



Under the Home

Fifth Grade Science

Rocks and Minerals Notebook Pages

Learn from the Masters

TABLE OF CONTENTS

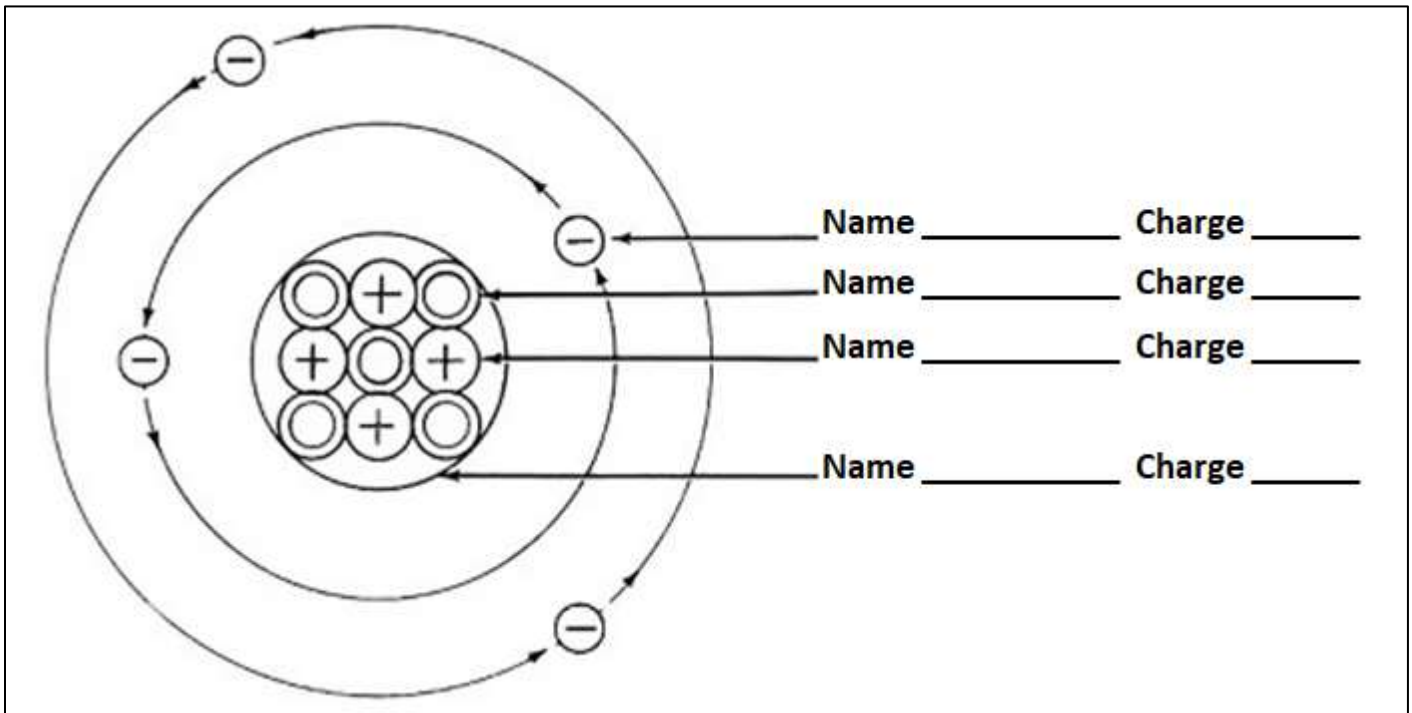
| | |
|---|---|
| LESSON 1: ATOMS..... | 3 |
| LESSON 2: THE PERIODIC TABLE OF ELEMENTS..... | 4 |
| LESSON 3: MATTER..... | 5 |
| LESSONS 4-36 BLANK TEMPLATE..... | 6 |

Lesson 1: Atoms

Directions: Read the instructions, and fill in the blanks.

1. Label the diagram of the atom with the names and charges (+ positive, - negative, or 0 neutral) of its subatomic particles:

- Nucleus
- Proton
- Neutron
- Electron



2. Label the following with either "E" for element or "C" for compound.

- a. Copper (Cu) _____ E _____
- b. Cuprite (Cu₂O) _____
- c. Sodium (Na) _____
- d. Chlorine (Cl) _____
- e. Salt (NaCl) _____

Lesson 2: The Periodic Table of Elements

Directions: Read the instructions, and color as directed.

