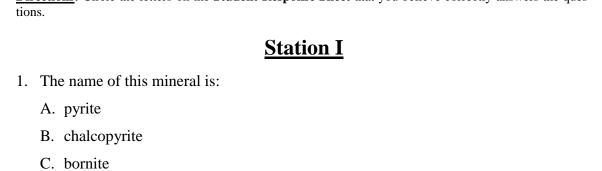
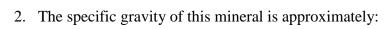
Colorado Science Olympiad

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the ques-





A. 1 - 2B. 3-4

D. lepidolite

- C. 5 6
- D. 7 8
- 3. This mineral is used in the manufacture of:
 - A. electrical wire
 - B. steel
 - C. aluminum
 - D. glass
 - E. none of the above

4. The name of this mineral is:

A. epidote

B. nepheline

C. celestite

Colorado Science Olympiad

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station II

	D. fluorite
	E. barite
5.	The hardness of this mineral is:
	A. 2
	B. 3
	C. 4
	D. 5
	E. 6
6.	This mineral is used in small amounts for:
	A. tanning leather
	B. fertilizer
	C. toothpaste
	D. concrete
	E. none of the above

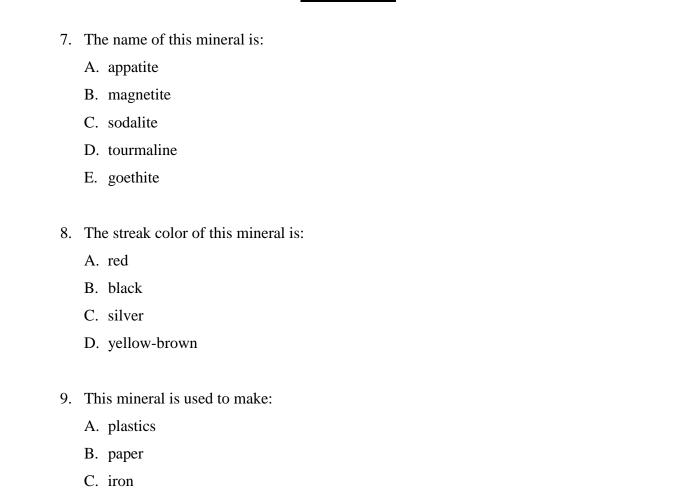
D. glass

E. all of the above

Colorado Science Olympiad

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station III



<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station IV

10. The name of this mineral is:						
A. ulexite						
B. gypsum						
C. calcite						
D. sodalite						
E. barite						
11. The hardness of this mineral is:						
A. 1						
B. 2						
C. 3						
D. 4						
12. In which of the following environments does this mineral form?						
A. high mountain streams						
B. deep ocean						
C. fresh water lakes						
D. evaporite						
13. This mineral is used in the manufacture of:						
A. plaster of Paris						
B. sheet rock						
C. paper						
D. rubber						
E. all of the above						

Colorado Science Olympiad

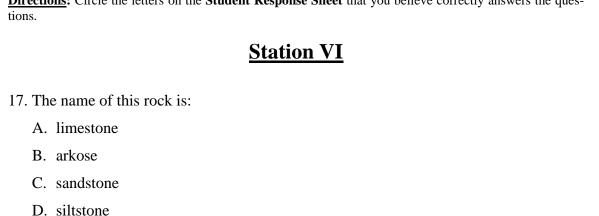
<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station V

- 14. The names of the two rocks at this station are:
 - A. travertine and limestone
 - B. limestone and dolomite
 - C. limestone and diatomite
 - D. dolomite and diatomite
 - E. dolomite and travertine
- 15. The chemical formula for the pink-colored rock is:
 - A. SiO2
 - B. CaCO3
 - C. CaMg(CO3)2
 - D. CaSO4
 - E. Na2SO4
- 16. The chemical formula for the white-colored rock is:
 - A. SiO2
 - B. CaCO3
 - C. CaMg(CO3)2
 - D. CaSO4
 - E. Na2SO4

Colorado Science Olympiad

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the ques-



- 18. In which of the following environments does this mineral form?
 - A. beach

E. mudstone

- B. aeolian
- C. fluvial streams
- D. all of the above
- E. none of the above
- 19. This rock is used for:
 - A. building stone
 - B. glass
 - C. ceramics
 - D. all of the above
 - E. none of the above

C. batteries

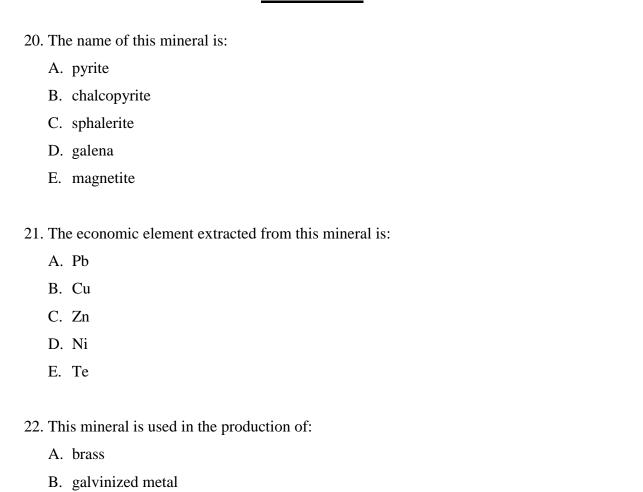
D. all of the above

F. none of the above

Colorado Science Olympiad

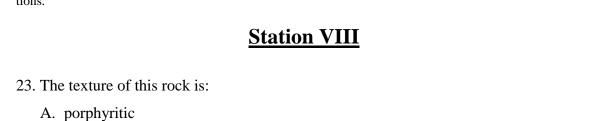
<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station VII



Colorado Science Olympiad

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.



