**Lesson 5 – Answer Key**

Renewable energy 101: **How does hydroelectricity work?**

1. H2O

* covers 71% world Surface
* Vital for daily life
* Clean, renewable, reliable source of E

1. How does HE work?

* HE capture moving H2O force from rivers & oceans
* Movement of H2O spins H. turbines
* Generate KE converts E in generator
* E insert power grid

1. Dam structure

* Built on rivers & streams
* Big drop elevation = gravity
* Blocks H2O natural floods
* Force H2O to flow through pipe to generator
* Release H2O to stream on other dam side

1. Dams then & now

|  |  |
| --- | --- |
| * Dams in US before 1960s: disrupt ecosystem | * Existing dams now tapped for E * Upgraded to be less harmful: plants, fish & wildlife * Get E protecting natural environment: win win |