minimum thickness is determined by practicality and by established standards such as ansi z80-1999.	
moisture chamber A thin plastic sheet attached to the eyewire of a frame and shaped to fit like a safety cup style side shield. helps to create a chamber of moisture for a dry eye condition.	
mono-design This progressive lens type uses a single design for a given distance base curve to which all add powers are applied.	
monocle A single eyeglass lens designed to be worn or hand-held in front of one eye; usually provided with an attached cord or chain.	
monocular Pertaining to one eye only.	монокюляр монокюлярный
monocular vision 1. Vision resulting from the use of one eye only. 2. The ability to see with one eye only, so that the sense of distance is impaired	
mounted lens Lens that has been inserted into a spectacle frame front. mr-10 – unique 1.67 high index resin used in lens manufacturer's mix with best tensile strength for rimless mountings.	
multi-design This progressive lens is custom designed for each base/add power combination. lens variables are selected and controlled for all designs maximizing visual performance. multifocal –a lens incorporating two or more different powers (includes bifocal, trifocal, or progressive lenses).	
multi-layer ar All modern ar coatings consist of multiple layers on each side of the lens, usually five or more.	
mydriatic 1. Any drug that dilates the pupil. 2. A drug which makes the pupil of the eye become larger	

myodisc A strong minus lens that limits thickness by lenticularizing the minus power into a small 25 to 35 mm concave bowl in the center of a plano or plus lens blank. often an option for a very high minus patient.	
myopia 1. Nearsightedness; ability to see close objects more clearly than distant objects; a refractive condition in which the point of focus falls in front of the retina; may be corrected by eyeglasses or contact lenses. n – the variable used to represent a material's index of refraction. nanometer (nm) – a unit of length equal to onemillionth of one millimeter or 10 angstrom units; used to measure the wavelength of light. narrow/stretch bridge – to change the bridge size by modifying the shape of a lens by cutting away the bridge or filling the bridge area with extra frame material on a zyl frame. 2. A condition in which someone can see clearly objects which are close, but not ones which are further away. also called shortsightedness. opposite longsightedness	miopía, corto de vista
nasal edge The side of a spectacle lens closest to the nose.	
near acuity The eye's ability to distinguish an object's shape and details at a near distance. near point of convergence (npc) – the closest point at which the two eyes can maintain a single unit image. nearsightedness– a condition in which the optics of the eye are too strong and focus in front of the retina, resulting in blurred distance vision. also referred to as myopia. it is corrected with minus power lenses. near vision– usually from 11 inches to within arms reach (approx. 30 inches).	
near zone width The measurement of the near zone taken at a specified point below the fitting cross. negative relative accommodation (nra) – a measure of the maximum ability to relax accommodation while maintaining clear, single binocular vision.	
neutralization 1. Utilizing a lensometer to determine the dioptric power of an ophthalmic lens. 2. Нейтрализация 3. N нейтрализация 4. [1] heavy gunfire to immobilize enemy activity in the area bombarded. [2] to render a mine incapable of firing, even though it may remain dangerous to handle.	нейтрализация 1. (от лат . neuter - ни тот, ни другой) (реакция нейтрализации), химическая реакция между стехиометрическими количествами кислоты и основания, приводящая к образованию соли, напр.: $\text{hcl} + \text{naoh} = \text{nacl} + \text{h}_2\text{o}$ 2. , в языкознании - снятие (неосуществление) в определенных позициях противопоставления единиц языка, напр. в русском языке противопоставление согласных по глухости - звонкости нейтрализуется, в частности, в конце слова ("сноп" и "сноб" произносятся одинаково). 3. Реакция между раствором сильной кислоты и щелочи, в результате протекания которой кислотная или щелочная среда раствора становится нейтральной. компенсация 1. Прием перевода, восполняющий неизбежные семантические или стилистические потери средствами языка перевода, причем необязательно в том же самом месте текста, что и в подлиннике. 2. 1. обещание компенсировать потери или повреждения, причиненные в результате определенного набора обстоятельств. 2. пункт, обычно в

письменном соглашении, посредством которого одна сторона соглашается принять юридическую ответственность, связанную с его де

3. Способ перевода, при котором элементы смысла, утраченные при переводе единицы ия в оригинале, передаются в тексте перевода каким-либо другим средством, причем необязательно в том же самом месте текста, что и в оригинале.

4. Согласно з. фрейду – реакция организма и психики, противодействующая травматическим возбуждениям путем изъятия активной энергии у всех психических систем и созданием соответственного энергетического заполнения вокруг травмированных элементов. согласно а.

