For Further Reading

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**Assignment 1: Beyond the Essentials**

https://www.gia.edu/gia-news-research/diamond-quality-short-history-4Cs

**Assignment 2: Birth of the Modern Diamond Industry**

https://www.gia.edu/gems-gemology/spring-2012-vallerano-diamond-bedino

https://www.gia.edu/gems-gemology/summer-2006-cullinan-diamond-scarratt


Shigley J.E. Bibliography, Historical Reading: The Diamond Fields of South Africa: Part 1 (1868-1893)

Shigley J.E. Bibliography, Historical Reading: The Diamond Fields of South Africa: Part 2 (1893-2014)
Assignment 3: The Modern Diamond Market

https://www.gia.edu/gia-news-research/debeers-optimistic-sales-revive-luxury-houses-remain-cautious

https://www.gia.edu/gia-news-research/major-diamond-find-brightens-market

https://www.gia.edu/gems-gemology/winter-2014-gemnews-online-diamond-sales


https://www.gia.edu/gems-gemology/summer-2014-weldon-botswana-scintillating-moment

https://www.gia.edu/gia-news-research-may-2014-industry-analysis-retailers-diamond

https://www.gia.edu/gia-news-research/recycled-diamonds-mining-worlds-largest-diamond-resource

https://www.gia.edu/gia-news-research-china-diamond-exchange-lucas

https://www.gia.edu/gia-news-research-zbird-industry-hsu

https://www.gia.edu/gia-news-research-zimbabwe-diamonds-shor

https://www.gia.edu/research-news-botswana-making-beneficiation-work

https://www.gia.edu/gia-news-research-sothebys-diamond-auction-2013-shor

https://www.gia.edu/gems-gemology/spring-2013-shor-auction-houses

https://www.gia.edu/gems-gemology/fall-2010-diamond-pearl-shor


https://www.gia.edu/gems-gemology/winter-2002-gem-news-international
Assignment 4: How Diamonds Form

https://www.gia.edu/gems-gemology/winter-2017-worlds-biggest-diamonds

https://www.gia.edu/gems-gemology/winter-2016-microworld-ferropericlase-inclusion-diamond

GIA (2016) Large, Rare Diamonds Reveal the Inner Workings of Earth’s Mantle
https://www.gia.edu/diamonds-reveal-inner-workings-of-earths-mantle


Pay D. et al. (2014) Tiny Inclusions Reveal Diamond Age and Earth’s History: Research at the Carnegie Institution. GIA Research & News
https://www.gia.edu/gia-news-research-tiny-inclusions-reveal-diamond-age

https://www.gia.edu/gia-news-research-carnegie-carbon-isotope-studies-diamond

https://www.gia.edu/gia-news-research-carnegie-story-behind-story

https://www.gia.edu/gems-gemology/WN13-advances-diamond-geology-shirey

https://www.gia.edu/ongoing-research/coesite-inclusions-in-pink-diamond


Assignment 5: Exploring for Diamonds

https://www.gia.edu/gems-gemology/fall-2007-gem-news-international

https://www.gia.edu/gems-gemology/spring-2005-gem-news-international

https://www.gia.edu/gems-gemology/fall-2002-diamonds-canada-kjarsgaard

Shigley J.E. et al. (2001) Discovery and Mining of the Argyle Diamond Deposit, Australia. Gems & Gemology, Vol. 37, No. 1

https://www.gia.edu/gems-gemology/summer-1998-gem-news-international

https://www.gia.edu/gems-gemology/summer-1998-gem-news-international

Kopf R.W. et al. (1990) Recent Discoveries of Large Diamonds in Trinity County, California. Gems & Gemology, Vol. 26, No. 3
https://www.gia.edu/gems-gemology/fall-1990-diamonds-california-kopf


Assignment 6: Diamond Mining

https://www.gia.edu/gems-gemology/spring-2017-brazilian-diamonds

https://www.gia.edu/gia-news-research/russia-lomonosov-diamond-project-shows-fancy-colors

