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| East.H.S. ©λ€M|5+rγ  visit http://genest.weebly.com |  | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  This Friday is a tiny quiz  Thursday Nov 11 is a big Test  Friday Nov 12 there is no school for students |

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| Here are four things you DO need to be careful about in LoL energy diagrams: |  | Here are two things you DON’T need to be careful about in LoL energy diagrams: |
| Mistake A The total initial, and the total final MUST agree with the number of squares of energy that entered or left the system. |  | * + The amount that enters or leaves the system circle is not exact. We make that up randomly. |
| Mistake B The direction of the arrow must be correct. Light must COME OUT from a firecracker, not go in. Light must GO IN to a growing corn plant performing photoshythesis, not come out. |  | * The number of squares in the beginning is just some arbitrary number that we make up at random. Some people find it comfortable to always start with 4, 4, 4 in the initial box. |
| Mistake C If something changes from solid to liquid to gas, the Eph must increase. Going the other way, if something changes gas to liquid or liquid to solid, the Eph must decrease |  |  |
| Mistake D If the formula of the substance is the same before and after, the Ech CAN NOT change. A big example of this is phase changes of water. if an ice cube turns into a puddle of water, the Ech did not change, the Eph went up though. |  |  |

1. A glass of 30- degree C tea is heated to 80 degrees in a microwave oven.

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|  | new EBC |

List what was wrong with the drawing on the left and redraw it better on the right.

Mistake: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mistake: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. A tray of 20 degree C water is placed in a freezer and changes to ice cubes that are negative eight degrees C

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|  | new EBC |

List what was wrong with the drawing on the left and redraw it better on the right.

Mistake: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mistake: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. A firecracker explodes

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|  | new EBC |

List what was wrong with the drawing on the left and redraw it better on the right.

Mistake: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mistake: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. A bike tire contains 8.38x1024 air molecules at 2.00 atm. By pumping it, you add 5.5x1023 air molecules. What is the final pressure of the bike tire?