5. (лат. возмещение,

6. Ж.. вештод

7. Возмещение потерь, понесенных убытков, расходов, возврат долга. компенсационные соглашения, сделки строятся на принципе компенсации закупок одних товаров встречной поставкой других или другим способом взаимного удовлетворения интересов. компенсационные вы

8. Согласно з. фрейду – реакция организма и психики, противодействующая травматическим возбуждениям путем изъятия активной энергии у всех психических систем и созданием соответственного энергетического заполнения вокруг травмированных элементов. согласно а.

адлеру – повышенное, компенсаторное развитие физических, психических и личностных компонент, возмещающее некий недостаток, реальный или мнимый. чрезмерная компенсация переходит в сверхкомпенсацию. та и другая выступают как механизмы и средства нейтрализации и преодоления комплекса неполноценности.

9. В гражданском праве - возмещение убытков, возникших вследствие нарушения гражданско-правовой обязанности, когда ее исполнение в натуре

10. (от лат. compensatio уравнивать) – уравнивание, осн. понятие индивидуальной психологии альфреда адлера, согласно которому благодаря представлениям или действиям, приводящим индивида к сознанию своей полноценности и даже превосходства, чувство неполноценности компенсируется или сверхкомпенсируется.

11. (от лат . compensatio - возмещение), в технике - совокупность операций при сборке машин для возмещения ошибок формы и размеров деталей, взаимного расположения их поверхностей. один из основных способов компенсации - установка дополнительных деталей (компенсаторов).

neutralizer A combination of chemicals used to “stay” a color of tint on a lens surface.	
night vision 1. The eye's ability to adapt to low light conditions. under low light levels, the pupil enlarges and the eye uses different light receptors (rods). different eye conditions resulting in night blindness or poor night vision include pupils that become smaller with age, cataracts, nearsightedness, retinitis pigmentosa, or vitamin a deficiencies. 2. The ability to see in dim light. the illumination in submarines and certain areas of surface vessels is red in order to preserve this ability.	
nodal point 1. The point on the optical axis to which entering and emerging rays are directed. 2. [1] to the mariner, a point of land from where the current flows up the coast on one side and down the coast on the other. [2] the term node is used in many other fields—including astronomy, computer science, medicine, and photography—to denote a position of change or connection. 3. Узловая точка	
nominal power The nominal curve of a semifinished lens marked in diopters by the manufacturer. the difference between marked and actual tool curve of the surface represents the manufacturer's compensation for the base curve. this compensation allows standard tooling to be utilized over a range of prescriptions with little or no further compensation by the laboratory. normal retinal correspondence (nrc) – the foveas of the two eyes are corresponding neural points in the visual cortex and binocular vision can occur.	
normal vision Vision is clear and sharp when the eye is able to focus on images correctly onto the retina.	
nose pad The nasal bearing surface member of a front; also called pad.	
nyctalopia 1. Night blindness; impaired vision under reduced light. 2. The condition of being unable to see in bad light. also called night blindness 3. See moon-blink. 4. See night blindness. o	
object displacement Movement of objects seen through a prism toward the apex of the prism.	
objective refraction Determination of the prescription utilizing the response of the patient to determine the accuracy of the prescription.	
obliqu e In referring to optical axis, any axis that is not perpendicular (90) or parallel (180).	
oblique errors Oblique astigmatism and oblique spherical power error.	
occluder An opaque plastic spatula device used to cover one eye during examination.	
ocular globe The eyeball.	
ocular hypertension An increase in pressure above the normal range with no detectable changes in vision or damage to the eye. common in very nearsighted or diabetic patients.	

