Element Guide Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_

1. Name the 2 elements that make up the highest percentage of the Earth’s crust and their mass percent abundance

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|  | Element | Symbol | % Abundance by Mass |
| 1 |  |  |  |
| 2 |  |  |  |

1. Name the 4 most common elements in the human body with their mass percent abundance

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|  | Element | Symbol | % Abundance by Mass |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |

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| **Chlorine - Cl** | Atomic # |  |
| What family elements is chlorine a part of?  What does chlorine look like?  The most common compound with chlorine is sodium chloride, also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  What is an example of a household product made with chlorine? | | |

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| **Carbon - C** | Atomic # |  |
| What are the three forms that carbon can take?  What is the subdiscipline of chemistry focused on the study of Carbon-based compounds called? | | |
| **Copper - Cu** | Atomic # |  |
| Why is copper often mixed with other metals?  What is bronze made of?  What is brass made of?  Why is copper used in electrical wires? | | |

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| **Gold - Au** | Atomic # |  |
| Why is the symbol for gold Au?  Why does gold keep its luster (shine)?  What is Gold leaf? How thick is it? | | |

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| **Hydrogen - H** | Atomic # |  |
| Hydrogen is diatomic. What does this mean?  Hydrogen is the most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ element in the universe.  Our sun fuses Hydrogen atoms together to produce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  What does the name Hydrogen mean? | | |
| **Iron - Fe** | Atomic # |  |
| Iron is most abundant in what part of the Earth?  Why was Iron a popular material for the construction of early tools?  What is steel made of?  Rust is created when Iron reacts with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |

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| **Sulfur - S** | Atomic # |  |
| In what type of geological region are you most likely to find sulfur?  What does hydrogen sulfide smell like?  Name a common household product which contains sulfur | | |

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| **Nitrogen - N** | Atomic # |  |
| Nitrogen is an important ingredient in what invention by Alfred Nobel?  Why is Nitrogen important to living things?  What temperature is required to support liquid Nitrogen? | | |

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| **Oxygen - O** | Atomic # |  |
| Where does most of the Oxygen in our air come from?  What is combustion?  What is oxidation? | | |

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| **Silicon - Si** | Atomic # |  |
| What form does most of the Silicon on Earth take?  Silicon is the most famous of the semi-conductors. Its properties as part of this category make it ideal for what important application? | | |

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| **Lithium - Li** | Atomic # |  |
| What element family is Lithium a member of?  Lithium is often used as a medication for what disease?  There is a growing concern that there isn’t enough Lithium supply to support this new(ish) application: | | |