

AP Chemistry Photo Scavenger Hunt

What it is: A collection of unique photos and an explanation of the term presented in some form (prezi, google presentation, scrapbook, photo album)

Due: first day of class

Scoring: You will earn 1 extra test point for every FIVE items. Maximum 10 bonus test points (50 images)

Earn Points by: “collecting (photographing items and writing a description for each one. “Collecting” means that you should find the item and photograph it. Your photos should be original. (Read more below.)

You can be creative: If you choose an item that is internal to an item, you could submit a photograph of the whole item or a close up of part of it, and provide an explanation of what is inside.

Original photos only: Do not use an image from any publication or the internet. You must have taken the photograph yourself. The best way to prove that is to place an item in all of your pictures that only you could have added. Perhaps something that you always carry; student ID, key chain, or a special pen. You will submit/show that item with your project on day 1.

Team work: You may work with other students, but each student must turn in his or her own work with unique set of terms. Working with other students means brainstorming, collaborating, discussing, and going on collecting trips together. It doesn't mean using the same items.

Chemistry Scavenger Hunt Terms: Below are the items you are to “collect” (photograph). An item can only be used once. Humans are acceptable for one category only. Remember, you must take all photos yourself; no internet photos!

GROUPINGS: total of 5 specimens are required to complete a category (unless otherwise specified). Complete a maximum of TWO groups (10 photos is 2 test points).

1. Alloys
2. Colors of the halogens (Three only)
3. Density : have a total of 5 things (3 layers & 2 floating items, etc)
4. Metal vs. nonmetal characteristics (show at least 2 differences)
5. Kinds of salts (at least 3)
6. Polymers
7. Smells produced by different ringed hydrocarbons (at least 3)
8. Transition metal uses
9. Three Phases of water together (Clearly, only three)
10. Types of solutions

INDIVIDUAL ITEMS: 1 test point for every five items

- | | | |
|---|-------------------------------|-----------------------------------|
| 1. Any element | 32. crystalline solid | 64. molar volume |
| 2. a compound that you know how to write the formula for. | 33. diatomic molecule | 65. mole of anything |
| 3. acid | 34. diffusion | 66. molecular solid |
| 4. Acid rain | 35. dihydroxyacetone | 67. network (atomic) |
| 5. alcohol | 36. dialysis | 68. neutral |
| 6. aldehyde | 37. dry cell battery | 69. nitrous oxide |
| 7. alexandrite | 38. effusion | 70. osmosis |
| 8. alkane | 39. electrode | 71. piston |
| 9. alkyne | 40. electrolyte | 72. plant that changes in acidity |
| 10. alkyne | 41. emerald | 73. polyprotic acid |
| 11. amine | 42. entropy | 74. potentiometer |
| 12. amorphous solid | 43. enzyme | 75. pressure |
| 13. base | 44. ethylene | 76. protein |
| 14. blast furnace | 45. free energy | 77. pure element |
| 15. buffered solution | 46. freezing-point depression | 78. redox reaction |
| 16. calcium carbonate | 47. galvanic cell | 79. rhizome |
| 17. capsaicin | 48. graphite | 80. ruby |
| 18. carbohydrate | 49. hydrazine | 81. semiconductor |
| 19. catalyst | 50. Henry's law | 82. SI unit used in a store |
| 20. cathode ray tube | 51. hydrogen bonding | 83. silicate |
| 21. change in | 52. hydrophilic | 84. silver plating |
| 22. concentration | 53. hydrophobic | 85. silver sulfide |
| 23. change in pressure | 54. ion exchange | 86. slaked lime |
| 24. change in temperature | 55. isotonic | 87. sodium azide |
| 25. closest packing | 56. isomerism | 88. soluble |
| 26. collision model | 57. Ionic solid | 89. solution |
| 27. coagulation | 58. Isopentyl acetate | 90. spontaneous process |
| 28. colligative property | 59. kairomones | 91. state function |
| 29. colloid | 60. ketone | 92. sublimation |
| 30. combustion (be safe) | 61. kinetic energy | 93. surface tension |
| 31. corrosion of iron | 62. lead storage battery | 94. taconite ores |
| | 63. magnetite | 95. titanium dioxide |

96. Tyndall effect
97. vaporization

98. viscosity
99. voltmeter

EVENTS/PLACES: You can use up to 5 events. These must be selfies of you and a short description of the event listed. Some of these will take more than one picture; however, it will count as one item. These are counted the same as individual items so you can do fewer than 5.

1. *A laboratory*- One sentence describing what you were most impressed by.
2. *Beach Trash*- Clean-up 5 pieces of plastic from the beach, include them in your picture.
3. *Cook something*. Describe the chemistry involved.
4. *Read a science book*- Write 3 sentences about the importance of the book.
5. *Go to a water park*- List 5 reasons why water is so important to life.
6. *Test a pool or spa*. Show the chemistry.
7. *Volunteer at a science park or camp*-List 5 science related activities that you helped with.
8. *Visit a science museum*- Take pictures of 3 exhibits and explain why they captured your interest.
9. *Your choice- Chemistry related activity*- Did you do something this summer related to chemistry? Take a picture and give a brief explanation of what you did