occulist An early term for a physician specializing in the study and treatment of affects and diseases of the eye.	
occupational segment A segment that is prescribed and fit to answer a specific task. o.d. – (1) an abbreviation of doctor of optometry; (2) oculus dexter in latin – meaning “right eye”. off center (marginal) astigmatism – blurred vision due to power error and induced cylinder in the periphery, corrected by introducing asphericity into lens design.	
ocular defects The end result of visual problems.	
oleophobic coating A chemical composition top coat consisting of hydrophobic chemicals and oleophobic chemicals to repel dirt, dust, skin oils, and make up for effortless cleaning and smudge resistancy.	
ophthalmometer An instrument used to measure the curvature of the cornea.	
ophthalmoscope 1. An instrument containing a perforated mirror and lenses to examine the interior of the eye. 2. An instrument containing a bright light and small lenses, used by a doctor to examine the inside of an eye	
ophthalmoscopy The doctor examines the inside of the eyes with an illuminates and magnifies the interior of the eye.	
optic cup The white, cup-like area in the center of the optic disc. optic disc/optic nerve head – the circular area (disc) where the optic nerve connects to the retina. optic nerve has the bundle of over one million nerve fibers that carry visual messages from the retina to the brain.	
optical axis 1. An imaginary line at right angles to the surfaces of a lens and passing through its optical center. 2. The line that passes through the center curvature of optical surfaces.	
optical center 1. The point on an optical lens where the light passes directly through without bending. the thickest point of a plus lens and the thinnest point of a minus lens. 2. The point on a lens through which light can pass without being deviated.	
optical correction Combination of curvatures of the front and rear surface of the lens, measured in diopters.	
optical cross A diagram consisting of two straight lines crossing each other at right angles orientated to represent the principal refractive meridians of an ophthalmic prescription lens; used to chart the axis and refractive powers in the principal meridians.	
optometric assistant Office staff primarily involved in front-office procedures, optical dispensing and contact lens patient education.	
optometric technician Technicians work directly with optometrists in the areas of patient examination and treatment including contact lenses, low vision, vision therapy, and optical dispensing and office management. optometrist (o.d.) – a doctor of optometry who specializes in vision examinations and treatment, prescribes spectacle and contact lenses, and also diagnoses and treats some eye diseases.	

optyl The trade name for a thermo-setting epoxy resin of high stability used in eyeglass frames. it will return to its original shape when heated.	
orthokeratology The practice of correcting or reducing prescription needs surgically altering the shape of the cornea.	
orthophoria Balance of the eye muscles.	
orthoptics 1. The science of correcting defects in binocular vision. o.s. – oculus sinister in latin – meaning “left eye”. o.u. – oculus uterque in latin – meaning “both eyes”. 2. The study of methods used to treat squints	
over-refraction A determination of additional refractive power needed over a pair of spectacles or contact lenses to correct a visual error.	
oversize blank Larger lens blanks that are necessary in order to align the optical center of the lens with the eye p.d. as measured on the frame. p	
pad arm The extension of a spectacle frame or mounting that connects the pad retainer to the bridge or front; also called guard arm.	
paddle temple A temple which fits straight back and does not bend behind the ear.	
paddle tip A flattened portion of a temple fitting over and behind the ear.	
palpebral fissure The space between the upper and lower eyelids when the eyes are open.	
palpebrum Eyelid.	
pantoscopic tilt angle Angle of a spectacle frame tilted towards the cheek and away from the eyebrows. correct pantoscopic tilt allows for better vision through the lens and a more pleasing cosmetic alignment.	
paraoptometric Works under the direct supervision of a licensed doctor, collects patient data, administers routine technical tests of the patient’s visual capabilities and assists in office management.	
penalization To prevent sight out of the good eye and force the weaker, amblyopic eye to function. a filter, patch, or eye drops are used in the good eye.	
peripheral vision Side vision; ability to see objects and movement outside of the direct line of vision.	
periscope lens A spherical lens with a 1.25 base curve.	
phoria It informs as to how much accommodation may be changed with a lens, without causing an overt change in convergence.	
phoropter An instrument of determining the refractive state of the eye.	
photochromic lens A lens having the capability to automatically darken when exposed to ultraviolet light.	
pin bevel Use of a ceramic or diamond wheel to remove all sharp angles and chips from a lens edge.	

pinguecula 1. A small, yellowish elevation of ocular tissue near the cornea that occurs especially in people of advanced age. 2. A condition affecting elderly people, in which the conjunctiva in the eyes has small yellow growths near the edge of the cornea, usually on the nasal side	
plano lens Plain lens material blank with no prescription corrective power. also, plano can refer to the curvature of the lens indicating a flat base curve surface.	
plastic lenses Most widely used material for eyeglass lenses lighter weight than glass.	
pliers 1. A hand-held tool consisting of two handles attached to jaws used to grip, bend, cut or otherwise manipulate materials. 2. A hand tool, pincer-like, with scissors action, usually with serrated jaws; used for gripping, holding, bending, and cutting. plinth 1. a square or rectangular base for column, pilaster, or door framing. 2. a solid monumental base, often ornamented with moldings, bas reliefs, or inscriptions, to support a statue or memorial. 3. a recognizable base of an external wall, or the base courses of a building collectively, if so treated as to give the appearance of a platform. plenum fan plinth , 1	
plus lens Indicates the power of a convex surface or power of a lens whose convex surface is stronger than its concave surface.	
points file A computer program file that contains height measurements for points across a lens surface which are used for guiding the position of the cutting tool during computer-controlled (cnc) cutting of the surface.	
polariscope An instrument used to detect stress points on a lens.	полярископ
polarized A lens design to reduce reflective glare; i.e.: light reflected off the water.	поляризованный
polished edges A lens bevel polished by a buffing wheel to make the edge of the lens crystal clear.	
polythinner A polycarbonate lens ground thinner (1.0) than standard thickness (2.0).	
position of wear The position of the fitted spectacle lens as worn by the actual wearer, including the vertex distance, pantoscopic tilt, and facial wrap of the lens.	
positive accommodation The adjustment of the crystalline lens from far to near regard; occurs by contracting of the ciliary muscles and increasing the curvature of the crystalline lens.	
power error The change in the power of a lens as the eye looks through various points of the lens.	
power wheel of lensometer The large focusing wheel that focuses the power of the sphere and the cylinder of the lens. prentice's rule – the amount of prism at any point in a lens is equal to the distance in centimeters from the optical center of the lens times the power of the lens in diopters. the base of the prism will be toward the optical center for plus powered lenses and away from the optical center in minus powers (example: 10 millimeters (1 cm) from the center of a +2.00 lens the amount of prism is 1x2.00 or 2 prism diopters) with the	

