**Test: Flow and Future Projects**

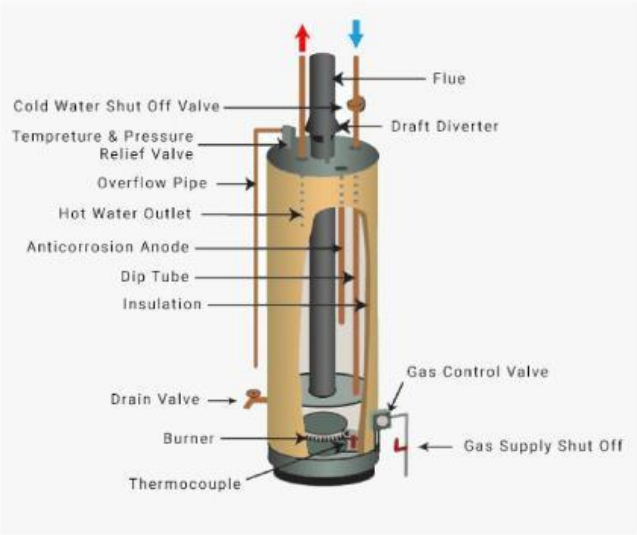
Name: _____ Date: _____

**A. Heating System** _____ / 20 p (10x2)

1. Read and complete the following text.

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**How does a gas water heater work?**

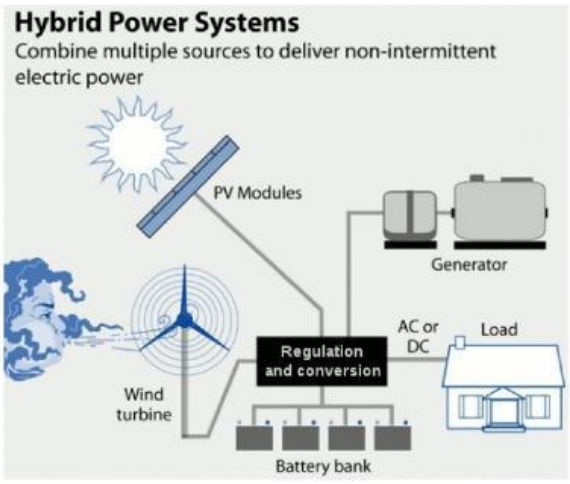



A gas storage hot water system _____ (heat) water via a gas burner, which is located under the storage tank. Cold water _____ (go) into the tank, where it _____ (sink) to the bottom and is heated. As the water _____ (get) warmer, it _____ (rise) to the top of the tank and _____ (flow) into your hot water piping when you _____ (turn) on the hot water tap.

A thermostat _____ (control) the temperature, with the element and burners ensuring that the stored water never _____ (drop) below the legal 60°C. Hot air and gas-burning fumes _____ (escape) through the flue.

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**B. Electrical Circuit** _____ / 28 p (8x3.5)




2. Complete the following conditional sentences.

a. If the the wind flows and the house needs energy, _____

_____

(current / flow / controller / house)

b. If wind doesn't flow and the Sun doesn't shine and the house needs energy, _____

_____

_____

(current / flow / batteries / house)

c. _____

(Sun / shine / and / house / need / energy), the current flows from the controller to the house.

d. _____

(Sun / not shine / and / house / not need / energy), the current doesn't flow.

LIVEWORKSHEETS

**C. Future Projects**

3. Read the article about a new solar panel plant. Complete the specification chart. _____ / 20 p (10x2)



## The New Offshore Wind Farm

The New Offshore Wind Farm will be one of the most advanced wind energy projects in the world. Engineers are installing it now, off the coast of Scotland, in the North Sea. They will complete the project in 2025.

Today, many industries rely on fossil fuels for energy. In the future, they will use electricity from the wind farm. It will supply power to factories and homes across the region.

There will be 60 wind turbines. Each turbine will be 150 meters tall, with blades that are 80 meters long. The turbines will be anchored 30 kilometers from the shore, at a depth of 50 meters. The farm will generate about 600 megawatts of electricity per day, enough to power 500,000 homes.

Technicians will perform regular maintenance on the turbines to ensure they work efficiently. Each turbine will have a network of sensors to monitor performance. About 100 maintenance workers will be responsible for the upkeep of the wind farm, and specialized boats will carry them to the turbines.

| Solar Power Plant | |
|---|---|
| Location | |
| Possible completion date | |
| Number of turbines | |
| Height of turbines | |
| Length of blades | |
| Anchorage depth | |
| Energy produced | |
| Number of homes supplied | |
| Total workers needed | |
| Role of boats | |

4. Underline 5 mistakes in this report. Disagree and rewrite the correct version. _____ / 32 p (10x3.2)

The Offshore Wind Farm will be a large solar energy project. Engineers are installing it off the coast of Sweden. They will start the project in 2025. It will supply power to ships. Each turbine will be 150 meters wide. The farm will generate 600 megawatts of electricity per hour.

*Example: The Offshore Wind Farm won't be a solar energy project. It will be a wind energy project.*

_____

_____

_____

_____

_____

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