King J. et al. (2016) Lab Notes: Examination of the Largest Canadian Diamond. Gems & Gemology, Vol. 52, No. 2
https://www.gia.edu/gems-gemology/summer-2016-labnotes-examination-largest-canadian-diamond

https://www.gia.edu/gems-gemology/summer-2016-diamonds-canadian-arctic-diavik-mine

https://www.gia.edu/gems-gemology/fall-2015-letseng-unique-diamond-proposition

https://www.gia.edu/gia-news-research/bright-light-midnight-canadas-far-north-land-diamonds

https://www.gia.edu/gia-news-research-revived-canadamark

https://www.gia.edu/gia-research-news-diamonds-roof-world-shor-weldon
https://www.gia.edu/research-news-industry-analysis-cullinan-mine

https://www.gia.edu/gia-news-research-Diamond-Mining-in-minas-gerais-brazil

_Gems & Gemology_, Vol. 49, No. 4
https://www.gia.edu/gems-gemology/WN13-GNI-yellow-diamonds-sierraleone

https://www.gia.edu/gia-news-research-diamonds-Ghana

https://www.gia.edu/gems-gemology/winter-2007-gem-news-international

_Gems & Gemology_, Vol. 42, No. 4
https://www.gia.edu/gems-gemology/winter-2006-gem-news-international

_Gems & Gemology_, Vol. 41, No. 1
https://www.gia.edu/gems-gemology/spring-2005-gem-news-international

https://www.gia.edu/gems-gemology/fall-2002-gem-news-international


_Gems & Gemology_, Vol. 38, No. 2
https://www.gia.edu/gems-gemology/summer-2002-gem-news-international

Shigley J.E. et al. (2001) Discovery and Mining of the Argyle Diamond Deposit, Australia. _Gems & Gemology_, Vol. 37, No. 1

Shigley J.E. et al. (2000) Gem Localities of the 1990s. _Gems & Gemology_, Vol. 36, No. 4

https://www.gia.edu/gems-gemology/summer-1998-gem-news-international

https://www.gia.edu/gems-gemology/summer-1998-gem-news-international


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**Assignment 7: The Diamond Crystal**

https://www.gia.edu/gia-news-research/begin-end-mind-tips-tools-evaluate-diamond-rough

https://www.gia.edu/gems-gemology/fall-2009-crystallographic-analysis-tavernier-blue-sucher


Sunagawa I. et al. (1998) Fingerprinting of Two Diamonds Cut from the Same Rough. *Gems & Gemology*, Vol. 34, No. 4
https://www.gia.edu/gems-gemology/winter-1998-diamonds-cut-same-rough-sunagawa


**Assignment 8: Diamonds and Light**

https://www.gia.edu/diamond-cut/cut-grade-research-background

https://www.gia.edu/gems-gemology/winter-2009-fiery-diamonds-gilbertson


**Assignment 9: The Evolution of Diamond Cutting**

https://www.gia.edu/gia-news-research/polki-diamonds-new-fashion-statement-mogul-india


https://www.gia.edu/gia-news-research-chowtai-fook-hsu


https://www.gia.edu/research-news-diamond-slices-shor

https://www.gia.edu/gia-news-research-round-brilliant-cut-diamond-pay

https://www.gia.edu/gems-gemology/summer-2010-diamond-wittelsbach-graff-gaillou


https://www.gia.edu/gems-gemology/summer-1997-diamond-cutting-polishing-caspi

https://www.gia.edu/gems-gemology/fall-1982-diamond-kerr


**Assignment 11: Grading Clarity**

https://www.gia.edu/gems-gemology/winter-2006-internal-whitish-reflective-graining-king

For Further Reading

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### Assignment 12: Diamonds and Color


[https://www.gia.edu/gems-gemology/spring-2016-photoluminescence-spectroscopy-diamond-applications-gemology](https://www.gia.edu/gems-gemology/spring-2016-photoluminescence-spectroscopy-diamond-applications-gemology)


GIA (2015) Famous Diamonds Examined by GIA. GIA Research & News
[https://www.gia.edu/famous-diamonds](https://www.gia.edu/famous-diamonds)


[https://www.gia.edu/gems-gemology/summer-2009-type-classification-system-diamonds-breedin](https://www.gia.edu/gems-gemology/summer-2009-type-classification-system-diamonds-breedin)
https://www.gia.edu/gems-gemology/winter-2008-wittelsbach-blue-droschel