base toward the optical center of the lens. for cylinder lenses, the power used in calculation is the power in the meridian that passes through the point being considered.	
prescribed prism A desired and ordered component of an ophthalmic lens producing specified displacement by refractive elements of the lens.	
prescription laboratories Transforms semifinished lenses into finished lenses and then edges and glazes into frames. prism (?) – a wedged-shaped piece of lens material, using a symbol ?, that bends light, but does not refract light, in the direction of its base. prism grinding is incorporated into spectacle lenses to help relieve eyestrain caused by weak eye muscles and/or to make the optical and mechanical centers coincide.	
prism diopter Unit of measure indicating deflection of light rays. one prism diopter deflects rays of one centimeter at a distance of one meter. prism power can be calculated by using prentice's	
prism segment A straight-top glass bifocal lens with the "base in" prism ground in the segment portion only. prism thinning (equi-thin)– the reduction of inherent thickness in the upper portion of certain type of multifocal lenses by grinding equal basedown prism in each lens of a pair; the lower portions in certain type lenses tend to be thinner than the upper portions. thickness and weight are reduced due to this procedure causing a more pleasing pair of spectacles.	
prismatic effect by lens When light goes through a wedge shaped lens which is called a prism, it bends. light is also bent when it does not go through the center of a lens. it commonly occurs when the pupillary distance (pd) is not measured or made correctly.	
prismatic imbalance The difference in prism power in a pair of ophthalmic lenses at corresponding specified reference points.	
process engineering 1. The design or adjustment of a series of operations in a production process in order to manufacture a product to the desired specifications. 2. Технология	
progressive channel The aspheric corridor of a progressive lens that makes up the intermediate and near vision zones.	
progressive lens Designed to provide clear and continuous vision from distance to mid-range to near by a contoured front surface curve. progressive lenses have no visible segment lines and are designed to eliminate image-jump in vision.	
pseudophakia The condition of an eye containing a surgically implanted artificial lens.	
ptosis crutch A metal wire attachment mounted on the frame front.	
puck A semi-finished lens blank with a factorymolded spherical front surface used for producing back-side progressives using freeform surfacing.	
pupillary reflex The automatic contraction or enlargement of the pupil when confronted with the presence or absence of light, accommodations, or emotional change.	
pupilometer An optical device for measuring the diameter, width, or area of the pupil of the eye. q	

