

### STATION 1

Which of these minerals shows twinned crystals?

A, B, C, D, E

Which two minerals have the same chemical formula?

A, B, C, D, E

Which of these minerals is/are silicate minerals?

A, B, C, D, E

Can you name them? A - \_\_\_\_\_

B - \_\_\_\_\_ C - \_\_\_\_\_

D - \_\_\_\_\_ E - \_\_\_\_\_

### STATION 2

Which mineral shows hexagonal crystal form?

A, B, C, D, E

Which minerals contain sulfur?

A, B, C, D, E

Which minerals contain copper?

A, B, C, D, E

Which of these minerals is the softest?

A, B, C, D, E

Can you name them? A - \_\_\_\_\_

B - \_\_\_\_\_ C - \_\_\_\_\_

D - \_\_\_\_\_ E - \_\_\_\_\_

STATION 3 - Identify Each Crystal System from the diagram  
then match with an arrow to a mineral

A. \_\_\_\_\_ GYPSUM

B. \_\_\_\_\_ BARITE

C. \_\_\_\_\_ GALENA

D. \_\_\_\_\_ ULEXITE

E. \_\_\_\_\_ BERYL

F. \_\_\_\_\_ CHALCOPYRITE

### STATION 4

Which of these minerals is an ore of zinc?

A, B, C, D

What is the crystal system for Mineral A? \_\_\_\_\_

What is the crystal system for Mineral C? \_\_\_\_\_

Which of these minerals are on the Mohs Hardness Scale?

A, B, C, D

Name each mineral

A - \_\_\_\_\_ B - \_\_\_\_\_

C - \_\_\_\_\_ D - \_\_\_\_\_

# STATION 1

A



B



C



D



E



"Cave of Swords" – Naica, Mexico

Stations January 16

## STATION 2

A



B



C



D

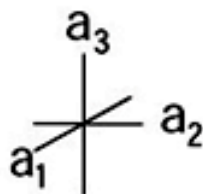
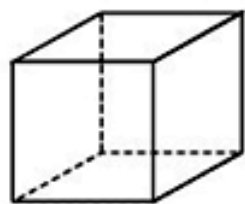


E



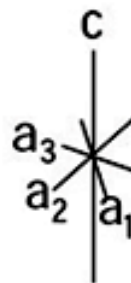
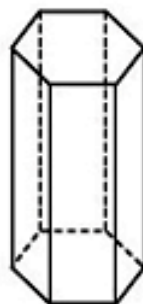
Stations January 16

# Station 3



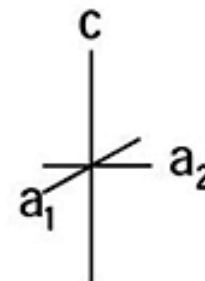
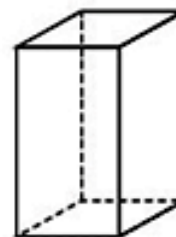
$a_1 = a_2 = a_3$   
all angles  $90^\circ$

**A**



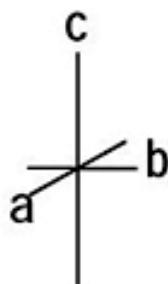
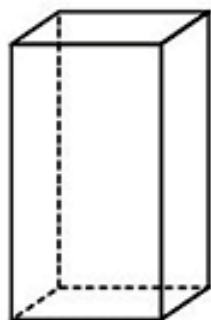
$a_1 = a_2 = a_3 \neq c$   
angles  $a_{1,2}$  to  $c = 90^\circ$   
angles between  $a$  axes  $= 120^\circ$

**B**



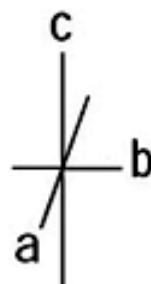
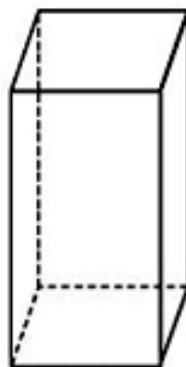
$a_1 = a_2 \neq c$   
all angles  $90^\circ$

**C**



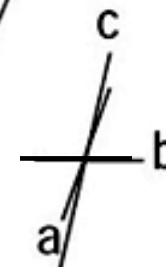
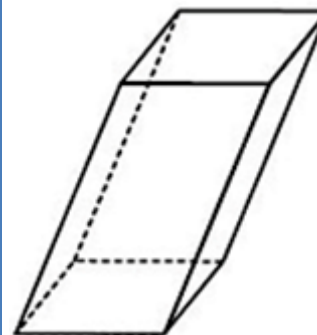
$a \neq b \neq c$   
all angles  $90^\circ$

**D**



$a \neq b \neq c$   
angle between  $a$  &  $b$   
and  $b$  &  $c = 90^\circ$ ;  
angle between  $c$  &  $a > 90^\circ$

**E**



$a \neq b \neq c$   
all angles  $\neq 90^\circ$

**F**



# STATION 4

A



B



C



D



### STATION 1

Which of these minerals shows twinned crystals?

**A,** B, C, D, E

Which two minerals have the same chemical formula?

A, B, C, **D,** **E**

Which of these minerals is/are silicate minerals?

**A,** B, **C,** D, E

Can you name them? A - **staurolite**

B - **apatite** C - **almandine - garnet**

D - **selenite (gypsum)** E - **satin spar (gypsum)**

### STATION 2

Which mineral shows hexagonal crystal form?

A, B, **C,** D, E

Which minerals contain sulfur?

**A,** B, C, **D,** E

Which minerals contain copper?

**A,** **B,** C, D, E

Which of these minerals is the softest?

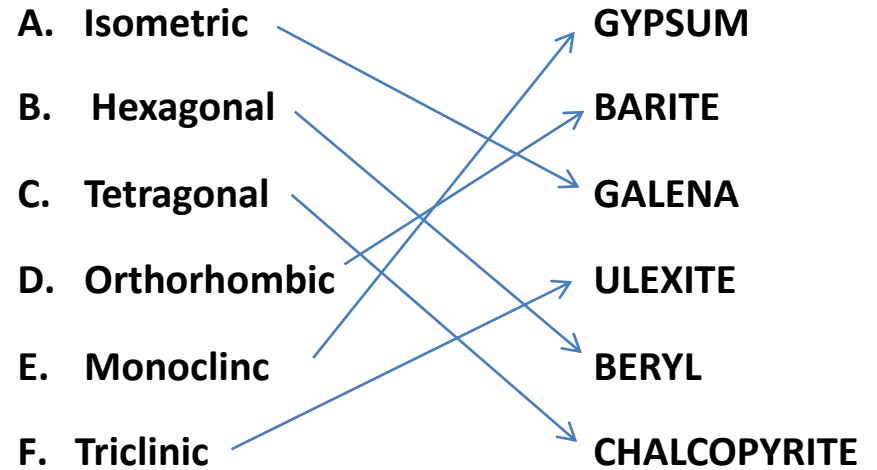
A, B, C, D, **E**

Can you name them? A - **bornite**

B - **malachite** C - **beryl (aquamarine)**

D - **sulfur** E - **graphite**

STATION 3 - Identify Each Crystal System from the diagram then match with an arrow to a mineral



### STATION 4

Which of these minerals is an ore of zinc?

A, **B,** C, D

What is the crystal system for Mineral A? **hexagonal**

What is the crystal system for Mineral C? **isometric / cubic**

Which of these minerals are on the Mohs Hardness Scale?

**A,** B, **C,** D

Name each mineral

A - **corundum** B - **sphalerite**

C - **fluorite** D - **tourmaline**