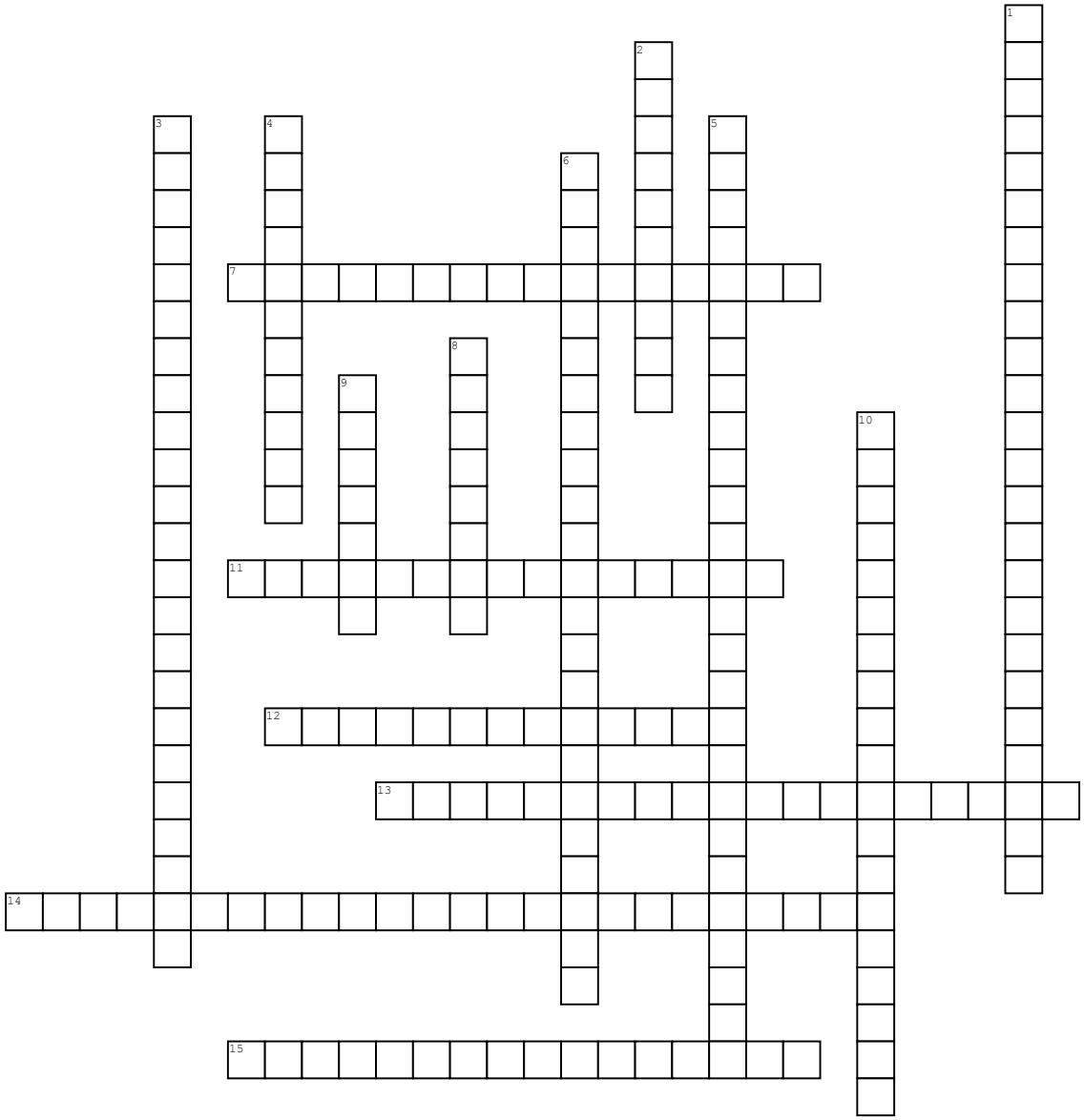
Name: _____ Date: _____

heat source in the environment



Across

7. The greenhouse effect is the process by which radiation from a planet's atmosphere warms the planet's surface to a temperature above what it would be without its atmosphere. If a planet's atmosphere contains radiatively active gases they will radiate energy in all directions.

11. Greenhouse gasses include water vapor, methane, ozone, nitrous oxide, and carbon dioxide. There may not be much of some of these gasses in our atmosphere, but they can have a big impact. Each greenhouse gas molecule is made of three or more atoms that are bonded loosely together.

12. Global warming is a long-term rise in the average temperature of the Earth's climate system, an aspect of climate change shown by temperature measurements and by multiple effects of the warming.

13. 100% of the energy entering earth's atmosphere comes from the sun. ~50% of the incoming energy is absorbed by the earth's surface i.e. the land and oceans. ~30% is directly reflected back to space by clouds, the earth's surface and different gases and particles in the atmosphere (the earth's albedo is 0.3 on average).

14. Conventional energy directly mean the energy source which is fixed in nature like oil, gas and coal. In other words conventional energy is also termed as non-renewable energy sources. Their use leads to increased greenhouse gas emissions and other environmental damage.

15. the trapping of the sun's warmth in a planet's lower atmosphere, due to the greater transparency of the atmosphere to visible radiation from the sun than to infrared radiation emitted from the planet's surface.

Down

1. Alternative energy is any energy source that is an alternative to fossil fuel. These alternatives are intended to address concerns about fossil fuels, such as its high carbon dioxide emissions, an important factor in global warming.

2. a natural fuel such as coal or gas, formed in the geological past from the remains of living organisms.

3. A solar collector positioned on the roofs of buildings heats the fluid and then pumps it through a system of pipes to heat the whole building. Photovoltaic cells, or solar panels, are slightly more involved than passive or active solar energy systems.

4. heat from the sun

5. All fossil fuels are nonrenewable, but not all nonrenewable energy sources are fossil fuels. Coal, crude oil, and natural gas are all considered fossil fuels because they were formed from the buried remains of plants and animals that lived millions of years ago.

6. Renewable energy is energy that is collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat. ... As of 2015 worldwide, more than half of all new electricity capacity installed was renewable.

8. a force produced when objects rub against each other

9. A biofuel is a fuel that is produced through contemporary biological processes, such as agriculture and anaerobic digestion, rather than a fuel produced by geological processes such as those involved in the formation of fossil fuels, such as coal and petroleum, from prehistoric biological matter.

10. Passive solar heating is the least expensive way to heat your home. Put simply, design for passive solar heating aims to keep out summer sun and let in winter sun while ensuring the building's overall thermal performance retains that heat in winter but excludes it and allows it to escape in summer.