quadrifocal A lens design that features a trifocal segment at the bottom and a bifocal segment at the top of the lens. prescribed to patients who work at differing focal lengths.	
quality of vision Refers to the light-dark adaptation of the eye.	
quantity of vision The eye's ability to adjust to environmental and focal differences, which relates to blurred vision. r radial keratotomy (rk) – a surgical procedure used to reduce nearsightedness. during surgery, eight to sixteen cuts are made in the cornea to flatten it thus focusing light back toward the retina. risk of surgery include over or under correction, fluctuating vision, sensitivity to glare and seeing difficulty during night viewing. surgical scars on the cornea sometimes make it difficult for some patients to wear contact lenses.	
radius of curvature A straight line measured from the center of a circle to its circumference, usually used to express the curvature of a spectacle or contact lens in millimeters, or to compute the sagitta value and dioptric power of a corneal surface.	
range of accommodation The linear distance from the farthest point of clear vision to the nearest point of focus or clear vision attainable by the human eye; usually expressed in centimeters or inches from far point to near point.	
reading field The area in which clear reading vision is attained at a specified distance through a multifocal segment, or near-use ophthalmic lens.	
rede-rite A glass occupational lens that has a 38 mm half round segment at the top of the lens for distance viewing. lower part of the lens is for near viewing.	
reference markings Location points, inked or etched on the surface of an ophthalmic lens, provided by designers and manufacturers to establish the proper rotational alignment of a lens blank.	
reflected glare 1. Relatively bright light that does not enter the eye directly from the light source, but after it has been deflected by a surface which the direct light has illuminated. it can be either diffuse or specular. 2. Glare resulting from specular reflection of high brightness in polished or glossy surfaces in the field of view. also	
reflective lens A lens that has been coated to return specific wavelengths of incident light.	
refracted index Characterizes the way a transparent optical material bends or refracts light.	
refractionist One skilled in determining the refractive state of the eyes, the state of binocularity, and the proper corrective lenses.	
refractive error A defect in the eye that prevents light rays from being brought to a single focus exactly on the retina.	
refractive power A lens' ability to bend parallel light rays into focus, as measured by power diopters.	
retinal pigment epithelium The pigment cell layer that nourishes the retinal cells; located just outside the retina and attached to the choroid.	

retinitis pigmentosa 1. A hereditary disorder in which the pigmented layer of the retina begins to break down, resulting in tunnel vision and difficulty seeing in dim light. eventually central vision diminishes. 2. A hereditary condition in which inflammation of the retina can result in blindness	
retinoscope 1. An instrument for evaluating refractive errors of the eye by projection of a beam of light into the eye and observation of the movement of the illuminated area of the retina surface and of the refraction by the eye of the emergent rays. 2. An instrument with various lenses, used to measure the refraction of the eye	
retroscopic tilt Angle or pitch of a spectacle frame away from the cheeks.	
reversed image Visual impression of an object as formed by a lens or mirror in which the right and left portions of the image appear as exchanged. reverse slab-off - a slab-off molded into the front surface of a plastic lens to better control accuracy of the slab-off. reverse slab-offs are used on the eye with the most plus or least minus prescription.	
ribbon segment A narrow band of add power providing distance power above and below the segment.	
riding bow temple A temple that is bent in a semicircle and wraps around the total ear contour.	
rimless frame A type of frame that provides no, or only partial, peripheral support for the lenses.	
rivets Fasteners used to attach hinges or other frame components to a frame.	
rocking pads Plastic pads attached to pad arms on the eyewire. the pads are moveable and can be adjusted for a precise fit on the nose. rod, rod cells – one type of specialized lightsensitive cells (photoreceptors) in the retina that provide side vision and the ability to see objects in dim light (night vision).	
rolled edges A lens bevel rounded to improve the cosmetics by reducing edge thickness.	
rouge Iron oxide, a very fine abrasive used in polishing a glass lens surface. s	
saccades 1. Abrupt voluntary shift in fixation from one point to another. when children read, this occurs as their eyes jump from word to word. 2. Controlled rapid movements of the eyes made when a person is changing the direction in which they are focusing, e.g. when they are reading	
saddle bridge A bridge design made of plastic that permits continuous contact between the nose and the front in the nasal crest area.	
safety bevel A flattening bevel ground on the back edge of the lens to remove the sharp edge for a safer lens.	
safety glasses A pair of ophthalmic lenses special construction and mounted to protect the eye from injury by impact, heat, excessive irradiation, or liquid chemicals; meeting the a.n.s.i. z87 standards.	

sagitta depth The theoretical thickest point of a lens. edge thickness in a minus with a zero center thickness and center thickness of a plus lens with a zero edge. schlemm's canal – the passageway for the aqueous fluid to leave the eye.	
sagitta gauge Instrument to measure approximate base curve of the lens. also known as lens clock.	
scotoma 1. A blind area within the visual field. 2. A small area in the field of vision where someone cannot see	
scratch resistant coating A clear hard coating applied to the front and back of a lens to reduce scratching of the lens surface. does not make the lens scratch proof.	
sculptured bridge An individually designed bridge area of a spectacle front that conforms to an unusual nasal anatomical variation.	
segment drop The manufacturer's specification for the vertical distance from the horizontal lens blank bisector to the horizontal tangent at the top of the segment on a semi-finished multifocal.	
segment gauge A mechanical measuring device which may be inserted into an unglazed spectacle rim to determine height of bifocal or trifocal add in millimeters. segment height - measurement vertically from the lowest point on the lens to the top of the segment. traditionally bifocals and trifocals are measured just below lower lid to lower pupil. progressive seg heights are taken from the vertical center of pupil. seg heights can vary depending on where wearer's prefer and whether the segment is being placed for task-specific purposes.	
segment width The lateral measurement of a multifocal segment at it's greatest width.	
selective absorption The blocking of certain wave lengths of light. examples include ultra-violet absorption and blue light absorption.	
self-taping screw A threaded mechanical fastening device with a sharp, projecting thread that cuts its own reciprocal channel into the material into which it is inserted or twisted.	
semi-finished blank A lens blank in which the front surface is a factory base curve finished and the back surface is to have a power ground (cut) on it.	
single vision A lens having one optical center and power. a single vision lens may contain up to two refractive powers to create correction for astigmatism (compound lens), but will only contain one optical center.	
single-point cutting The process of cutting apart, such as a lens, by removing material from one point, typically as the part is being "turned" by the machine.	
skewed and size distortion Unwanted central and peripheral magnification/minification changes that cause swimming and swaying sensations.	
skull temple A temple shaped straight back with a bend over the ear area.	

