

Periodicity in our life

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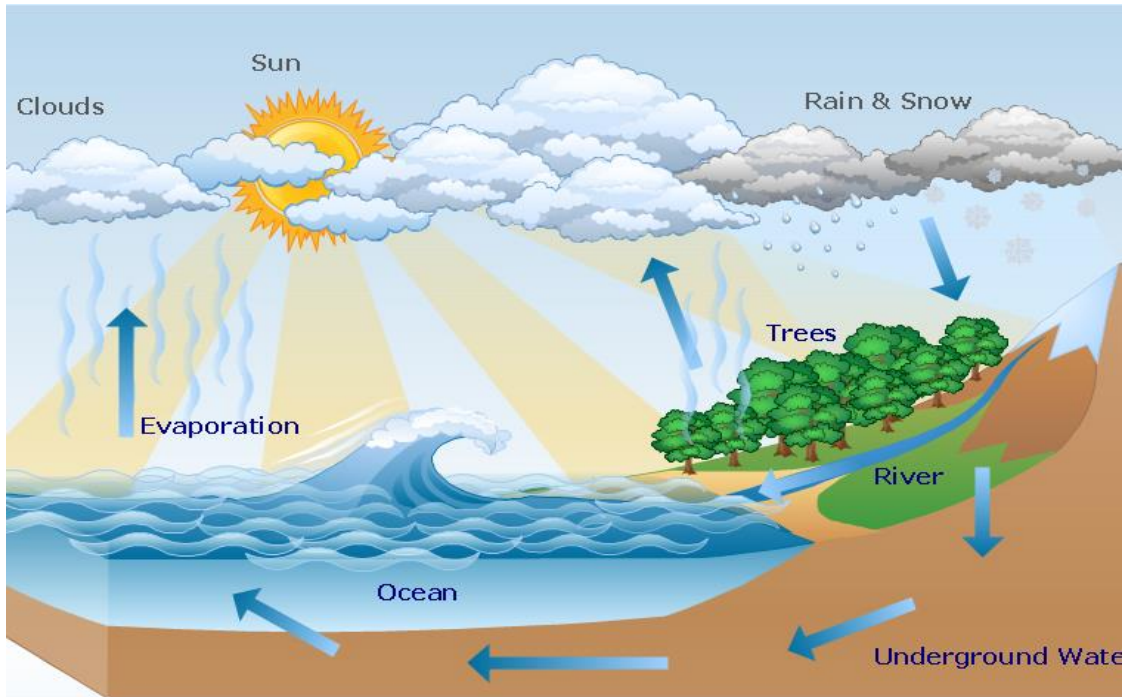
"Da Vinci" School

Chisinau, Moldova

Content:

- Water Cycle in Nature
- X-ray Burster
- Seasons
- Cell Regeneration
- Waves

Water Cycle in Nature



Source: <https://images.app.goo.gl/ghQxoUEotWju9hTu5>

- Why does it happen?

If water didn't naturally recycle itself, we would run out of clean water.

- How does it happen?

The natural water cycle moves water from the earth to the atmosphere - and back again.

- What is the periodicity of this phenomenon?

A drop of water may spend over 3,000 years in the ocean before evaporating into the air, while a drop of water spends an average of just nine days in the atmosphere before falling back to Earth.

- What factors influence this phenomenon?

Sun and temperature affect the water cycle.

- What are the consequences of the phenomenon?

Precipitations fall on Earth.

- What is the importance of this phenomenon in my life?

Water Cycle is important because we cannot live without water.

X-ray Burster



Source: <https://images.app.goo.gl/Po7mQ8rY1f6cBHK5A>

- Why does it happen?

X-ray bursts occur in low-mass X-ray binary systems where a neutron star and low-mass main sequence star are in orbit around one another.

- How does it happen?

When a star in a binary fills its Roche lobe, it begins to lose matter, which streams towards its neutron star companion.

- What is the periodicity of this phenomenon?

At least once a day. The burst can last from a fraction of a second to over a thousand seconds.

- What factors influence this phenomenon?

Extreme temperatures and pressures that exist there.

- What are the consequences of the phenomenon?

On Earth, gamma waves are generated by nuclear explosions, lightning, and the less dramatic activity of radioactive decay.

- What is the importance of this phenomenon in my life?

This phenomenon does not affect me in any way.

Seasons



Source: <https://images.app.goo.gl/UNUNhDHkfApZ6Vbq7>

- Why does it happen?

Seasons change because Earth rotates around Sun and the intensity of sunlight changes.

- How does it happen?

Seasons change from winter to spring, summer and autumn.

- What is the periodicity of this phenomenon?

Seasons change every 3 months.

- What factors influence this phenomenon?

The amount of sunlight that reaches Earth's surface.

