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| **P1.2 Factual Knowledge Tests – Pass Mark = 80%** |
| **Law of conservation of energy (3)**  Energy cannot be **created** or **destroyed** it can only be **transformed** from one form into another. |
| **Describe what happens to wasted energy and its effect on the surroundings (2)**  Waste energy is dissipated as heat energy  This heat energy warms the surroundings – increases its temperature. |
| **State the formula for energy efficiency and state what values efficiency is always between. (2)**  Efficiency = total useful energy out / total energy input  Efficiency is always between 0 and 1 or 0 and 100% |
| **Why are energy efficient devices good for the environment? (3)**  Energy efficient devices waste less energy and so use less electricity.  Most electricity comes from burning fossil fuels.  If we burn less fossil fuels, we emit less C02, which reduces the impact on global warming. |
| **What are the advantages and disadantages of LED’s over filament lamps (3)**  LED’s advantages = **longer lasting**, **more energy efficient** (waste less heat), **use less electricity**  LED’s disadvantage = **initial cost is higher**, but they payback over time. |
| **Why is using standby bad for the environment? (3)**  Devices on standby still use electricity.  Most electricity comes from burning fossil fuels, which releases CO2  CO2 contributes to global warming. |
| **State all the forms of energy (9)**  **C**hemical  **H**eat  **E**lectrical  **E**lastic potential  **K**inetic  **Y** -  **G**ravitational potential  **L**ight  **A**tomic (nuclear)  **S**ound |

**Score /25 = %**

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| **P1.2 Energy Efficiency - Factual Knowledge Tests** |
| **Law of conservation of energy (3)** |
| **Describe what happens to wasted energy and its effect on the surroundings (2)** |
| **State the formula for energy efficiency and state what values efficiency is always between. (2)** |
| **Why are energy efficient devices good for the environment? (3)** |
| **What are the advantages and disadantages of LED’s over filament lamps (3)** |
| **Why is using standby bad for the environment? (3)** |
| **State all the forms of energy (9)** |

**Score /25 = %**

**EBI – In the space below write out 3 of the ones you got incorrect so that you learn these for your resit.**