# Exploring Energy Grades 5 & 6 Student Worksheet

**Name: ………………………………….  Class: …………..**

**Thought starter: How do you use energy?**

**Defining Key Terms**

**1.** Work with a partner to create your own definitions for the following terms. Don’t worry if you’re unsure what the terms mean; just have a go.

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Energy |  |
| Electricity |  |
| Renewable Energy |  |
| Non-Renewable Energy |  |
| Fossil Fuels |  |
| Solar Power |  |
| Pollution |  |
| Climate Change |  |
| Sustainability |  |
| Other new vocabulary |  |

**2.** Again working in your pairs, discuss and record your answers to the following questions:

**What do you think might be the problem with using fossil fuels to create electricity?**

**How might using fossil fuels for creating electricity harm our environment?**

**Different Types of Energy – Jigsaw Activity**

**1.** Work in your groups to read both the Introduction and your section of the Energy Factsheet. You should then discuss and record your answers to the following questions. Each student will need to record their own answers on their own Worksheet:

|  |  |
| --- | --- |
| **Question** | **After discussing the question, record your answers here:** |
| Where does this energy come from? |  |
| Is it renewable or non-renewable? Is this energy source sustainable? |  |
| Would you recommend this energy to someone wanting to reduce the impact of their energy use on our environment? Why or why not? |  |
| Year 6 Differentiation – What are the costs and benefits of the type of energy you are looking at? |  |

**The Future Is Here**

**1.** You will now watch a clip from the 2040 documentary. Once complete, work in pairs to discuss your answers to the following questions, with each student recording their answers in their own words:

|  |  |
| --- | --- |
| **Question** | **Answer** |
| What did you see in this clip? What was this clip about? |  |
| What does this clip make you think about? |  |
| What did you find interesting, surprising or inspiring about this clip? |  |
| What does this clip make you wonder? What questions does it leave you with? |  |

2. You will now work in groups to imagine the following scenario and answer the following question:

**Imagine you were going to start up energy production in your neighbourhood to help people move away from using polluting energy sources; which type of energy might be most suitable for where you live and why? (e.g. Do you live near the sea where you could access hydropower? Do you have enough space for wind turbines and is it often windy?)**

Each group needs to produce a **scientific poster** in response to this scenario and question. The poster needs to include:

* Information about the energy source you have chosen, including whether it is a renewable or non-renewable source of energy
* Justification for choosing this energy source (why is it the best choice for your area?)
* A rough sketch of what this might look like (this does not have to be feasible or correct – the aim here is for you to think creatively about your energy solution).

**Reflection**

1. After watching the clip with young people talking about energy in the future, work independently to answer the following questions:

|  |  |
| --- | --- |
| **Question** | **Answer** |
| What would you add to this clip? |  |
| What would you like to say about the future of energy? |  |
| What is your energy 2040? |  |