

STATION 1

Identify the crystal system for each specimen and what you observed to help you determine it.

A: _____

B: _____

C: _____

D: _____

E: _____

STATION 3

Three of these minerals all have the same chemical formula. Name them by letter and then by name.

Letter - ____ Name _____

Letter - ____ Name _____

Letter - ____ Name _____

Identify the other two minerals:

Letter - ____ Name _____

Letter - ____ Name _____

Which mineral is from an entirely different mineral group? ____

Name the two mineral groups present? ____ & ____

STATION 2

Most of these minerals are in the Mohs hardness scale. Can you identify them by their hardness?

A _____ B _____

C _____ D _____

E _____ F _____

G _____ H _____

Can you identify the one mineral in the box that is NOT on the Mohs hardness scale?

STATION 4

Which of these minerals is a native element ?

A, B, C Name it: _____

Name the two minerals in specimen B:

What do the two minerals in specimen B have in common?

Which mineral displays multiple cleavage directions that are not perpendicular to each other? _____

What type of fracture style is displayed by sample C? _____

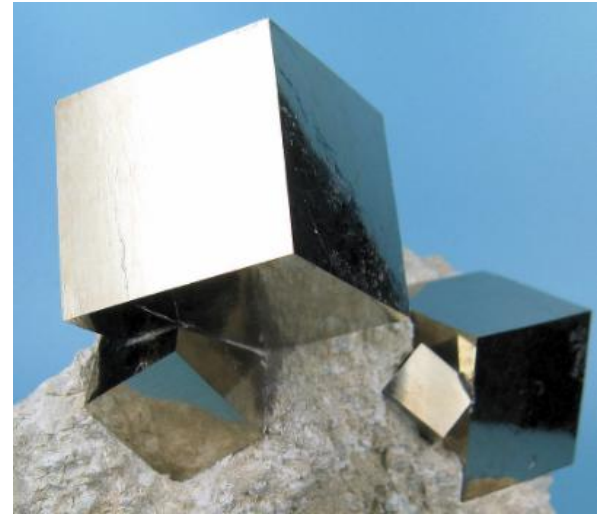
Name sample A and describe its luster: _____

STATION 1

A



B



C



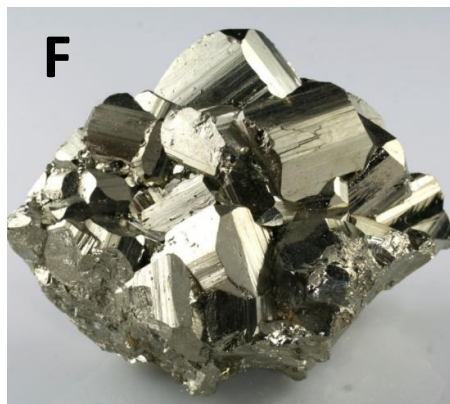
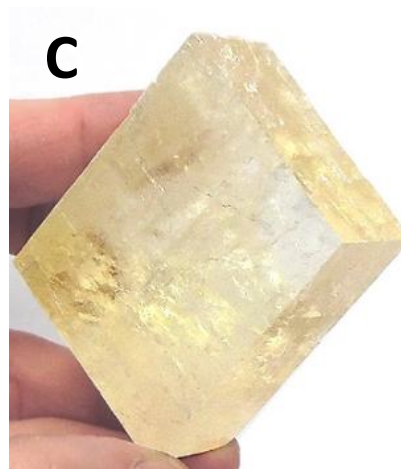
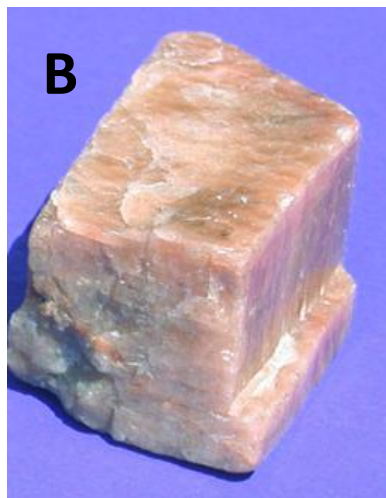
D



E



STATION 2



STATION 3

A



B



C



E



D



STATION 4

A

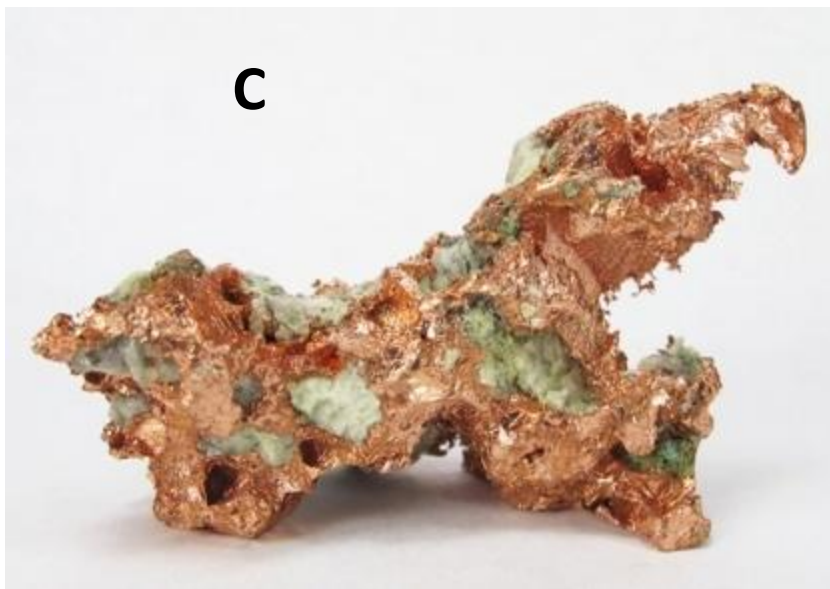


B



I could not find an excellent photo of these two minerals together to match my example online so this is a fabricated combination.

C



Station Answers – December 12

Station 1

- A. Triclinic (no parallel axes)
- B. Cubic/isometric (3 perpendicular and equal axes)
- C. Isometric dodecahedron
- D. Hexagonal – 6-sided
- E. Tetragonal – all parallel axes, two equal length, one is shorter

Station 2

- | | |
|------------|-------------|
| A. Apatite | B. Feldspar |
| C. Calcite | D. Quartz |
| E. Talc | F. Pyrite |
| G. Gypsum | H. Fluorite |

Pyrite is not in Moh's scale.

Station 3

B, C, and E are all gypsum
B – alabaster
C – selenite
E – satin spar

A is sphalerite D is celestite

A is a sulfide mineral. Rest are sulfates.

Station 4

C is a Native Element --- Copper
Specimen B contains Galena and Celestite.
Both contain the element sulfur (S).
Celestite has multiple non-parallel cleavages.
Copper (C) has hackly fracture.
A is sphalerite and has metallic luster.