Year 8 Science EXAM REVISION

***Complete the following questions in your notebooks, using your notes and textbooks***

1. **Explain** how a mineral is different from a rock?

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1. **Define** the following terms relating to minerals, and give an example where possible:

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| 1. Lustre
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| 1. Streak
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| 1. Cleavage
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| 1. Hardness
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| 1. Density
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| 1. Colour
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1. **Explain** the difference between magma and lava.

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1. **Identify** which type of rock (igneous, sedimentary or metamorphic) is being described by each statement below:

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| 1. has layers
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| 1. has pebbles all cemented together
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| 1. Has wavy uneven layers
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| 1. has crystals which interlock with each other
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| 1. formed by cooling molten magma
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| 1. formed by changing existing rocks with heat and pressure
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| 1. may contain fossils
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| 1. formed from lava
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| 1. This rock is formed from weathering, erosion, deposition, compaction, and cementation
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| 1. There are two main types of this rock – contact and regional.
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| 1. Formed from magma.
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| 1. Granite and pumice are examples of this type of rock
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| 1. Marble and gneiss are examples of this type of rock
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| 1. Sandstone and conglomerate are examples of this type of rock.
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1. **Identify** the igneous, metamorphic and sedimentary rock below:

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|  |  | Experiment with Pumice – Experiment Exchange |

1. **Explain** the difference between an intrusive and an extrusive igneous rock in terms of
2. How they are formed

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1. Their appearance – the size of the crystals

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1. **a)** **Explain** what a fossil is.

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**b)**  **Describe** how fossils are formed.

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**c) Explain** why fossils are useful to science.

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1. **Summarise** the main characteristics of the three types of rocks by completing the table:

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| **TYPE OF ROCK** | **HOW are they formed?** | **WHAT do they commonly look like?** | **Names of some EXAMPLES** |
| Igneous |  |  |  |
| Sedimentary |  |  |  |
| Metamorphic |  |  |  |

1. **Explain** which type(s) of rock you would expect to find fossils in, and which type(s) you would not expect to find fossils in.

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1. **Explain** how each of the following processes contribute to making sedimentary rock:

 weathering, erosion, compaction, cementation.

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1. **Complete** the diagram of the rock cycle below:

1. Use the diagram to **explain** how the rock cycle is NOT a one-way process:

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1. The following questions refer to this rock face:

**J**

**R**

**H**

**P**

**D**

**I**

1. **List** the rock types from oldest to youngest:

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1. **Identify** which layer is the most resistant to weathering.

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1. **Explain** how you know for (b)

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1. **Identify** which type of rocks would take the longest to form, and **explain** why.

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1. **Predict** which would have the greatest pressure, and **explain** why – a finger pressed into the palm of your hand, or a pin pushed into the palm of your hand – both with the same amount of force.

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1. **Classify** the following rocks as either Igneous, Sedimentary or Metamorphic:
2. Shale \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ e) Basalt \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Granite \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ f) Conglomerate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Mudstone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g) Pumice \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Marble \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ h) Slate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. **Use** the information below to identify the difference between mudstone and sandstone:

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1. **Summarise** the importance of the mining rehabilitation process.

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1. **Use** the table below to answer the questions.



1. **Identify** from the table, a mineral that is mined in Mexico that is used in mobile phones

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1. **Identify** the 2 minerals that are used in screen glass in mobile phones.

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1. Using the properties of the minerals identified in question 20, **explain** why they have been chosen for use in screen glass.

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