slab-off Surfacing method of grinding prism to a bicentric lens to reduce vertical imbalance at near. regular slab-offs are prescribed for the lens with the most minus or least plus.	
slit lamp 1. An instrument (combination of light and microscope) which produces a slender beam of light for illuminating and viewing the anterior of the eye under magnification. 2. A piece of equipment which provides a narrow beam of light and is connected to a special microscope, used to examine the eye	
slumping The process of heating a glass blank over a "former" made from a refractory material (such as ceramic) until the glass blank replicates the shape of the former. this process is often used to produce progressive lens molds.	оползание сползание
smart seg A plastic flat-top bifocal with the top portion of the bifocal segment having a progressive lens design.	
snellen chart 1. A chart used for testing central visual acuity. it consists of lines of letters, numbers, or images in graded sized drawn to snellen measurements. 2. A chart commonly used by opticians to test eyesight [described 1862. after hermann snellen (1834– 1908), dutch ophthalmologist.] comment: the snellen chart has rows of letters, the top row being very large, and the bottom very small, with the result that the more rows a person can read, the better his or her eyesight.	
soft design A progressive lens design with a soft blending of surface astigmatism resulting in adequate distance and reading areas done by gradually spreading the unwanted surface astigmatism over a greater portion of the lens.	
spatial relation The ability to judge the relative position of one object to another and the internal awareness of the two sides of the body. these skills allow the individual to develop the concepts of left, right, front, back, up, and down. this ability is needed in reading and math.	
spatula temple Term for skull temple.	
spectacle blur A transient impairment of visual acuity on changing from contact lenses to spectacle correction usually due to induced epithelial edema lasting from a few minutes to a few hours.	
spectacle plane A flat, geometric surface projected through the posterior lens vertices equidistant from corresponding points of a pair of mounted ophthalmic lenses; used as a reference for the orientation of ophthalmic lenses in front of the wearer's eyes.	
spherical aberration An aberration in a lens which causes rays incident at various distances from its optical center to focus at different distances from the lens.	aberración esférica
spherical equivalent A mathematical expression of the dioptric power of a spherocylindrical lens. the calculation is the spherical power of the lens plus half the cylindrical power. spherical lens (or sphere) – a segment of a sphere, refracting rays of light equally in all meridians. a lens having the same radius of curvature in every meridian.	
splay 1. To spread out or apart; sloping or spreading the nose pads on a frame to open/widen the bridge. 2. A sloped surface, or a surface which makes an oblique angle	

