

# 1<sup>st</sup> Annual Muscatel Invitational Tournament

## Rocks and Minerals Test

## Station 1

A-G: Identify the specimens

H: Give the chemical formula of specimen D.

I: What are the two major forms of specimen F?

J: Give an optical property of specimen A.

## Station 2

A-G: Identify the specimens

H: Which of the the specimens is considered to be high-grade coal?

I: Specimen B is the *intrusive/extrusive* equivalent of which specimen?

J: Which of the specimens displays twinning?

## Station 3

A-I: Identify the specimens

J: Which specimen is highest on the Mohs Scale?

K: What is another name for specimen C?

L: What is specimen E composed of?

## Station 4

A-G: Identify the specimens.

H: Give the class of specimen B.

I: Specimen G is an ore of what?

J: What are the main minerals found in Specimen F?

## Station 5

A-G: Identify the specimens.

H: Give the nickname for specimen D.

I: What causes the impurities in specimen E?

J: The large crystals in specimen A are what?

## Station 6

A-G: Identify the specimens.

H: Which specimen is a hydrate?

I: True or false: specimen C is the most common sedimentary rock in the world?

J: Which specimen turns into malachite over time?

## Station 7

A-G: Identify the specimens.

H: Specimen G is a source of what controversial building material?

I: Will specimen D sink?

J: What is the french name for the structure structure in specimen E?

## Station 8

A-G: Identify the specimens.

H: What is the main metal found in specimen A?

I: What is the chemical formula for specimen F.

J: What is specimen C made up of?

## Station 9

Match the following rocks with their nickname/common name.

1 Ulexite

A. Chessylite

2 Sulfur

B. Television Stone

3 Pyrite

C. Heavy Spar

4 Azurite

D. Fool's Gold

5 Barite

E. Heavy Spar

6 Where is most of the world's Anthracite Coal mined?

7 Explain birefringence (in less than 10 words).

8 What is the most massive ore on this list? What is it an ore of?

9 What is the best conductor on this list?

10 What are the bonds that hold carbon molecules together to form graphite?

## Station 10

Draw a picture of the Bowen's Reactions Series showing the direction of crystal cooling, and the minerals involved.