

## **Diamond Fundamentals 101**

This guide is intended for an audience that is not familiar with the basics of diamonds. We will be discussing carat weight, cut, color, clarity, in addition to some details regarding gemological labs and their importance in diamond grading.

### **Carat Weight**

Carat “weight” is actually a misnomer. It is more appropriate to describe a carat as a unit of mass. A carat is equal to exactly 200 mg (milligrams) or 0.2 grams and is used to describe the mass of gemstones and pearls. So, a [3 carat stone](#) weighs exactly 600 mg – which is quite heavy for a gemstone if you think about it! Keep in mind that although higher carat stones fetch more value, it does not necessarily mean they are of better quality than smaller stones. Obviously, if a piece of jewelry is comprised of a higher weight of gold, it will cost more. So higher carat stones add value, but the beauty and downside of diamonds is that their production process in nature is completely random. That is why a smaller stone can possibly be produced in more favorable conditions to have better color and clarity. Diamonds can also be produced in a laboratory but that is a separate topic in itself. All in all, think carat = mass.

### **Color**

We are going to discuss color by two different standards. Firstly, in an ideal world, a chemically pure diamond would not consist of any color. Like anything else in life, diamonds aren't perfect. A diamond's color can either add or detract from its value. For example, if a diamond has a detectable yellow color, it may be discounted, while pink or red diamonds could fetch a high value because of how rare they are. When most people think of a diamond, they think of a white stone, but diamonds can actually be almost any color like yellow, orange, red, blue, or even black.

In terms of diamond grading, color is thought of a little differently. [Diamond gemstones](#) that are used in engagement rings are described by a variety of commonly accepted adjectives that categorize their tier. For example, the rarest diamonds appear totally or almost colorless. Fancy color diamonds are most commonly yellow or brown. Pale yellow diamonds to brown in color are categorized within the normal color range. The normal color range diamonds are the ones that are graded on a scale of D – Z. Here we'll go more into detail about what all these letters mean.

Keep in mind that different labs use different standards to describe diamond color but these are the most commonly accepted:

D	Colorless
E	
F	
G	Near Colorless
H	
I	
J	
K	Faint Yellow
L	
M	
N	Very Light Yellow
O	
P	
Q	
R	
S	Light Yellow
T	
U	
V	
W	
X	
Y	
Z	

Like mentioned earlier, fancy color diamonds are those that have a more intense yellow color that can even reach brown. They are beyond Z and do not have a color grade. Diamonds that are higher on the chart, like “E” for example are worth more than diamonds that are lower on the chart, say “X” color. This is because diamonds closer to colorless are rarer, so their supply is limited, and because consumers desire a whiter stone.

### **Clarity**

Clarity is another characteristic that describes the visual appearance of a diamond. Words commonly associated with the clarity of a diamond are “inclusions” (which refer to internal defects) and “blemishes” (which refer to the surface imperfections). Because diamonds are created under extreme temperatures and pressures within the Earth, the process can be quite unpredictable. Inclusions can be foreign crystal material that was incorporated during this intense process. Tiny cracks can also occur within the diamond. Blemishes can include chips, scratches, nicks, or anything of the sort. These imperfections decrease a diamond’s value. If a diamond is “eye clean”, it means that none of these imperfections can be seen with the naked eye. However,

a jeweler’s loupe, which magnifies the stone, can reveal any impurities. Many people are perfectly content with eye clean diamonds as they appear perfect to the eye and to family and friends.

Like color grading, diamonds have a clarity grading scale as well. The most commonly accepted standard was devised by Gemological Institute of America (GIA), which we will describe in more detail later. Here is a table:

Flawless	Internally Flawless	Very, Very Slightly Included	Very Slightly Included	Slightly Included	Included
FL	IF	VVS1 / VVS2	VS1 / VS2	SI1 / SI2	I1 / I2 / I3

Diamonds that lean towards the left side of the table, fetch much higher values than those on the right. GIA uses 10x magnifications as their standard. So, a diamond that is “FL” will have absolutely zero inclusions and blemishes under 10x magnification. VS1 / VS2 diamonds may have inclusions that are difficult to see under 10x magnification, but a highly trained jeweler may or may not be able to see them. SI1 / SI2 diamonds may or may not have inclusions that are visible to the naked eye. I1-I3 stones have inclusions and blemishes that are easily visible.

## Cut

Some people mistake a diamond’s cut for its shape. A diamond’s shape is described by round, pear, heart, oval, etc. A diamond’s cut refers to its symmetry, polish, and proportioning. The cut is a very important feature because it determines how much luminosity a diamond will give off. After a diamond is mined, it doesn’t appear like an individual may see one in a showcase of a jewelry store. They are irregular, dirty, and may look like rocks. Laboratories use strict computer aided designs and lasers to cut the diamond into perfect proportions to give off the sparkle that is desired. Diamonds that are cut as close as possible to perfect proportions fetch much higher values.

## Gemological Laboratories

I know many people may not want to hear the word “laboratories” because it reminds them of their Freshman year chemistry lab, but we promise that these labs are a little different. You also won’t have to participate in any experiments. Laboratories exist around the globe that are dedicated to the study and research of gemstones. The aim of these labs is to create standards by which to assess and grade diamonds since they are valuable. Some laboratories may have different standards, but the connotation is all the same. Colorless diamonds are worth more, as are diamonds without inclusions and blemishes. The most highly esteemed lab that people hear about is Gemological Institute of America (GIA).

When couples or men go [engagement ring shopping](#), they may notice that certain diamonds are certified by GIA. What this means is that these diamonds, before they were mounted onto an engagement ring, were sent off to a GIA lab somewhere in the United States to be graded. For a diamond to be graded, it must meet certain criteria. Not just any diamond can be sent off to the lab. GIA gives it a grade in terms of color, cut, and clarity, and provides a certification with the diamond. A certification by GIA means that there is no dispute about what the color or clarity of a diamond can be. If a diamond ever needs to be resold, the certification will add value.

We know that this guide has been quite lengthy, but we hope that it has given you enough information to understand the basic terminology associated with diamonds! Please feel free to reach out to us if you have any more questions. Our friendly staff can be reached by email at [info@raymondleejewelers.net](mailto:info@raymondleejewelers.net) or by phone at 561-750-7808.