**Light of the Desert – Video by Royal Ontario Museum**

* + **Why would this gem be difficult to facet?**
  + heat generated through the process of cutting and grinding; good material shatters when you cut it (200 carats maximum cutting)
  + **How much does this 900 carat gem weigh in grams?**
  + 180 grams
  + **What physical property gives a gem its fire?**
  + the size of the gem gives more dramatic its fire
  + natural optics existing within gem and style of cut the gem cutter uses
  + **Why might the physical size of a gem have an impact on the resulting fire?**
  + The bigger the gem, the more natural optics within the gem and the more facets can be cut and a greater style and cut so that it can create more ‘fire’
  + **What is a ‘pavillion’? What is its function?**
  + bottom half of a gem
  + take the gem and reflect it back into face to create sparkle
  + the bottom half can also split the light into spectral colors/dispersion – “fire” of gem – diamond/cerussite
  + **For thought:**
  + **Considering the weight and density of this gem, would a diamond of equivalent weight be larger or smaller by volume? Why?**
  + It would be much smaller, diamonds are very heavy

GIA Diamond Grading Report :

* + **­What is the highest possible grade a diamond could receive on the 3 characteristics described here by a scale?**
  + D (colour scale)
  + Flawless (clarity scale)
  + excellent (cut scale)
  + **Which of the 4 C’s is not judged on a scale and why is that so?**
  + carat because although it can be a big diamond, there is so much more to the value of a diamond besides it’s weight (colour, clarity, and cut also play a role in it’s value)
  + **Judging by the report of the specific diamond graded, do you think this is a high quality or low quality diamond, or somewhere in between, and why?**
  + I think it’s a pretty high quality diamond, it’s pretty up in the scales for all three categories, making it increasingly valuable

“Loupe Holes: Illicit Diamonds in the Kimberley Process”

* + **What is a ‘conflict diamond’?**
  + Rough diamond mined in an area controlled by insurgent forces whose sale is used to finance anti-government military action
  + Causes ‘conflict’ by its production and sale
  + **Has the introduction of the Kimberley Process eliminated the existence of conflict diamonds?**
  + No, the situation is actually getting worse
  + **Which countries are highlighted in this issue as still having significant illegal trade in conflict diamonds?**
  + Venezuela, northern Cote d’Ivoire, Zimbabwe, Gono, New Delhi, (West Africa – Guinea, Sierra Leone, Liberia, Ghana, Cote d’Ivoire), Mali, DRC – Congo, Angola,
  + **Does the Kimberley Process apply to rough, finished, or both rough and finished diamonds?**
  + It applies to both
  + Rough: to improve internal controls and increase collaboration and enforcement efforts to combat rough diamond smuggling
    - to develop a research and monitoring capacity to address illicit flows of rough diamonds
  + Finished: to be cut and polished with a minimum standard that meets the KP standards
  + **In general, is the Kimberley Process effective in countries with strong stable governments and small to large scale mining operations?**
  + yes
  + **In general, is the Kimberley Process effective in countries with unstable governments where most mining occurs on an artisanal scale?**
  + no
  + **Venezuela produces approximately 200,000 carats of rough diamond per year. How long would it take the Diavik mine in northern Canada to produce an equivalent amount?**
  + less than two weeks
  + **What are a few of the main trends outlined in this review of the Kimberley Process?**
  + Should take swift action when faced with cases of non-compliance, and should agree an interim suspension mechanism with clear criteria
  + Should require participants, stronger government oversight of the diamond industry, including regular stock audits of companies – diamond cutting and polishing sector should be required to adhere to KP minimum standards
  + Should improve internal control mechanisms and increased collaboration and enforcement efforts to combat rough diamond smuggling
  + Should develop a research and monitoring capacity to address illicit flows of rough diamonds