**Rocks vs Minerals - 7 Key Differences**

Do you know the difference between a diamond and a rock? Diamonds are minerals and you are not supposed to call them rocks. Do you know how to tell a mineral from a rock? It may not seem important to many people, but being able to identify rocks and minerals is big business in the mining exploration industry.

**Make some notes from this page:**

**Put a heading (a) Minerals versus Rocks in your notebook, and copy the highlighted text. Then answer the Qs**

Let’s take a closer look at the main differences between rocks and minerals so that you won’t make the common mistake of calling a diamond a “rock”.

**Rocks**

Rocks are solid and naturally occurring substances. Rocks are categorised into three main groups by the way they are formed – namely sedimentary, metamorphic and igneous. Soil is composed of rock particles and organic matter. Rocks are not homogenous and don’t have a specific chemical composition (rocks are a mixture). Rocks can be a mixture of different minerals or non-mineral substances and can also contain organic traces. Rocks are generally classified by their appearance using colour, layering, hardness, and size of the particles within the rock.

**Minerals**

 Minerals are solid, crystalline substances that occur naturally. They are made of very specific chemicals. Minerals are homogenous in nature and have a very specific structure). There are over 5 thousand types of minerals. Minerals are identified colour (not always reliable), streak, lustre, breakage, hardness, magnetism, and density.

**The Differences between Rocks and Minerals**

So, now that you know the major differences between rocks and minerals, let’s have a look at all the details that tell them apart. Check out the **mineral vs rock comparison table** below to get a clear image of the two substances.

|  |  |  |
| --- | --- | --- |
| **Difference** | **Minerals** | **Rocks** |
| 1 | * Minerals are homogenous substances with a very specific chemical composition. | * Rocks are aggregates with variable composition and are usually a mix of multiple minerals. |
| 2 | * Minerals are inorganic. | * Rocks can contain organic matter – even fossils! |
| 3 | * Minerals usually have a specific shape. | * Rocks do not have a definite shape. |
| 4 | * Minerals help in blood coagulation, in bone formation and muscle contraction, and some have nutritional value for the human body. | * Rocks don’t have any nutritional value. |
| 5 | * It has a regular, repeating atomic arrangement. | * Rocks do not. |
| 6 | * Minerals are classified according to their chemical and physical properties, but never by the way they were formed. | * Rocks are classified into 3 groups depending on how they are formed. |
| 7 | * The science that studies minerals is called mineralogy. | * Petrology is the science that studies rocks. |

**Questions (Answer in your notebook)**

**1.** If you had to list three differences between minerals and rocks, which three do you think are the most important? Copy these into your notebook.

**2.** Which of the seven differences in the table above are mentioned in the article? List them in your notebook.

**3.** What is it about a diamond that makes it a mineral and not a rock? Answer this question in your notebook.