A major problem our planet faces: The greenhouse effect

ALEXANDRA LESAI C2

Greenhouse effect

QUESTION	ANSWER
1. **What is the greenhouse effect?**	Greenhouse effect is one of the contributing factors to global warming. The greenhouse effect is based on the activities of the greenhouses, which are built to provide heat to plants in order to grow. The greenhouses absorb heat from the sun and retain the heat in order to help maintain a constant temperature for plant growth. This is similar to the 'greenhouse' effect that is experienced by the Earth's atmosphere. **Greenhouse effect is the retention of the heat by the greenhouses gases on the surface of the Earth, allowing the planet's temperature to rise.**

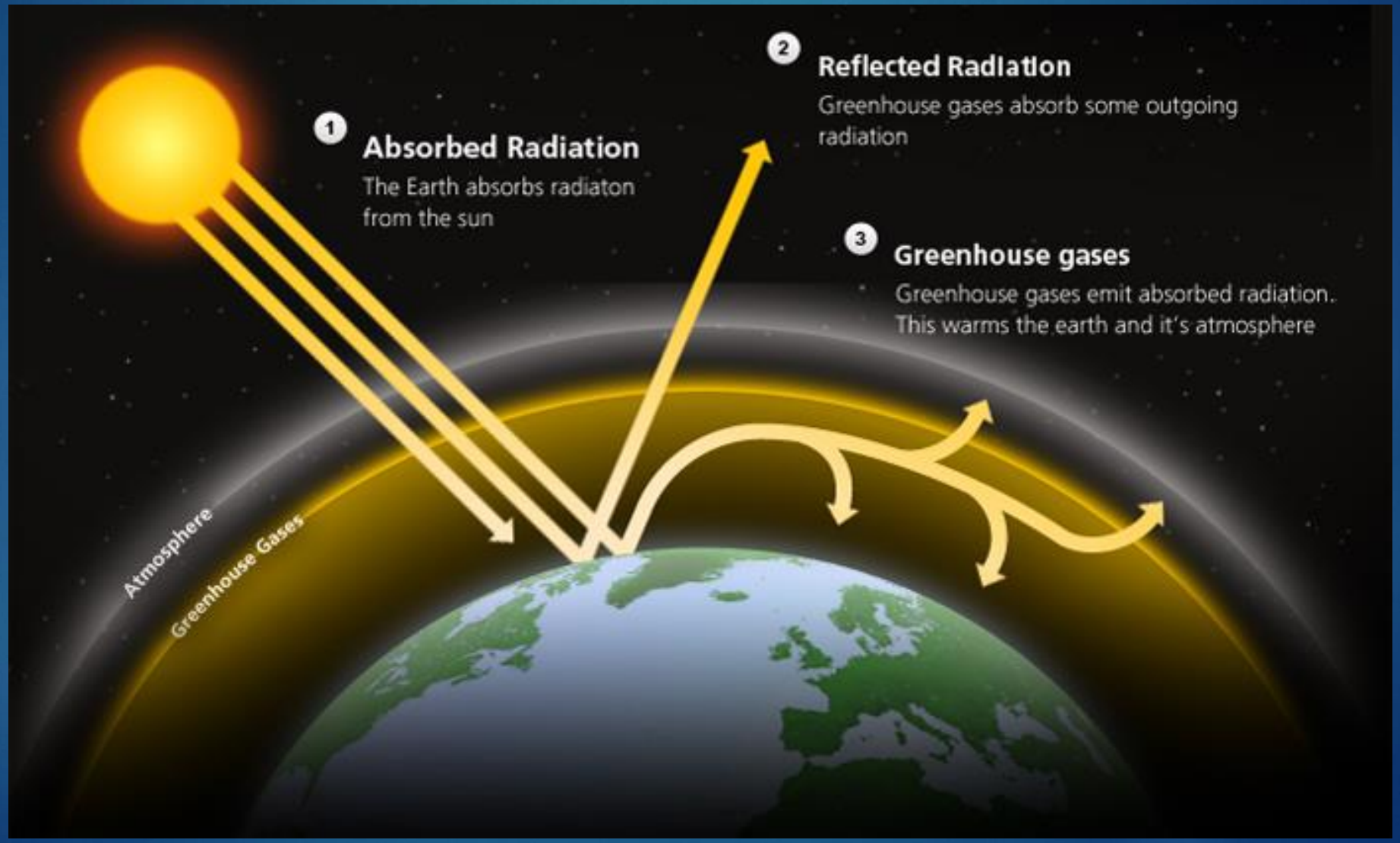
Greenhouse effect

QUESTION	ANSWER
2. When was the greenhouse effect first examined?	The theory of the greenhouse effect was first argued by Joseph Fourier in 1824 and was further strengthened by Claude Pouillet in 1827 and 1838 and John Tyndall in 1859.

Greenhouse effect

QUESTION	ANSWER
3. How does this phenomenon work ?	When the Sun's energy reaches the Earth's atmosphere, some of it is reflected back to space and the rest is absorbed and re-radiated by greenhouse gases. Greenhouse gases include water vapour, carbon dioxide, methane, nitrous oxide, ozone and some artificial chemicals such as chlorofluorocarbons (CFCs). The absorbed energy warms the atmosphere and the surface of the Earth.

How the greenhouse effect works



Greenhouse effect

QUESTION	ANSWER
4. Why is the greenhouse effect important to our planet ?	The greenhouse effect plays an important part in the development of life on the planet. Research shows that due to the retention of the heat by the Earth's atmosphere, the planet became warm enough to sustain life. If the greenhouse effect did not exist, the planet would be too cold for living organisms or plants.

