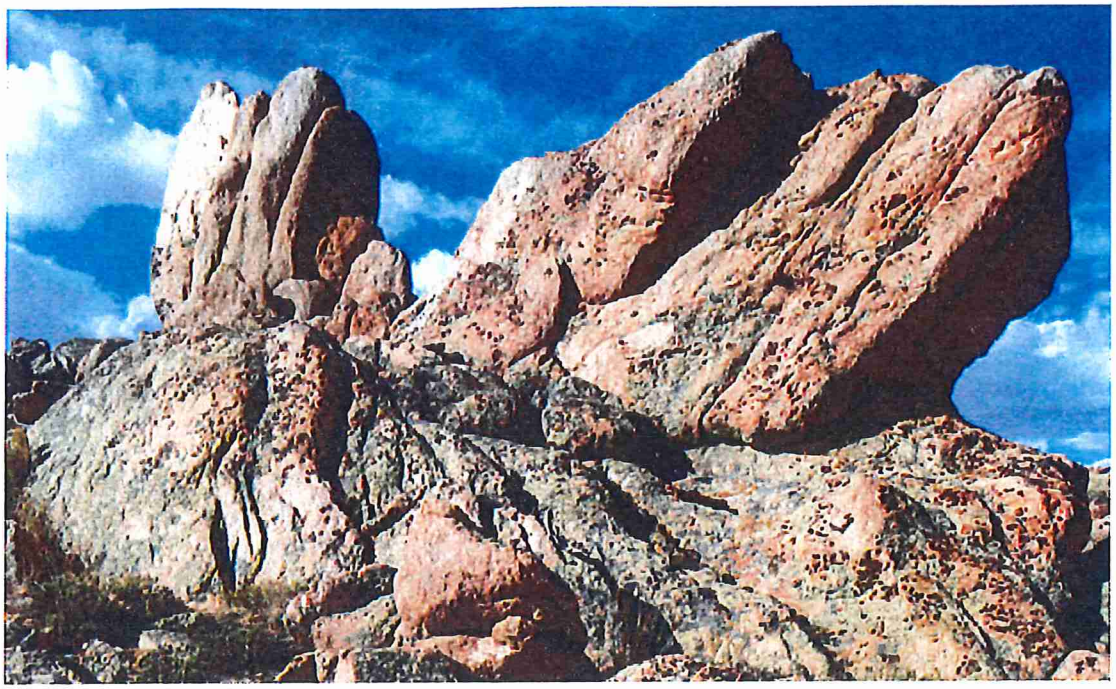
Rock Cycle Year 8 (M)
Test and Practical



Name:

Teacher:

Practical	Test	Total
_____ 24	_____ 21	_____ 45

Year 8 Rocks Assessment

Part A: Multiple Choice

(5 marks)

1. Rocks that form from cooling magma underground are called:

   a) extrusive metamorphic rocks
   b) intrusive metamorphic rocks
   c) extrusive igneous rocks
   d) intrusive igneous rocks

2. Identify the property of a diamond that allows it to scratch glass or drill through hard rock.

   a) Lustre
   b) Streak
   c) Hardness
   d) Transparency

3. Which of the following rocks are formed from the remains of living things?

   a) Basalt and Coal
   b) Coal and Limestone
   c) Coal and Slate
   d) Slate and Granite

4. All rocks are made up of a number of basic materials called:

   a) fossils
   b) ores
   c) minerals
   d) crystals

5. Use the following chart to answer the following question:

Mohs' Rank Position		Mineral
1	softest	talc
2		gypsum
3		calcite
4		fluorite
5		apatite
6		feldspar
7		quartz
8		topaz
9		corundum
10	hardest	diamond

Which of the following is correct?

a) Calcite will scratch diamond
b) Feldspar will scratch quartz
c) Quartz will scratch calcite
d) Talc will scratch all minerals