https://www.gia.edu/gems-gemology/spring-2008-purple-diamonds-siberia-titkov


https://www.gia.edu/gems-gemology/spring-2005-chameleon-diamonds-hainschwang


https://www.gia.edu/gems-gemology/winter-2003-gem-news-international

https://www.gia.edu/gems-gemology/winter-2003-gem-news-international

https://www.gia.edu/gems-gemology/summer-2003-seven-rare-diamonds-king

https://www.gia.edu/gems-gemology/summer-2002-grading-natural-pink-diamonds-king

https://www.gia.edu/gems-gemology/spring-2002-star-of-the-south-diamond-smith

https://www.gia.edu/gems-gemology/winter-1997-fluorescence-diamonds-moses


https://www.gia.edu/gems-gemology/winter-1990-dresden-diamond-kane

https://www.gia.edu/gems-gemology/winter-1990-black-diamonds-kammerling

https://www.gia.edu/gems-gemology/summer-1989-hope-diamond-crowningshield

https://www.gia.edu/gems-gemology/summer-1988-color-gems-fritsch
Assignment 13: Grading Color


https://www.gia.edu/gems-gemology/winter-2008-color-grading-d-to-z-diamonds-king


https://www.gia.edu/gems-gemology/winter-1998-blue-diamonds-king


https://www.gia.edu/gems-gemology/summer-1989-hope-diamond-crowningshield

https://www.gia.edu/Fall-1941-A1-diamond-color-grading-shipley

Assignment 14: Grading Proportions—Table, Crown, and Girdle


Assignment 15: Grading Proportions—Pavilion and Culet—and Evaluating Finish


GIA Diamond Polish and Symmetry: Guide to GIA Terminology and Abbreviations. GIA Research & News
https://www.gia.edu/diamond-polish-symmetry-guide-terminology-abbreviation
For Further Reading

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**Assignment 17: Estimating Weight, Recutting, and Repolishing**

[https://www.gia.edu/gems-gemology/spring-2010-sister-stones-hope-diamond-sucher](https://www.gia.edu/gems-gemology/spring-2010-sister-stones-hope-diamond-sucher)


**Assignment 18: Diamond Simulants**


[https://www.gia.edu/gems-gemology/spring-2012-zirconia-diamantine-shigley](https://www.gia.edu/gems-gemology/spring-2012-zirconia-diamantine-shigley)

Kammerling R.C. (1991) An Examination of Nontransparent “CZ” from Russia. _Gems & Gemology_, Vol. 27, No. 4


**Assignment 19: Synthetics and Treatments**

**General Articles**

https://www.gia.edu/gems-gemology-spectroscopy-diamond-applications-gemology

https://www.gia.edu/gems-gemology-analysis-yellow-diamond-melee-color-treatment-synthetics

https://www.gia.edu/identifying-lab-grown-diamonds

https://www.gia.edu/gems-gemology-small-yellow-diamond-melee

https://www.gia.edu/gems-gemology-synthetic-gem-materials-renfro

https://www.gia.edu/gems-gemology-smithsonian-yellow-diamonds-kitawaki

https://www.gia.edu/gems-gemology-characteristics-hpht-synthetic-diamonds-shigley

https://www.gia.edu/gems-gemology-characteristics-synthetic-gem-materials-koivula

https://www.gia.edu/gems-gemology-debeers-diamond-tools-welbourn

https://www.gia.edu/gems-gemology-synthetic-diamond-thin-films-fritsch

**CVD Synthetic Diamonds**

https://www.gia.edu/gems-gemology-synthetic-diamond-overgrowth-natural-diamond

https://www.gia.edu/gems-gemology-observations-cvd-synthetic-diamonds-review
https://www.gia.edu/gems-gemology/spring-2016-labnotes-ring-cvd-synthetic-melee-diamond


https://www.gia.edu/gems-gemology/summer-2014-labnotes-yellow-cvd-synthetic-diamond

https://www.gia.edu/gems-gemology/spring-2014-labnotes-cvd-diamond-unusual

Lo C. et al. (2014) Lab Notes: Round CVD Synthetic Diamond Over 1 Ct Identified in Hong Kong Lab. *Gems & Gemology*, Vol. 50, No. 1
https://www.gia.edu/gems-gemology/spring-2014-labnotes-large-cvd-synthetic-diamond

https://www.gia.edu/gems-gemology/FA13-LN-pinkish-brown-CVD-synthetic

https://www.gia.edu/gems-gemology/spring-2013-gemnews-undisclosed-samples-large-cvd-diamond


https://www.gia.edu/news-research-CVD-grown-part1

https://www.gia.edu/news-research-CVD-grown-part2

https://www.gia.edu/gems-gemology/summer-2012-cvd-synthetic-diamonds-gemesis-corp-wang