with another, esp. at the sides of a door, window, proscenium, etc., so the opening is larger on one side than the other; a large chamfer; a reveal at an oblique angle to the exterior face of the wall. splay brick, cant brick a brick, one side of which is splayed (beveled).	
spring hinge 1. A type of flexible frame hinge that helps keep the glasses in proper alignment. they make frames more durable and reduce the need for frequent adjustments. 2. A hinge containing one or more springs; when a door is opened, the hinge returns it to the open position automatically; may act in one direction only, or in both directions (as on a swinging door).	
squint 1. To be unable to direct both eyes simultaneously toward a point. 2. A condition in which the eyes focus on different points. also called strabismus verb to have one eye or both eyes looking towards the nose babies often appear to squint, but it is corrected as they grow older. srn srn abbr state registered nurse ssri ssri abbr selective serotonin re-uptake inhibitor	
stereopsis 1. Depth perception. 2. Стереопсис	стереопсис Субъективное ощущение глубины пространства при зрении бинокулярном, обусловленное сетчаточной горизонтальной диспаратностью. при прочих равных условиях – чем больше диспаратность, тем больше видимая глубина.
stock lens An unedged ophthalmic lens with both surfaces finished to specific vertex power(s) supplied from the manufacturer.	
straight top bifocal A fused bifocal that has one-half of a sphere with diameters of 22, 25, 28, 35, 40, or 45 mm. also called a “d” seg or flat-top.	
stria 1. A streak in a lens caused by imperfect materials and resulting in a variation of refractive index. 2. A pale line on skin which is stretched, as in obese people (note: the plural is striae.)	пал. струйки
stroma 1. The middle and thickest layer of the cornea. 2. Tissue which supports an organ, as opposed to the parenchyma or functioning tissues in the organ	
stye 1. An inflammation of a gland near the edge of the eye lids. 2. Same as hordeolum	
subconjunctival hemorrhage Bleeding between the conjunctiva and sclera which often looks alarming, usually poses no threat to the eye or vision.	
subjective examination Eye test using patient's responses to help determine the prescription for glasses or contact lenses. surfacing (traditional) – accomplished by taking a lens, known as a blank, and grinding away portions of its back surface in such a way that it will contain the wearer's unique prescription. surfacing (digital) – see freeform surfacing. surfacing (direct) – see freeform surfacing. surfacing (freeform) – the process of using a “freeform” generator and polisher to cut and polish lens surfaces of virtually unlimited complexity.	
suspension mounting Lenses are attached to the chassis by nylon or metal cord fitted in a groove around the lens.	

symmetrical design A design that has similar contour line patterns in the nasal and temporal areas of each lens. the uniform design is decentered and rotated accordingly to produce a right and left lens.	
systemic disease Diseases which affect the entire body, such as diabetes, high blood pressure and arteriosclerosis. these may affect vision and are frequently detected during an eye examination, often times before the symptoms appear elsewhere. t	
telescopic lens A compound lens system, with plus objective and minus ocular components for magnification or image size; a low vision aid.	
tempering 1. The process to harden a glass lens to meet required standards by the fda. tempering is accomplished by air/heat hardening or chemical treating the lens. 2. Preliminary tempering of exhalating substrates	отпуска
temple bow The combined outward and inward curvature of a spectacle earpiece temple, designed to eliminate contact with the head in front of the ear.	
temple covers Plastic tubes that are used to cover the flexible part of a cable style temple.	
temple fold angle The angle formed by the temples, in folded position, as viewed from the back of the frame; also called cross angle.	
temple tip The extreme end portion of an end piece fitting over and behind the ear.	
temporal edge The side of a spectacle lens closest to the ear. tennon's capsule – membranous tissue that envelops the whole eyeball except the cornea. tension/compression mounting – lenses are drilled and attached to the chassis with gaskets or fasteners other than screws.	
thermal cure scratch coating Employs ovens in which lenses are heated and gradually brought to room temperature over a specific period of time. this may be accomplished via conduction, convection, radiation, or a combination. produces a tightly bonded coating but requires a lengthy cure cycle. best suited for large batches of lenses.	
thickness caliper A tool used for measuring thickness. calipers were formerly often calibrated in "points" but are now calibrated in millimeters.	
thin film coating Generally refers to the ultra thin ar coating produced in a vacuum chamber.	
three piece mount A rimless frame style with frame parts that attach to each lens with screws or some other type of mounting device. in essence, when not held together by lenses, the frame chassis is in three pieces: right endpiece temple, left endpiece temple and bridge.	
tint density Tints may be a variety of different hues with the same coloration density which determines how much opacity of color is present.	
tinting Tinting a lens is accomplished by immersing it in a dye bath and either manipulating it or monitoring it until it has reached the desired density or coverage pattern.	