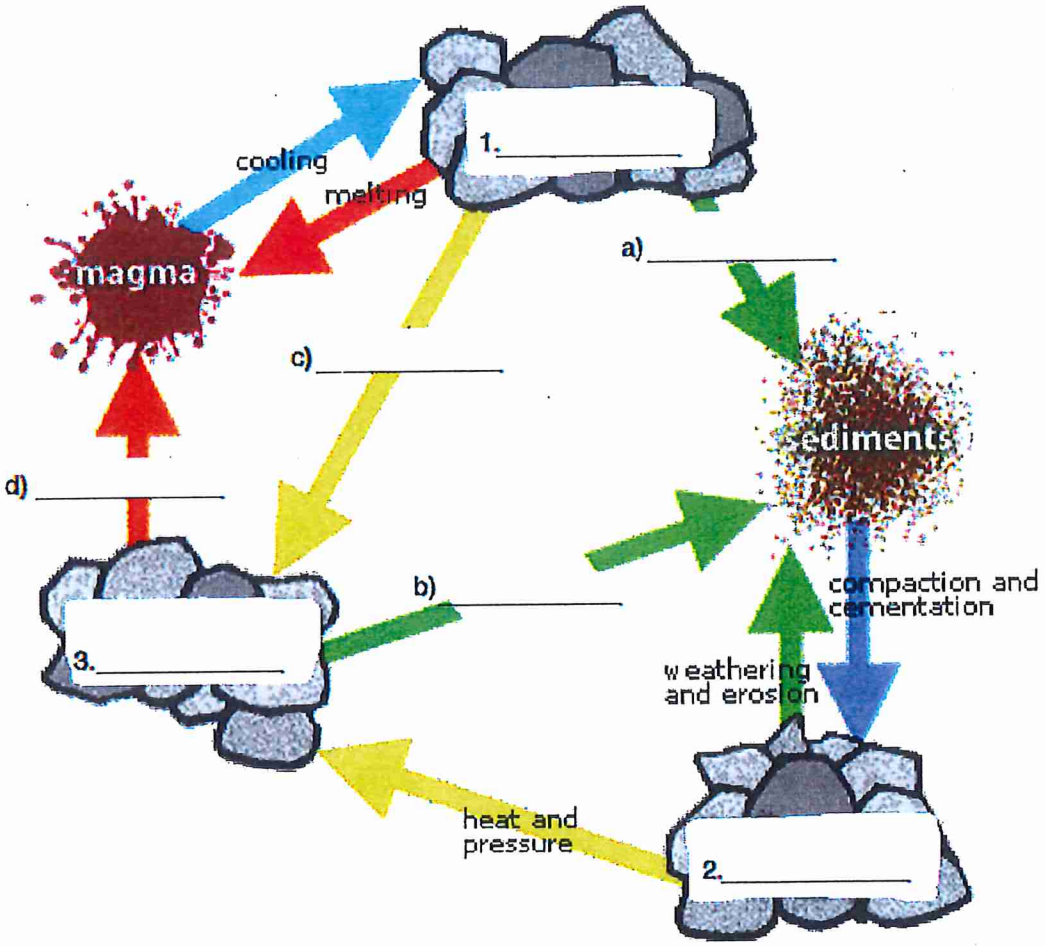
Part B: Label the Diagram **(7 marks)**

A trip through the rock cycle takes millions of years.

Using the Rock Cycle diagram below:

1. Label the three rock types, using the spaces provided (boxes 1 – 3). (3 marks)

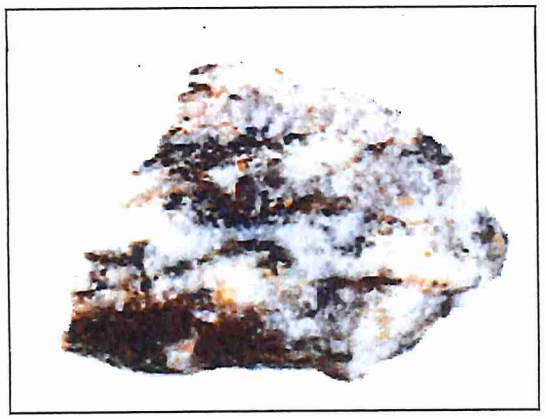
2. Label the four processes which help to create each of the rock types, using the spaces provided (lines a – d). (4 marks)



Part C: Rock Identification

[9 marks]

1. Label each of the 3 Rock samples shown below (Igneous, Sedimentary or Metamorphic). (3 marks)



2. Accompany your choice with **two** reasons why you think it belongs in that category (what features does it have that helps you classify it). (6 marks)

_____ _____ _____

_____ _____ _____

Part D: Rock Cycle investigation

[24 marks]

Materials :			
	1 sugar cube Foil (10cm square) Candle	Hand lens Wooden test tube peg Safety glasses	White paper (10 cm square)

Procedure, Observations and Conclusions

Procedure	**Observations** - Describe what you see		**Marks**	**Conclusion** Relate your observations to the Rock Cycle	**Marks**
1. Examine the sugar cube with a hand lens.	Grain size		½ mark each	**What rock type does this represent?**	1
	Grain shape				
	How close together are the grains?			**Explain why**	2
	Are the grains cemented together?				
	What is the overall shape of the sample?				
	What state of matter is the sample? (solid,liquid,gas)				

<table>
<tr><td rowspan="2">2. Place sugar cube on white paper square and use the back of the tongs to crush <u>A SMALL AMOUNT</u> of the cube into a powder.</td><td>How close together are the grains in the small amount of crushed material?</td><td></td><td rowspan="2">½ mark each</td><td rowspan="2">What process in the Rock Cycle does this crushing represent?

Explain why:</td><td rowspan="2">1

2</td></tr>
<tr><td>Are the grains cemented together?</td><td></td></tr>
<tr><td>3. Fold the edges of the foil over to make a small bowl. Pour the crushed sugar into the foil bowl.</td><td colspan="4">What process in the Rock Cycle does the <u>movement</u> from place to place, of the crushed sugar represent?

Explain why and how:

www.shutterstock.com · 38723950</td><td>1

2</td></tr>
<tr><td>4. Use the metal tongs to hold the bowl over the candle flame. Write down what your observations are after waiting a few minutes</td><td colspan="4">What process in the Rock Cycle does this represent?

Explain how this comes about in the Rock Cycle</td><td>1

2</td></tr>
</table>

5. Set the foil bowl aside and let the sugar cool and harden. Write down what your observations after a few minutes.	What is the overall shape of the sample?		½ mark each	**What process in the Rock Cycle does this represent?** **Explain how this comes about in the Rock Cycle.**	1 2
	What state of matter is the sample? (solid,liquid,gas)				
6.Break the hardened sugar into pieces by crumpling the cooled foil a little. Write down what your observations are as the sugar begins to break up.	**What process in the Rock Cycle does this represent?** **What is produced from this process in the Rock Cycle?** **What do you notice about what we did in step 2, and what we did in step 6?** **What does this say about what happens to rocks?**				1 1 1 1
	TOTAL: 24		5		19