

**2034 NANUKU SANGAM SCHOOL**  
**LESSON NOTES**  
**WORKSHEET 5 -2021**

**Subject:** Basic Science      **Year:** 8      **Name:** \_\_\_\_\_

**STRAND:** Strand 3 – Energy

**SUB-STRAND:** Energy Source and Transfer

**CLO:** Classify energy into different categories.

**LESSON NOTES:**                      **ENERGY SOURCES**

- |                |                               |                       |
|----------------|-------------------------------|-----------------------|
| 1. Solar (sun) | 2. Wind                       | 3. Water (hydropower) |
| 4. Geothermal  | 5. Biomass (organic material) | 6. Fossil fuels       |

**Forms of Energy**

- |         |               |          |          |
|---------|---------------|----------|----------|
| 1. Heat | 2. Electrical | 3. Sound | 4. Solar |
|---------|---------------|----------|----------|

**Conduction**

1. Conduction transfers heat within a body or between two bodies that are touching.
2. Conduction occurs in solids, liquids, or gases that are at rest.
3. A material that allows heat to travel through it is called a **conductor**.

**Convection**

1. **Convection** is the transfer of heat from one fluid to another by the movement of the fluid itself.
2. Water in a tea kettle is heated by convection. A hot stove also heats the air in a room by convection.
3. A warmer volume of fluid will rise, while a colder and thus more compacted volume of fluid will descend.

**Radiation**

1. All objects radiate energy and heat, even your own body.
2. Radiation leaves an object in the form of waves.
3. The hotter an object, the shorter the wavelength of this radiation.

1. **Insulators** – Are objects and substances that does not allow heat to pass through. Eg. Paper

2. **Conductors** - Are objects and substances that allow heat to pass through. Eg. Nail

**ACTIVITY:**

1. Write down three ways of heat transfer.

\_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

2. List two good conductors and two insulators of heat in the table below:

<b>Conductors</b>	<b>Insulators</b>

3. Explain what happens during the following:

A] Conduction –

\_\_\_\_\_  
\_\_\_\_\_

B] Convection –

\_\_\_\_\_  
\_\_\_\_\_

C] Radiation -

\_\_\_\_\_  
\_\_\_\_\_