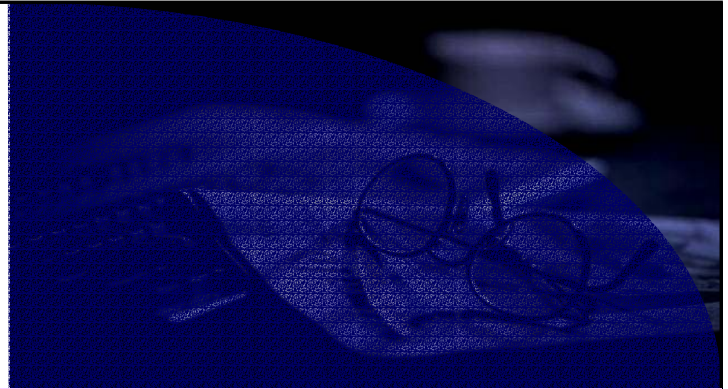


assessment for learning

year 8...mark scheme



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8H The rock cycle...mark scheme

Assessment for learning...year 8 (level 3-6)

Question 1:

- (a) (i) high **or** large pressure 1
high temperature 1
answers may be in either order
accept 'large forces'
*do **not** accept 'pressure'*
accept 'heat'
*do **not** accept 'temperature'*
- (ii) marble 1
- (b) heating **or** melting 1
cooling **or** solidifying **or** crystallising 1
*answers may be in either order accept 'rising' **or***
'moving to a cooler place'
- (c) 1 weathering 1
2 transport
3 deposition
4 burial
answers must be in the correct order
***all four** required for the mark*

[6]

Question 2:

(a)

4

rock	classification
A	igneous
B	sedimentary
C	
D	sedimentary
E	metamorphic

- (b) (i) E
(ii) D
(iii) A

1
1
1

[7]

Question 3:

(a)

1

1	4	3	2	6	5
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all six in the correct order are required for the mark

- (b) it has smaller crystals
accept 'it has smaller grains'
- (c) (i) $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
do not accept a word equation
- (ii) $\text{CaCO}_3 + \text{SiO}_2 \rightarrow \text{CaSiO}_3 + \text{CO}_2$
do not accept a word equation
- (iii) metamorphic
accept 'marble'
- (iv) D

1
1
1
1
1

[6]

Question 4:

- (a) (i) sedimentary
(ii) igneous

accept 'conglomerate'

1
1

- (b) The temperature falls below freezing point. ✓

1

Expansion forces the cracks in the rock to open. ✓

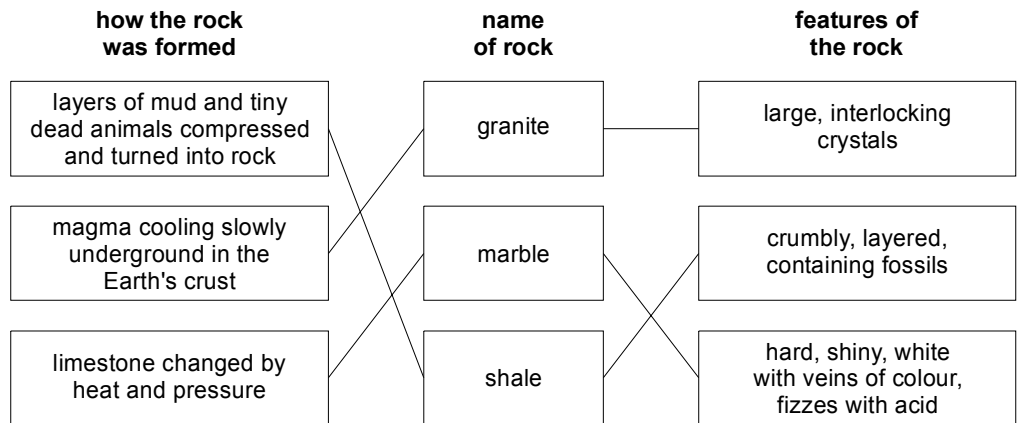
1

*if more than two boxes are ticked, deduct one mark for each incorrect tick
minimum mark zero*

[4]

Question 5:

- (a) **Both the line from the name of the rock to the method of formation and to the features of the rock must be correct for the mark.**



3

- (b) (i) acidic water drains through cracks

1

accept 'rain is acidic'

water reacts with limestone **or** calcium carbonate

1

accept 'limestone dissolves'

- (ii) any **two** from

2

- low temperatures make water freeze in cracks

accept 'water freezes in cracks'

- water expands as it freezes
- ice expanding breaks up the limestone

accept 'ice forces the rock apart'

[7]