top rims The components of a combination ophthalmic frame front that are attached to the top portion of a chassis. toric, toric lens – a toric surface is ground with two different curves at right angles to each other with the weaker of the two curves located on the cylinder's axis. a lens containing cylindrical (or outof- round) surface. toric lenses are used to correct astigmatism.	
total inset The lateral distance separating a vertical line drawn through the geometrical center of the distance portion of a multifocal and vertical line passing through the geometrical center of the segment.	
trabecular meshwork The spongy, mesh tissue near the front of the eye that allows the aqueous fluid (humor) to flow to schlemm's canal then out of the eye through ocular veins.	
trial frame An adjustable spectacle-like device containing cells used to hold multiple trial lenses during subjective refraction.	
trial frame set Adjustable eyeglass frame containing cells into which trial lenses are inserted during an eye examination. trial lenses are stored in a case with different powered lenses.	
trial lens (1) an individual spherical, cylindrical, or prism lens as a set or case and placed in a trial frame for the wearer to try different prescription options.	
trifocal A lens having three areas of viewing, each with its own focusing power. usually, the upper part is used for distance; the lower power for close vision, such as reading; and the middle area for "arm's length" vision.	
triple gradient A lens tinted two colors, top and bottom and fading to a third color in the center of the lens.	
ultex bifocal A one-piece bifocal with an arced top, wider in diameter than a round segment.	
ultrasonic cleaning A method of vibrating at frequency high enough that the friction between parts is cleaned by a solution in the ultrasonic cleaning unit.	limpieza ultrasónica
ultraviolet rays Usually referred to as "uv". invisible rays given off by radiant energy (sun's rays). over exposure to uv results in eye damage.	лучи.ультрафиолетовые
uncuts Lenses that have prescription ground on the surface but are not edged and beveled to a shape or frame.	
uniform density lens A lens with luminous transmittance which does not vary significantly over the entire area of the lens.	
uniocular Having or using only one eye.	
unwanted prism Prismatic effect induced by improperly centered lenses. any amount of prism that exists at the mrp other than that prescribed. uvea, uveal tract – the middle coat of the eyeball, consisting of the choroids in the back of the eye and the ciliary body and iris in the front of the eye. v	
vergence The ability of the eyes to rotate toward or away from each other to remain focused on an object as it approaches or moves away.	вергентность

verification of power Lens measurement and inspection to determine the prescription power.	
vertex distance Distance from the cornea (front surface of the eye) to the back surface of a wearer's eyeglass lens.	
vertex imbalance The difference in vertical prism power at the reading level in a pair of lenses.	
vertex power The total power of a lens expressed in dioptric value in all meridians. vertical centration (vc) – the exact spot where, when viewing straight ahead, the wearer's pupil looks out of the lens when the frame is properly adjusted to the face.	
vertical imbalance A generic description for unequal vertical position of one eye in reference to the other.	
vertical meridian The 90-degree meridian in a cylindrical surface.	
visual acuity 1. The ability to distinguish details and shapes of objects; also called central vision. 2. A measure of the ability to distinguish fine details; the reciprocal of the angular size of critical detail which is just large enough to be seen. 3. The ability to see objects clearly	
visual axis The main line of sight which extends from the fovea to the object of regard.	
visual discrimination The ability to discriminate between visible likeness and differences in size, shape, pattern, form, position, and color. such as the ability to distinguish between similar words like "ran" and "run".	
visual pathway Route of the nerve impulses from the retina along the optic nerve, and optic nerve radiations to the brain's sensory cortex that is located at the base of the skull.	
visual skills tests Performance tests obtaining meaning of the visual environment. they may uncover impairments.	
visual spectrum Range of light from 380nm to 800nm.	
visual therapy A vision care specialty where techniques are prescribed for developing vision skills such as focusing, eye movement, two-eye coordination, visual perception, and eye-hand-body integration.	
vitreous humor The jelly-like, colorless mass of gel that lies behind the lens and in front of the retina. vacuum coating - lenses coated with metallic alloys to create color, mirror effects or anti-reflective abilities. w	
wafer 1. A very thin lens which is cemented to a distance lens to form a bifocal on a single vision lens. 2. Базовая пластинка 3. A thin sheet of semiconductor (photovoltaic material) made by cutting it from a single crystal or ingot.	базовая пластинка используется для формирования слоев
wrap frame A type of eyeglass frame, often sports or sun wear, which curves closely around the face and temple area. x "x"-(axis) – a symbol used for the imaginary line connecting the geometric centers of a pair of lenses. the 180° line.	

x-ray lenses Occupational high index glass lenses offers protection from gamma ray energy present in x-ray radiation. the material is colorless and very heavy due to the high amount (70%) of lead oxide that glass contains. these lenses cannot be hardened. y “y”-axis –a symbol used for imaginary line perpendicular to the x-axis. the 90° line.	
yellow tint This tint absorbs practically all uv light and blue light and offers increased haze penetration, making objects stand out clearly on hazy and overcast days.	
yoked prisms A wedge-shaped lens that is thicker on one edge than the other. the prism bases (thicker end) are in the same direction for both eyes (up, down, right, left). yoked prisms are used to train or compensate for a binocular dysfunction (eye teaming problem) or a visual field loss. z	
zirconium oxide Compound used in polishing.	
zonules The fibers that hold the crystalline lens suspended in position.	
<p style="text-align: center;">Глоссарии бюро переводов Фларус</p> <p style="text-align: center;">http://glossary-of-terms.ru/</p>	