ALL ABOUT DIAMONDS

The conditions that created diamonds have not existed on this planet for millions of years.

Very early in the earth's history, as solid matter became condensed into a sphere, the material at the heart of the planet became subjected to unbelievable extremes of temperature and pressure.

It was the conditions in those deep layers that caused deposits of pure carbon to begin crystalizing into a diamond. A Diamond consists of pure carbon, and although there is no chemical difference between carbon powder and the diamond, the physical difference between carbon powder and the diamond crystal is both enormous and miraculous.

As the outer layers of the earth cooled, the stresses developed, and the plates of solid rock shifted and split. Streams of liquid rock were forced to the surface in volcanic eruptions, and some of that material carried with it the diamond crystals that had begun to form deep within the earth.

As the earth's surface cooled, the diamond bearing rock turned solid, and it is within this rock the diamonds are now found. Diamond is the hardest natural material found on the earth, and the simplest of all the gemstones in composition.

How Diamonds Handle Light

The way a diamond sparkles in the light is called its brilliance and fire. These are not subjective terms, but can be scientifically defined. Suppose the same amount of light should fall on a pile of black carbon powder as on a cut diamond. Both are forms from the same chemical, but clearly they will handle the light in different ways.

Most of the light which falls on the powder is absorbed, which is why it appears black. But when light strikes a diamond, part of the ray is reflected from the surface. This is called external reflection. The other part of the ray enters the diamond and, as it does so, it bends due to the greater optical density of a diamond. This is called refraction. The light is then reflected from the internal surface of the diamond which is internal reflection.

The ray then emerges from the top of the diamond where, once again, it is bent or refracted and is separated into the colors of the spectrum. It is this dispersion that gives the diamond its fire. For centuries, men and women have found that the sparkle and brilliance of a quality diamond expresses their deepest emotions and symbolizes their enduring love.

How Diamonds are Valued

While all diamonds are precious, those possessing the best combination of cut, clarity, carat weight and color- are the earth's rarest, most valuable and most beautiful to the eye. The combination of the 4c's determines the quality and value of a diamond and explains why some are rarer- and so more valuable than the others. The finest stones posses the rarest quality in each of the 4 c's and the most valuable. Strive for a stone that offers the best combination of the 4c's. The 4c's relate to a diamond's:

The Four C's: Cut, Color, Clarity, Carat Weight

The better any diamond scores on each of these for characteristics the more valuable it will be. Ultimately, you will discover the unique combination of the 4c's that makes a particular diamond the right choice for you. Let's look at each "C" in turn.

Cut

The better cut a diamond, the more brilliant. A well cut or faceted diamond, regardless of its shape, scintillates with fire and light offering the greatest brilliance and value.

While nature determines a diamond's clarity, carat weight and color, the hand of a master craftsman is necessary to release its fire, sparkle and beauty. When a diamond is cut to good proportions, light will reflect from one mirror like facet to another and disperse though the top of the stone, resulting in a display of brilliance and fire.

Diamonds that are cut too deep or too shallow lose light that spills through the side or bottom. As a result, poorly cut stones will be less brilliant and beautiful- and certainly less valuable then well cut diamonds. The better the quality of the cut, the better the stone will create brilliance and fire and that helps determine the value of each stone.

Traditionally, a diamond is cut into one of six variations: Round Brilliant, Oval, Marquise, Heart, Emerald, Pear shapes.

Color

The less color in a diamond, the more rare. Diamonds are graded by color: starting at D and moving to Z.

While most diamonds appear white, virtually all display barely perceptible tints of color. Evaluating a diamonds color is difficult for the undrained eye. We can help demonstrate this by showing you diamonds side by side.

Diamonds graded D, E and F are more expensive because they are more rare. However, well cut diamonds with good clarity of all color grades can be equally dazzling, as it is the interplay of the 4c's that determines each diamond's unique beauty.

Clarity

The greater a diamond = s clarity, the more brilliant, valuable and rare it is. Virtually all natural diamonds contain identifying characteristics, yet many are invisible to the naked eye. Under the microscope, natural phenomena called inclusions- may be seen. These are nature's birthmarks, and they any look like tiny crystals, clouds or feathers.

Diamonds categorized as internally flawless reveal no such inclusion. Diamonds with very, very small inclusions are graded as VVS1 or VVS2. The larger the inclusion, the lower the grade and the less rare the diamond.

The number, color, type, size and position of surface internal birthmarks affect a diamond

value. Major inclusions can interfere with its path of light that travels through a diamond, diminishing its brilliance and sparkle and therefore its value.

Carat Weight

The larger a diamond, the more rare. Larger diamonds are found relatively infrequently in nature, which makes them rare. However, a large diamond is not necessarily a better or more valuable diamond. In fact, a smaller diamond may actually be more valuable than one with a greater carat weight if its cut, color, and clarity are superior to that of the larger diamond. A diamond's weight is the simplest if its characteristics to measure.

The carat is a unit of weight which derives from the carob seed. The pods of the carat is standard metric weight of 0.2 grams, and each carat id divided into 100 points.

For example, a quarter of a carat is 25 points written as 0.25: a half a carat is 50 points, written as 0.50, and so on.

The 5’th C is Confidence!

While all diamonds are beautiful, only by comparing stones will you be able to appreciate what makes one rare and valuable than another. When you view stones side by side, you'll understand why diamonds that look similar at a casual glance are priced differently. Keep in mind that there are no " bargain" diamonds. There are only diamonds of different value, weight and brilliance.