https://www.gia.edu/gems-gemology/summer-2012-recent-advances-cvd-quality-eaton-magana

https://www.gia.edu/gems-gemology/fall-2011-cvd-synthetic-diamond-willems

https://www.gia.edu/gems-gemology/spring-2010-synthetic-diamond-khan
https://www.gia.edu/gems-gemology/spring-2010-pink-cvd-diamonds-wang

https://www.gia.edu/ongoing-research/cvd-grown-pink-diamonds


HPHT Synthetic Diamonds


https://www.gia.edu/gems-gemology/winter-2016-labnotes-blue-HPHT-synthetic-diamond-over-10-carats

https://www.gia.edu/gems-gemology/summer-2016-labnotes-yellow-synthetic-diamond-nickel-related-green-fluorescence

https://www.gia.edu/gems-gemology/spring-2016-labnotes-largest-blue-hpht-synthetic-diamond

https://www.gia.edu/gems-gemology/spring-2016-gemnews-large-colorless-hpht-synthetic-gem-diamonds-china


FOR FURTHER READING

https://www.gia.edu/gems-gemology/spring-2014-ulrika-hpht-synthetic-diamonds

https://www.gia.edu/gems-gemology/winter-2012-hpht-diamond-feral

https://www.gia.edu/gems-gemology/fall-2009-diamonds-hpht-treated-dobrinets


https://www.gia.edu/gems-gemology/winter-2002-gemesis-laboratory-created-diamonds-shigley

https://www.gia.edu/gems-gemology/spring-1997-synthetic-diamond-properties-shigley


https://www.gia.edu/gems-gemology/winter-1993-russia-synthetic-diamond-shigley

https://www.gia.edu/gems-gemology/fall-1993-synthetic-diamond-shigley


https://www.gia.edu/gems-gemology/winter-1987-debeers-synthetic-diamond-shigley

https://www.gia.edu/gems-gemology/winter-1986-synthetic-diamond-shigley
Nano-polycrystalline Diamond (NPD) Synthetic Diamonds

https://www.gia.edu/gems-gemology/summer-2016-labnotes-separation-synthetic-black-diamond-NPD

https://www.gia.edu/gems-gemology/winter-2014-labnotes-larger-higher-quality-npd-synthetic-diamond

https://www.gia.edu/gems-gemology/spring-2014-labnotes-fancy-black-npd-synthetic

https://www.gia.edu/gems-gemology/fall-2012-diamond-synthetic-skalwold

https://www.gia.edu/gems-gemology/summer-2012-diamond-sphere-skalwold

Treatments


https://www.gia.edu/gems-gemology/fall-2016-labnotes-treated-pink-type-IIa-diamond-colored-red-luminescence


https://www.gia.edu/gems-gemology/winter-2014-labnotes-irradiated-yellow-diamond

https://www.gia.edu/gems-gemology/spring-2013-labnotes-green-radioactive-salt

https://www.gia.edu/ongoing-research/treated-fancy-red-diamond

https://www.gia.edu/gems-gemology/spring-2008-history-of-diamond-treatments-overton


https://www.gia.edu/gems-gemology/fall-2000-ge-pol-diamonds-smith


https://www.gia.edu/gems-gemology/summer-2000-filling-material-diamonds-oved-shigley

https://www.gia.edu/gems-gemology/summer-2000-laseringechnique-diamond-mcclure


https://www.gia.edu/gems-gemology/winter-1999-general-electric-enhanced-diamonds-schmetzer


https://www.gia.edu/gems-gemology/spring-1990-gemstone-enhancement-kammerling

https://www.gia.edu/gems-gemology/summer-1989-color-treated-diamond-fritsch

https://www.gia.edu/gems-gemology/summer-1989-diamond-filling-koivula

https://www.gia.edu/gems-gemology/fall-1988-green-diamonds-fritsch

https://www.gia.edu/gems-gemology/summer-1982-diamonds-coloration-scarratt


**Treated Synthetic Diamonds**


https://www.gia.edu/gems-gemology/fall-2016-labnotes-treated-red-green-HPHT-synthetic-diamonds


https://www.gia.edu/gems-gemology/fall-2014-labnotes-irradiated-cvd-synthetic-diamond

https://www.gia.edu/gems-gemology/spring-2013-labnotes-hpht-fancy-pink


**Assignment 20: Succeeding in the Marketplace**


https://www.gia.edu/gems-gemology/spring-1983-diamonds-krashes