Color the following elements as listed:

- Copper (Cu) Red
- Silver (Ag) Gray
- Gold (Au) Yellow
- Mercury (Hg) Orange
- Group 17 Elements Pink
- Period 1 Elements Purple

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Group → | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | | | | | | | | |
| ↓ Period | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 H | | | | | | | | | | | | | | | | | 2 He | | | | | | | | | |
| 2 | 3 Li | 4 Be | | | | | | | | | | | 5 B | 6 C | 7 N | 8 O | 9 F | 10 Ne | | | | | | | | | |
| 3 | 11 Na | 12 Mg | | | | | | | | | | | 13 Al | 14 Si | 15 P | 16 S | 17 Cl | 18 Ar | | | | | | | | | |
| 4 | 19 K | 20 Ca | 21 Sc | 22 Ti | 23 V | 24 Cr | 25 Mn | 26 Fe | 27 Co | 28 Ni | 29 Cu | 30 Zn | 31 Ga | 32 Ge | 33 As | 34 Se | 35 Br | 36 Kr | | | | | | | | | |
| 5 | 37 Rb | 38 Sr | 39 Y | 40 Zr | 41 Nb | 42 Mo | 43 Tc | 44 Ru | 45 Rh | 46 Pd | 47 Ag | 48 Cd | 49 In | 50 Sn | 51 Sb | 52 Te | 53 I | 54 Xe | | | | | | | | | |
| 6 | 55 Cs | 56 Ba | | | | | | | | | | | 72 Hf | 73 Ta | 74 W | 75 Re | 76 Os | 77 Ir | 78 Pt | 79 Au | 80 Hg | 81 Tl | 82 Pb | 83 Bi | 84 Po | 85 At | 86 Rn |
| 7 | 87 Fr | 88 Ra | | | | | | | | | | | 104 Rf | 105 Db | 106 Sg | 107 Bh | 108 Hs | 109 Mt | 110 Ds | 111 Rg | 112 Cn | 113 Nh | 114 Fl | 115 Mc | 116 Lv | 117 Ts | 118 Og |
| Lanthanides | | | | | | | | | | | | | 57 La | 58 Ce | 59 Pr | 60 Nd | 61 Pm | 62 Sm | 63 Eu | 64 Gd | 65 Tb | 66 Dy | 67 Ho | 68 Er | 69 Tm | 70 Yb | 71 Lu |
| Actinides | | | | | | | | | | | | | 89 Ac | 90 Th | 91 Pa | 92 U | 93 Np | 94 Pu | 95 Am | 96 Cm | 97 Bk | 98 Cf | 99 Es | 100 Fm | 101 Md | 102 No | 103 Lr |

Lesson 3: Matter

Field Book Entry: Solid, Liquid, and Gas

| | |
|---|---|
| <p>Directions: Embark on a nature walk. During your walk identify instances of the three states of matter – solid, liquid, and gas. Draw an example of each state of matter as observed in the table below.</p> | |
| <p>Student Name:</p> | <p>Nature Walk Date:</p> |
| <p>Nature Walk Season (Check One):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fall <input type="checkbox"/> Winter <input type="checkbox"/> Spring <input type="checkbox"/> Summer <p>Nature Walk Weather (Check One or More):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Sunny <input type="checkbox"/> Partly Sunny/Cloudy <input type="checkbox"/> Overcast <input type="checkbox"/> Rainy <input type="checkbox"/> Windy <input type="checkbox"/> Snowy | <p>Solid State of Matter Sketch:</p> |
| <p>Liquid State of Matter Sketch:</p> | <p>Gas State of Matter Sketch:</p> |

Lessons 4-36 Blank Template

Field Book Entry: Rock/Mineral Specimen Template

Directions: Embark on a weekly nature walk to collect a rock or mineral specimen of your choosing. Upon your return from the walk, complete this page. If you have a hardness testing kit, determine the hardness and streak of the specimen. In the event a nature walk is impossible, you might utilize rocks and minerals from around the home – for example, a gemstone from jewelry, landscaping stones, stone kitchen countertops, etc. for study. If you wish, research the specimen identity online to find its name.

Student Name: _____

Specimen Identity Hypothesis: _____

Specimen Physical Characteristics:

Color _____

Mohs Scale Hardness _____

Luster

- Adamantine or Subadamantine (Diamond-like)
- Vitreous or Subvitreous (Glass-like)
- Metallic
- Waxy
- Pearly
- Dull
- Other _____

Cleavage

- Yes
- No

Streak _____

Tenacity

- Ductile (can be drawn into wires)
- Malleable (can be pounded into sheets)
- Brittle
- Crumbly
- Other _____

Specimen Colored Pencil Sketch: