CAM A partially faceted gem whose outline has been created using the CAM techpre-form nique. See Chapter 17.3.

Canada Along with cedarwood oil, Canada balsam is the traditional optical agent for balsam filling fractures in emerald and other gemstones. It is a turpentine based on the resin of the balsam fir tree. See Chapter 13.2. See also optical agent.

carat One fifth of a gram. Not to be confused with the measure of the purity of gold, which can be spelled carat or karat (see page 9).

cat's-eye The optical effect, seen in tiger's eye and other gemstones, arising from light scattering from randomly oriented fibrous inclusions. Formally known as chatoyancy. See Chapter 12.7.3.

cedarwood A traditional optical agent for filling fractures in emerald. Usually distilled oil from juniper and cypress trees, not cedar. See Chapter 13.2. See also Canada balsam and optical agent.

cerium oxide Popular metal oxide polishing agent. See Chapter 4.12.1.

ceramic lap An extremely hard type of polishing lap used with diamond bort. Ceramic laps produces the flattest facets and the sharpest meet points, but they can be a challenge to use. See Chapters 3.3.1 and 8.14.4.

charge (verb) To load a lap with abrasive or polishing agent. (noun) The act of doing so, or the current load of abrasive, as in "the current charge of diamond is wearing out." See Chapters 3.2.2 and 8.14.

chatoyancy see cat's-eye

cheater A mechanism for adjusting the rotation of the quill slightly in a clockwise or counterclockwise direction. These adjustments are usually smaller than one setting of the index wheel. Hence, the cheater is also known as the index splitter. See Chapter 2.2.1.

chemical The finest yet least well understood polishing process. Chemical polishing produces the final, perfect surface finish through a combination of mechanical and chemical action. See Chapter 8.11.

chemical A method for synthesizing gemstones by condensing material directly from vapour depoa vapour to the solid state. Currently used only with diamond. CVD produces sition (CVD) relatively small but high quality diamonds. See Chapter 6.6.2.

CHIA An mnemonic acronym to remember items to check before cutting a facet. Stands for "Cheater, Height, Index, Angle." See Chapter 8.9.2.

chromophore Mineralogical name for the atoms that produce the colour in gemstones.

These are usually trace impurity atoms, such as chromium which makes ruby red. See Chapter 12.3.2.

chrysoberyl A beryllium aluminum oxide gem material. Although usually yellow or golden-green, the rare and highly prized alexandrite type exhibits a green to purple-red colour change. See Chapter 14.1.