**Year 8 Earth and Space Sciences 2019**

**Section 2: Short Answer 41 marks**

***Use the Rock samples on your desk to answer questions 1 to 5.***

1. a) **Identify** the following rocks by writing down the **number** on them. (4 marks)

3

10

6

Shale: \_\_\_\_\_\_\_\_\_\_\_\_ Basalt: \_\_\_\_\_\_\_\_\_\_\_\_ Limestone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Limestone

b) **State** in which of the above would you most likely find fossils? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. a) **Circle** the type of rock that rocks 1- 4 are: (1 mark)

Igneous / Sedimentary / Metamorphic

b) **Name**, **classify** and state the use of rocks 1, 2 and 4 using your observations of the rock. (9 marks)

Obsidian Extrusive Blades/Jewellery/Ornaments

**#1** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classification: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Use: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Granite Intrusive Benchtops etc

**#2** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classification: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Use: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Scoria Extrusive BBQ / Landscaping

**#4** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classification: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Use: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Obsidian / 1

c) **Compare** rocks 1 and 2. Which rock had the faster cooling rate: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1 mark)

d) **Explain** your choice, using your knowledge of the rocks **features and where** specifically each rock is formed. (4 marks)

Obsidian has no crystals (1) as it was formed underwater (1) / above crust ( ½ )

Granite has large crystals (1) as it was formed below the crust (1)

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1. a) **Circle** what type of rock **# 9** is: Igneous / Sedimentary / Metamorphic (1 mark)

b) **Explain** your choice for rock **#9** (2 mark)

It is composed of sediments (1) that have been compacted and cemented together (1)

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c) **Name** and **classify** rock **#9** using your observations of the rock. (2 marks)

Conglomerate Clastic

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classification: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. a) **Circle** what type of rock **#14** is: Igneous / Sedimentary / Metamorphic (1 mark)

b) **Explain** your choice for rock **#14** (1 mark)

It is foliated (1) (has parallel bands/ layers ½ )

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c) **Name** and **classify** rock **#14** using your observations of the rock. (2 marks)

Gneiss Foliated

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classification: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. For each of the rocks below, **Identify** the number and **Name** the parent rock. (6 marks)

12 Limestone

Marble - Rock number: \_\_\_\_\_\_\_ Parent Rock: \_\_\_\_\_\_\_\_\_\_\_\_\_

13 Sandstone

Quartzite - Rock number: \_\_\_\_\_\_\_ Parent Rock: \_\_\_\_\_\_\_\_\_\_\_\_\_

11 Shale

Slate - Rock number: \_\_\_\_\_\_\_ Parent Rock: \_\_\_\_\_\_\_\_\_\_\_\_\_