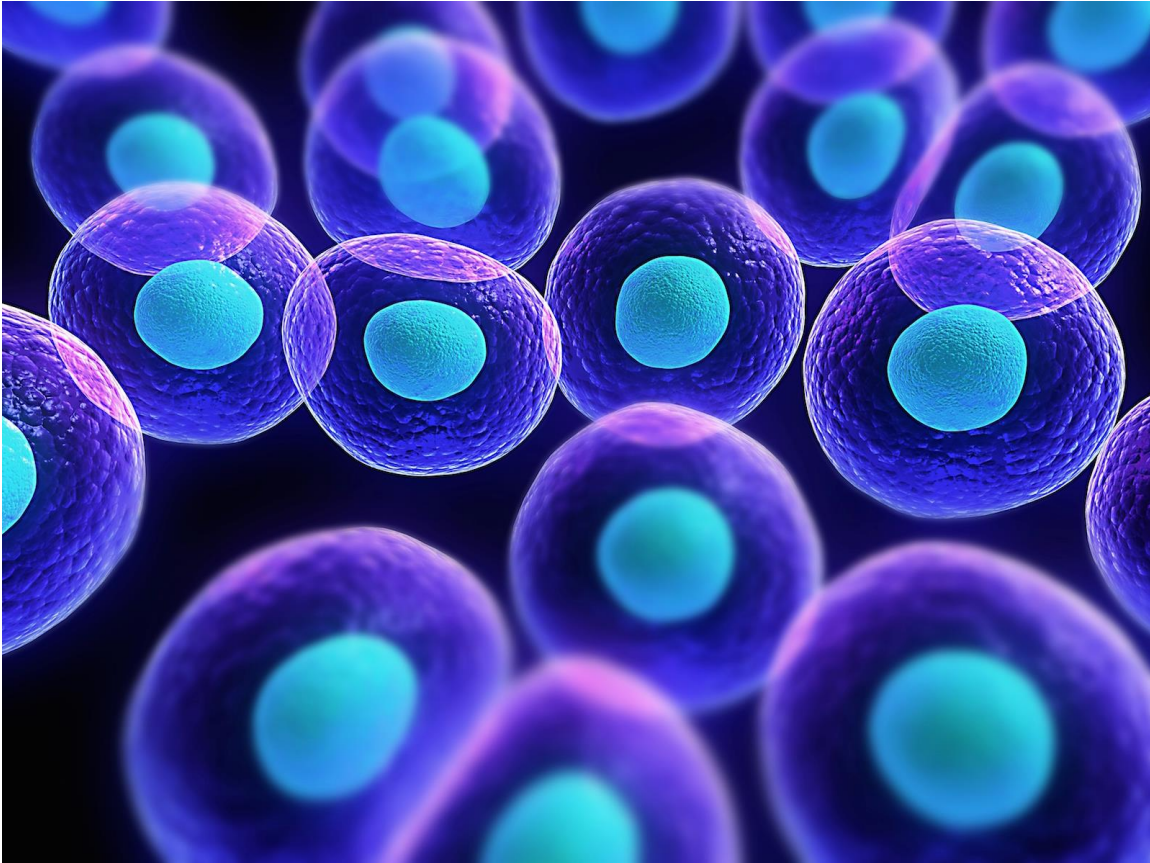
- What are the consequences of the phenomenon?

Climate changes, precipitations, temperature.

- What is the importance of this phenomenon in my life?

Without seasons change, humanity would be in a sorry state.

Cell Regeneration



Source: <https://images.app.goo.gl/nyQ5aVtSfp9ohRNC8>

- Why does it happen?

To regrow a damaged or a missing organ part from the remaining tissue.

- How does it happen?

When the body goes through changes or damage to its tissues and cells, they restore themselves.

- What is the periodicity of this phenomenon?

Cells are easily manufactured and replaced, but some cells take longer than 7 years to regenerate.

- What factors influence this phenomenon?

Temperature, feeding, pH, stress, water quality.

- What are the consequences of the phenomenon?

Our body repairs the damaged cells.

- What is the importance of this phenomenon in my life?

Our body uses cell regeneration to keep all of its processes functioning normally and to keep your organs and tissues working throughout the decades.

Waves



Source: <https://images.app.goo.gl/zWAUPat6cBg9QJJv7>

- Why does it happen?

Waves are created by the friction between wind and surface water.

- How does it happen?

As wind blows across the surface of the ocean or a lake, the continual disturbance creates a wave crest.

- What is the periodicity of this phenomenon?

The ocean is never still so waves are always present.

- What factors influence this phenomenon?

Wind, surface and gravitational pull of the sun and moon on Earth.

- What are the consequences of the phenomenon?

Waves create energy.

- What is the importance of this phenomenon in my life?

Ocean waves are very important for weather forecasting and climate modelling as well as for coastal communities, shipping routes and offshore industry. Ocean waves are thought to play a role in weather forecasting such as improving hurricane intensity forecasts by regulating surface friction.