ELECTRIC CARS

Lesson 10

Activity 1: Read the text and do the following activities.

Electric Cars



Electric cars are cars that use electricity for power. While conventional cars use gasoline or diesel for fuel, electric cars have an electric motor which is powered by batteries or a fuel cell.

There are several different kinds of electric cars. Plug-in hybrids have both a gasoline or diesel engine and an electric motor. The battery of plug-in hybrids is recharged when the car is plugged into an outlet, just like you would plug in any appliance. Battery electric vehicles do not use any fuel, running solely on electricity. Hydrogen fuel cell vehicles power an electric motor by converting hydrogen gas into electricity. Conventional hybrid cars use both gas or diesel and an electric motor for power, alternating between the two depending on the moment-to-moment needs of the car (accelerating, decelerating, idling, etc.). They are not considered to be electric cars, since they cannot be plugged in.

Electric cars tend to emit less pollution than the most efficient conventional cars. How much less pollution depends on the type of electric car and where its energy comes from. When you plug in a battery electric car into a clean electricity grid, its greenhouse gas emissions are comparable to what would be emitted by a conventional vehicle getting over a hundred miles per gallon. Electric cars that are charged using renewable electricity like solar or wind power are practically emission-free.

The purchase price of electric cars is typically higher than the purchase price of conventional vehicles. Both the federal government and some states offer tax credits for purchasing electric vehicles. Additionally, it costs significantly less over the life of an electric car to recharge its battery than it does to be constantly putting gas or diesel into a conventional car, so over the five to ten years that a person might typically own a vehicle, the total cost of ownership for electric cars can be between $700 and $1,000 a year less than that for conventional vehicles.

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Activity 2: Read the first paragraph again and complete this graph.

batteries	gasoline	fuel cell	diesel

CONVENTIONAL CARS USE _____ / _____ **FOR FUEL**

ELECTRIC CARS HAVE AN ELECTRIC MOTOR POWERED BY _____ / _____

Activity 3: Read the second paragraph and complete the chart.

You can't plug in these cars. They alterante between gas or diesel and an electric motor. It depends on the needs of the car.

They run only on electricity. These cars don't use fuel.

They have gasoline or diesel engine and an electric motor. You recharge the battery by plugging it into an outlet.

They use hydrogen gas which is converted to electricity .

Different kinds of electric cars	Plug-in hybrids	Battery electric vehicles	Hydrogen fuel cell vehicles	Conventional hybrid cars
How they work				

Activity 4: Read the third paragraph and mark the sentences TRUE or FALSE.

1. All electric cars emit less pollution: _____
2. Solar or wind power used to recharge electric cars have zero emissions. _____
3. If the car uses clean electricity grid, they are eco friendly. _____

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Activity 5: Read the fourth paragraph and choose the correct options.

1. How long does a person own a car?

5 years 10 years 15 years.

2. Some states offer _____ to buy electric cars.

money tax credits

3. Manteinance and fuel costs are _____ in electric cars.

less expensive more epensive

5. Buying an electric car is better than a conventional car.

Yes No

Activity 6: Match the words with their definitions.

Conventional car	A) to connect an electrical appliance by inserting a plug in a socket.
Electric car	B) Traditional car.
Fuel cell	C) Buy something.
Battery	D) Vehicles partially or fully powered on electric power.
Pollution	E) An amount of money that is taken off the amount of tax you must pay.
Tax credits	F) Damage caused to water, air, etc . by harmful substances or waste.
Purchase	G) A device that changes the chemical energy from a fuel into electricity.
Plug in	H) A device that produces electricity to provide power for radios, cars, etc.

LIVEWORKSHEETS