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Energy Transfer and Transmission

TASK: To identify different types of energy and the mechanisms of energy transfer during the process of solar electricity generation and electricity consumption.

Types of energy				
Kinetic	Potential	Electrical	Chemical	
Light	Sound	Heat		

Q.1. What energy transfers are taking place during each step of the process of solar electricity being generated and electricity being used in the home to run a ceiling fan? Fill in the blanks using the types of energy above.

	From:	To:
Sun shines on solar panel	……	……
Solar panel produces electrical current	……	……
Electrical current used to power fan	……	……

Q.2. What energy transfers are taking place during the process of fossil fuel generated electricity being produced at the power station and electricity being used in the home for water heating?

	From:	To:
Gas is burnt in the generator	……	……
Generator turns and produces electricity	……	……
Electricity used to heat water	……	……

Q.3. What happens during an energy transfer to impact the amount of energy that gets delivered to the home?

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Q.4. Keeping you answer above in mind, what do you think is a more efficient way to heat water – an electric or gas water heater? Explain your answer.

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