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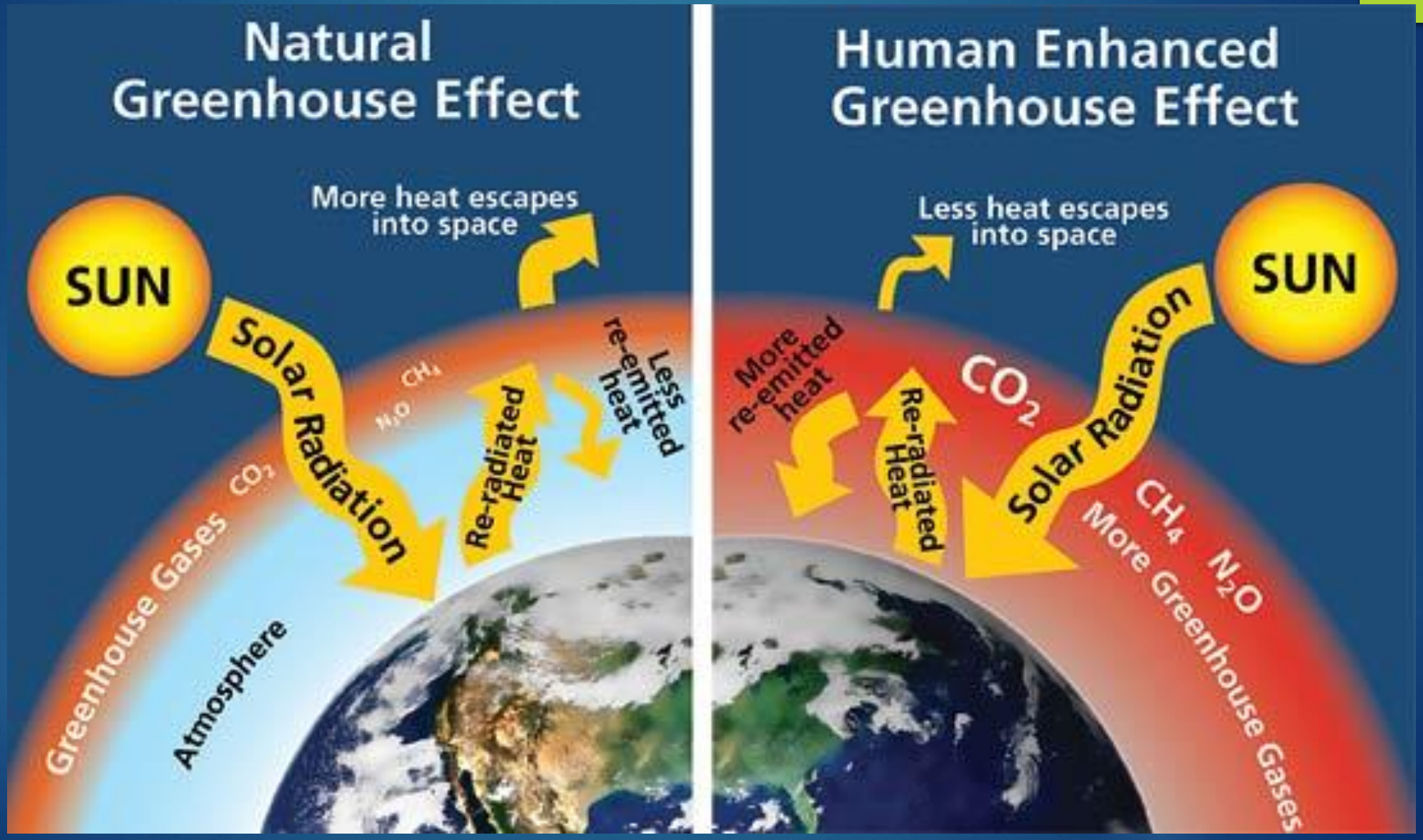
QUESTION	ANSWER
5. Why is the greenhouse effect harmful for our planet ?	The problem we now face is that human activities – particularly burning fossil fuels (coal, oil and natural gas), agriculture and land clearing – are increasing the concentrations of greenhouse gases. This is the enhanced greenhouse effect, which is contributing to warming of the Earth. If global warming continues unchecked, it will cause significant climate change, a rise in sea levels, increasing ocean acidification, extreme weather events and other severe natural and societal impacts, according to NASA, the EPA and other scientific and governmental bodies.


Natural
Greenhouse Effect
More heat escapes
into space
SUN
Solar Radiation
Re-radiated
Heat
Less
re-emitted
heat
Greenhouse Gases
Atmosphere
Human Enhanced
Greenhouse Effect
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SUN
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re-emitted
heat
Re-radiated
Heat
More Greenhouse Gases

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QUESTION	ANSWER
6. What are the main causes of the increase of the greenhouse effect ?	The main causes are: ▪ Increase of greenhouse gases ▪ Mining ▪ Combustion of fossil fuels ▪ Deforestation ▪ Increase in our world population

Greenhouse effect

QUESTION	ANSWER
7. **What are the main consequences of the greenhouse effect ?**	The main effects are: ▪ Global warming ▪ extreme weather conditions ▪ natural calamities ▪ droughts ▪ flooding ▪ melting of snow ▪ rising sea level

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QUESTION	ANSWER
8. What can we do about it ?	Unfortunately, the damage is already done. However, in order to reduce the acceleration rate of global warming it is important to cut down on emissions in any way possible, such as planting new trees, recycling, reducing dependency on cars, etc.

Sources:

- http://www.environment.gov.au/climate-change/climate-science-data/climate-science/greenhouse-effect
- https://www.livescience.com/37743-greenhouse-effect.html
- http://www.differencebetween.info/difference-between-global-warming-and-greenhouse-effect