7I Energy- Revision Worksheet

Explain why humans need **energy** from the **food** we eat.

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State the units for **measuring energy**. ……

Explain why a five year old child, an adult and an active adult have different **energy** needs.

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State the five ways in which **energy** can be **transferred**.

1.

2.

3.

4.

5.

Describe what the **law of conservation of energy** is.

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Match up the **energy stores** to their examples:

Chemical	Hot objects
Kinetic	Objects in high positions
Thermal	Food, fuel, batteries
Elastic potential / strain	Moving objects
Gravitational potential	Stretched, squashed, twisted objects
Atomic / nuclear	Stored inside atoms

Complete the following diagram showing **energy transfers** in TV.

Define the word **fuel**.

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Describe what **fossil fuels** are and give three examples.

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Explain why **fossil fuels** are classed as **non-renewable fuels**.

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Describe what a **renewable energy resource** is.

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Describe how the following can be used as **renewable energy resources**:

Sun-

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Wind-

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Water-

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Complete the table below:

Energy Resource	Advantages	Disadvantages
Fossil Fuels		
Nuclear		
Renewable Resources		

Explain how the **Sun** is the original source of **energy** for most of our **energy resources** and which resources do not depend on the Sun.

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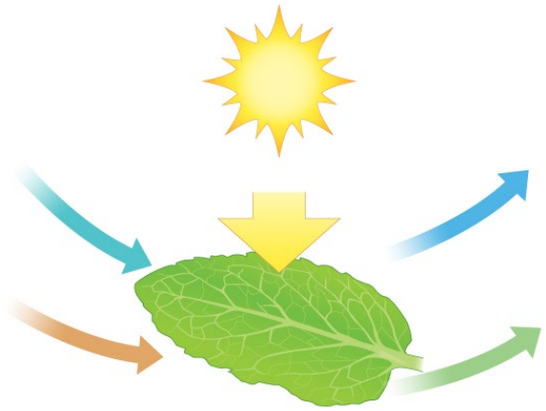
Label the arrows below to show what is taken in and given off during **photosynthesis**.



Define the word **efficiency**.

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Describe what **climate change** is and how we are contributing to it.

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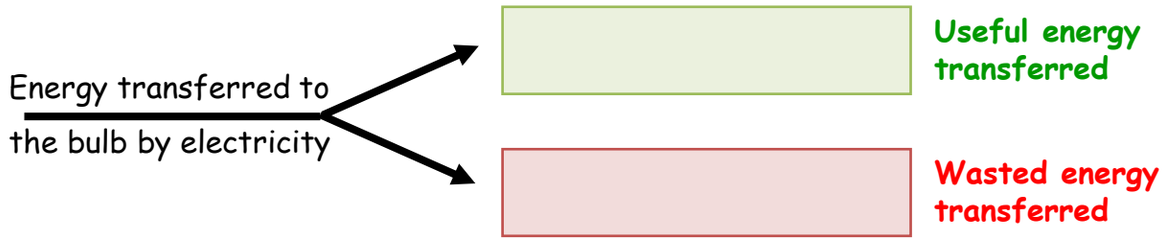
Complete the diagram showing the **useful** and **wasted energy stores/transfers** in a light bulb



Suggest three ways in which we can use less **fossil fuels**.

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Two light bulbs receive 20J of **energy** every second. Bulb A **transfers** 18J of energy by **light** every second, and bulb B transfers 4J by light every second. Explain which bulb is the most **efficient**.

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Compare the **energy** received from eating an apple with that from eating a piece of bread.

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Rate the following on how well you think you can do them:

I can…

- ☐ Recall that our bodies need energy, which we get from food.
- ☐ Explain why different people need different amounts of energy from food.
- ☐ Recall the units for measuring energy are joules (J) or kilojoules (kJ). 1kJ=1000J
- ☐ Make a fair comparison of results.
- ☐ Calculate ratios.
- ☐ Describe the different ways in which energy is transferred.
- ☐ Describe the different ways in which energy is stored.
- ☐ Recall the law of conservation of energy.
- ☐ Describe what fossil fuels are and how they were made.
- ☐ Explain why fossil fuels are described as non-renewable.
- ☐ Name some renewable fuels.
- ☐ Summarise the key points in a piece of text.
- ☐ Give some examples of renewable energy resources.
- ☐ Explain how the sun is the original source of energy for most of our energy resources.
- ☐ Recall which energy resources do not depend on the sun.
- ☐ Describe advantages and disadvantages of different energy resources.
- ☐ Describe some ways of using less fossil fuels.
- ☐ Explain what efficiency means.