- 24. In which of these environments does this mineral form?
 - A. volcanic

B. phaneritic

C. aphanitic

- B. hypabyssal
- C. plutonic
- D. metamorphic
- 25. The light color of this rock indicates that it:
 - A. contains abundant calcite
 - B. contains many different minerals
 - C. formed at great depths
 - D. is mafic
 - E. is felsic

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station IX

26.	Wh	nich rocks were formed near or on the surface?
	A.	1 and 2
	B.	1 and 3
	C.	1, 2, and 3
	D.	2 and 3
	E.	all of the above
27.	Wh	nich rocks are plutonic?
	A.	1 and 2
	B.	1 and 3
	C.	2 and 3
	D.	2 and 4
	E.	3 and 4
28.	Wh	nich rocks are texturally different, but chemically similar?
	A.	1 and 2
	B.	1 and 3
	C.	1 and 4
	D.	2 and 3
	E.	none of the above
29.	Wh	nich rock composes most of the crust found under the ocean waters?
	A.	1
	B.	2
	C.	3
	D.	4
30.	All	rocks included in this station are classified as:
	A.	sedimentary
	B.	igneous
	C.	metamorphic

Colorado Science Olympiad

<u>Directions</u>: Circle the letters on the **Student Response Sheet** that you believe correctly answers the questions.

Station X						
31. Rock 1 was formed from:						
A. mudstone						
B. sandstone						
C. limestone						
32. Rock 2 was formed from:						
A. mudstone						
B. sandstone						
C. limestone						
33. Rock 3 was formed from:						
A. mudstone						
B. sandstone						
C. limestone						
34. Rock 4 was formed from:						
A. mudstone						
B. sandstone						
C. limestone						
A. All rocks included in this station are classified as:sedimentary						
B. igneous						
C. metamorphic						

Rock and Mineral Exam STUDENT I					Nan	ne:					
					UDENT 1	ENT RESPONSE SHEET					
		ST	ATION	I		19.	A	В	C	D	\mathbf{E}
1.	A	В	C	D							
2.	A	В	C	D		STATION VI					
3.	A	В	C	D	${f E}$	20.	A	В	C	D	\mathbf{E}
						21.	A	В	C	D	\mathbf{E}
STATION II				22.	A	В	C	D	\mathbf{E}		
4.	A	В	C	D	\mathbf{E}						
5.	A	В	C	D	${f E}$	STATION VIII					
6.	A	В	C	D	${f E}$	23.	A	В	C		
						24.	A	В	C	D	
		STA	TION	III		25.	A	В	C	D	\mathbf{E}
7.	A	В	C	D	${f E}$						
8.	A	В	C	D		STATION IX					
9.	A	В	C	D	${f E}$	26.	A	В	\mathbf{C}	D	E
						27.	A	В	\mathbf{C}	D	E
		STA	TION	IV		28.	A	В	\mathbf{C}	D	E
10.	A	В	C	D	${f E}$	29.	A	В	\mathbf{C}	D	
11.	A	В	C	D		30.	A	В	C		
12.	A	В	C	D							
13.	A	В	C	D	${f E}$			STA	ATION	X	
						31.	A	В	C		
		STA	ATION	\mathbf{V}		32.	A	В	C		
14.	A	В	C	D	${f E}$	33.	A	В	C		
15.	A	В	C	D	${f E}$	34.	A	В	C		
16.	A	В	C	D	E	35.	A	В	C		
		STA	ATION	VI							
17.	A	В	C	D	${f E}$	Poss	sible (correct	respons	ses: 35	

18. A

B

 \mathbf{C}

 \mathbf{D}

 \mathbf{E}

Total correct responses: ____

ADMINISTRATIVE PAGE

Answers		Station	Specimens at this Station		
1.	D	I	Bo	rnite	
2.	\mathbf{C}				
3.	A				
4.	D	II	Flu	orite	
5.	C				
6.	\mathbf{C}		~		
7.	E	III	Go	ethite	
8.	D				
9.	C	***	•		
10.	В	IV	Gy	psum	
11.	B				
12. 13.	D E				
13. 14.	B	${f v}$	T ir	nestone	
14. 15.	C	V		lomite	
16.	В		D 01	ioiiite	
17.	C	VI	Sar	ndstone	
18.	D	V1	Sai	idstone	
19.	D				
20.	$\overline{\mathbf{C}}$	VII	Spl	nalerite	
21.	Ċ		~ F -		
22.	D				
23.	A	VIII	An	desite	
24.	В				
25.	\mathbf{E}				
26.	В	IX	1.	Andesite	
27.	D		2.	Granite	
28.	A		3.	Basalt	
29.	\mathbf{C}		4.	Gabbro	
30.	В				
31.	A	X	1.	Slate	
32.	A		2.	Phyllite	
33.	C		3.	Marble	
34.	В		4.	Quartzite	
35.	C				

Recommended resource: <u>Physical Geology Lab Manual</u> published by EOA Scientific Systems, Inc. For information, please visit the following web site:

http://www.otherworlds-edu.com