# SCAVENGER HUNT 2: COLORADO SCHOOL OF MINES MUSEUM & TRAIL

-Group Project - (3 students max per group)

# **Assignment Outline:**

This is a FIELD GROUP assignment for maximal 3 students and requires an actual field trip. Groups are SELF-Assignment (Sign-up in CANVAS under "People"). For eventual transportation needs to the destination contact your group members. Report your results by answering the questions and inserting photos as indicated by the symbol. Everyone in the group will receive the SAME grade!

**GROUP MEMBERS** Maximal 3 group members - Everyone in the group will receive the SAME grade! Log in to CANVAS and sign up for a group under "People" for this assignment.

Group Member 1 Name:	Activity Description	Date	Hours (Hrs:min)
Contact Info:			
Job Summary:			
Should Group Member 1 receive Full Credit for the project?	Group Member 2	□Yes □No _	Initial
	Group Member 3	□Yes □No	Initial
Group Member 2 Name:	Activity Description	Date	Hours (Hrs:min)
Contact Info:			
Job Summary:			
Should Group Member 2 receive Full Credit for the project?	Group Member 1	□Yes □No _	Initial
	Group Member 3	□Yes □No	Initial
Group Member 3 Name:	Activity Description	Date	Hours (Hrs:min)
Contact Info:			
Job Summary:			
Should Group Member 3 receive Full Credit for the project?	Group Member 1	□Yes □No _	Initial
	Group Member 2	□Yes □No _	Initial

# SUBMIT THIS COMPLETED SHEET WITH YOUR ASSIGNMENT

The group leader will submit the report for EVERYBODY in the group!



**ALL ANSWERS MUST BE TYPED USING A WORD PROCESSOR!** This includes chemical formulas, equations, tables and special characters. Become intimately familiar with these functions in your preferred word processor. Where graphics are indicated insert the proper graphic or picture as indicated by the symbol. Be familiar with placing and sizing visuals into a written document.

### **GRADING**

In general, for each fault in layout, grammar, spelling, content, concept, format, presentation, expression, design, citation, missing content, etc. I will deduct points. Multiple points can be deducted for larger infractions, such as missing content. Be aware that repeat mistakes will count MORE THAN ONCE!

### **RUBRIC:**

- /9 COMPOSITION & LAYOUT one or multiple point deduction per infraction
  - The appearance is neat and orderly. A title page mentioning ALL group members and the completed page 1 of this assignment is included. Each question & question number is repeated before each answer. The assignment is complete with ALL questions answered. Everything is typed and any graphics and data used are electronically prepared. Pictures are placed in a coherent form. Proper formatted citations are included.
- /10 WRITING & GRAMMAR one point deduction per infraction

Answers are in paragraph form with 3 to 5 sentences max. Spelling and grammar are correct. Word repetition and use of first person language is avoided. Statements are factually correct. Appropriate and complete language is used. Scientific notations / abbreviations as well as subscripts and superscripts are appropriately formatted.

- /50 CONTENT (10 Questions 5 points ea.) one or multiple point deduction per infraction

  ALL 10 questions are appropriately and factually answered Answers reflect understanding of the subject matter.
- PHOTOS (13 photos 2 points ea.)) one or multiple point deduction per infraction
  Field photos are clear, sharp, and show good detail to address the questions. If necessary, photos should be cropped. Every photo should have a FIGURE CAPTION describing the major points of each picture. Photos should show internal labels describing important objects.
- /5 CITATIONS (1 pts ea) one or multiple point deduction per infraction You must use a minimum of 5 properly formatted APA style citations)

#### THE WRITE-UP

The write-up has a title page mentioning the title of the assignment, ALL group members the course and the date. The title page has NO page numbering.

The <u>completed</u> GROUP MEMBER PAGE found on page 1 of the assignment outline must be inserted after the title page and becomes PAGE 1 of this assignment. Your write-up work starts on page 2.

In your WRITE-UP / DOCUMENTATION, <u>repeat</u> the question and question number, then answer each question INDIVIDUALLY as a single paragraph between 3 to 5 sentences. Do NOT combine questions! You may use graphics and illustrations outside the required photos. If you use visual or text material from another source it most be properly cited!

The group leader will submit the completed assignment as a PDF document by the DEADLINE or before through CANVAS!!! (Test your generated PDF to see if formatting and pictures exported correctly before submittal). Everyone in the group will receive the same grade, which includes any late penalties.

Travel to the Colorado School of Mines campus in Golden. Visit the Mineral Museum and Geologic Trail and answer ALL the following questions:

### **MUSEUM**

display. Then verify our displayers of research.						
	Name	Chemical Formula	Mineral Group (e.g. oxide, silicate, etc.)	Color	Where found in CO? (Be specific)	
Museum Display						
Research						

1	Name	Chemical Formula	Mineral Group (e.g. oxide, silicate, etc.)	Color	Where found in CO? (Be specific)
Museum Display					
Research					

3. Fill in the table for some selected minerals on display:

5. I in in the diote for some selected inincials on display.					
Name	Chemical Formula	Mineral Group (e.g. oxide, silicate, etc.)	Color	Where found in CO? (Be specific)	
Galena •					
Barite •					
Pyrite					
Gold •					
Fluorite •					

4. What mineral properties make a good gemstone? Describe & List at least 3 examples of gemstones on display that are different from the ones already used in this scavenger hunt and are found in CO with these indicated properties • •

5. Do a little research and for each one in your group, find your birth stone & zodiac stone. Are these on display at the mineral museum? If they are, take a picture and complete the table below

minoral massami, in and fare, take a province and complete the taken content					
Group Member	Birth Stone	Where found?	Zodiac Stone	Where found?	Picture, if applicable!
1.					•
2.					•
3.					•

#### GEOLOGIC TRAIL

- 6. According to the trail info, which Igneous Rocks are found in Colorado and where?
- 7. According to the trail info, which Metamorphic Rocks are found in Colorado and where?
- 8. According to the trail info, which Sedimentary Rocks are found in Colorado and where?

- 9. What is a geologic fault? Which fault is on display on the geologic trail and what did this particular fault do?
- 10. The Front Range of Colorado contains certain Rock Formations of certain geologic ages which are associated with certain rock types. These rock types in turn reflect the ancient depositional environment. Fill in the table below as complete as possible for all the Formations exhibited on the CSM nature trail including the exhibited rock samples:

Formation Name	Geologic Age	Major Rock Type(s)	Environment of Deposition

<b>CITATIONS:</b> ALL citations should be processed through the ZOTERO citation database software, freely available at <a href="https://www.zotero.org/">https://www.zotero.org/</a> .					
Citations should follow t	he APA citation stan	dard!			
Make sure your pictures or graphics have headers with citations. If you took the picture then cite yourself, showing the year and the name of the individual who has taken the photo. If you use an internet picture, you must appropriately cite it!!					