

A Martian Adventure

An interactive Geo-Edutainment Tool

Varjas János; M. Császár Zsuzsanna;
Gyenize Péter; Czigány Szabolcs; Pirkhoffer Ervin

University of Pécs
Hungary

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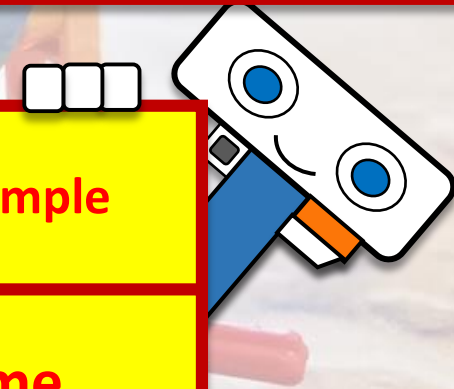
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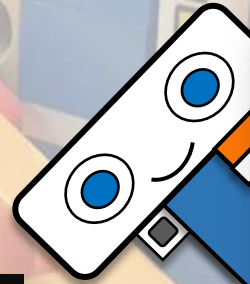
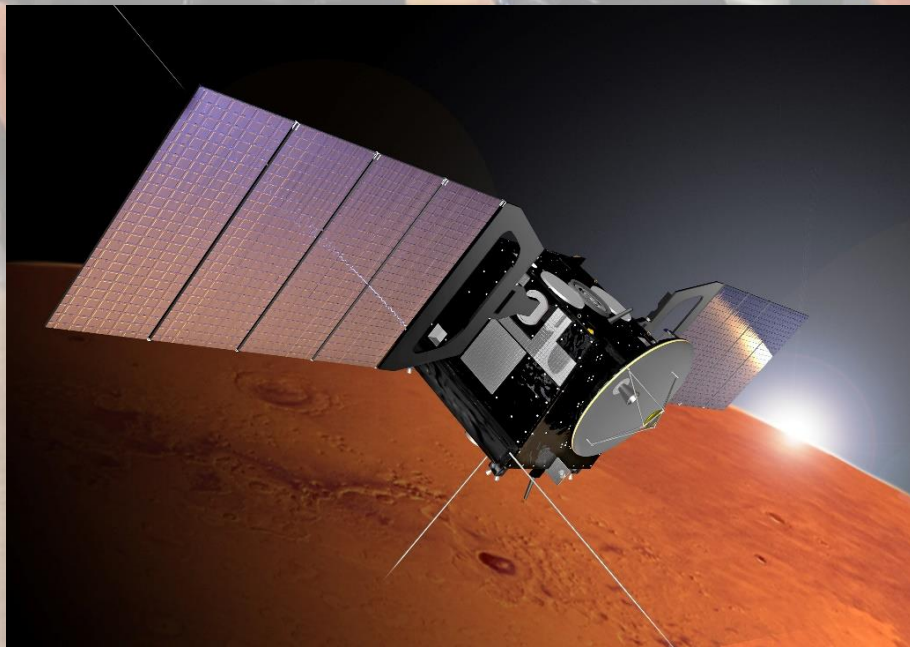
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Overview of the game



Relevance of MA

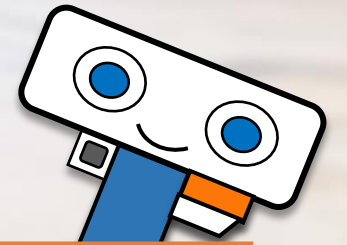
Transferable and practical knowledge

Active teaching methods

Popularity of Science

Games and Simulations

Martian Adventure



Design goals of the game



Teach about Mars

Teach about geomorphology

Teach about technology

Learning by activity

Mars terrain gamefield

Compare Mars to Earth

Lego Boost robots

Competitive game

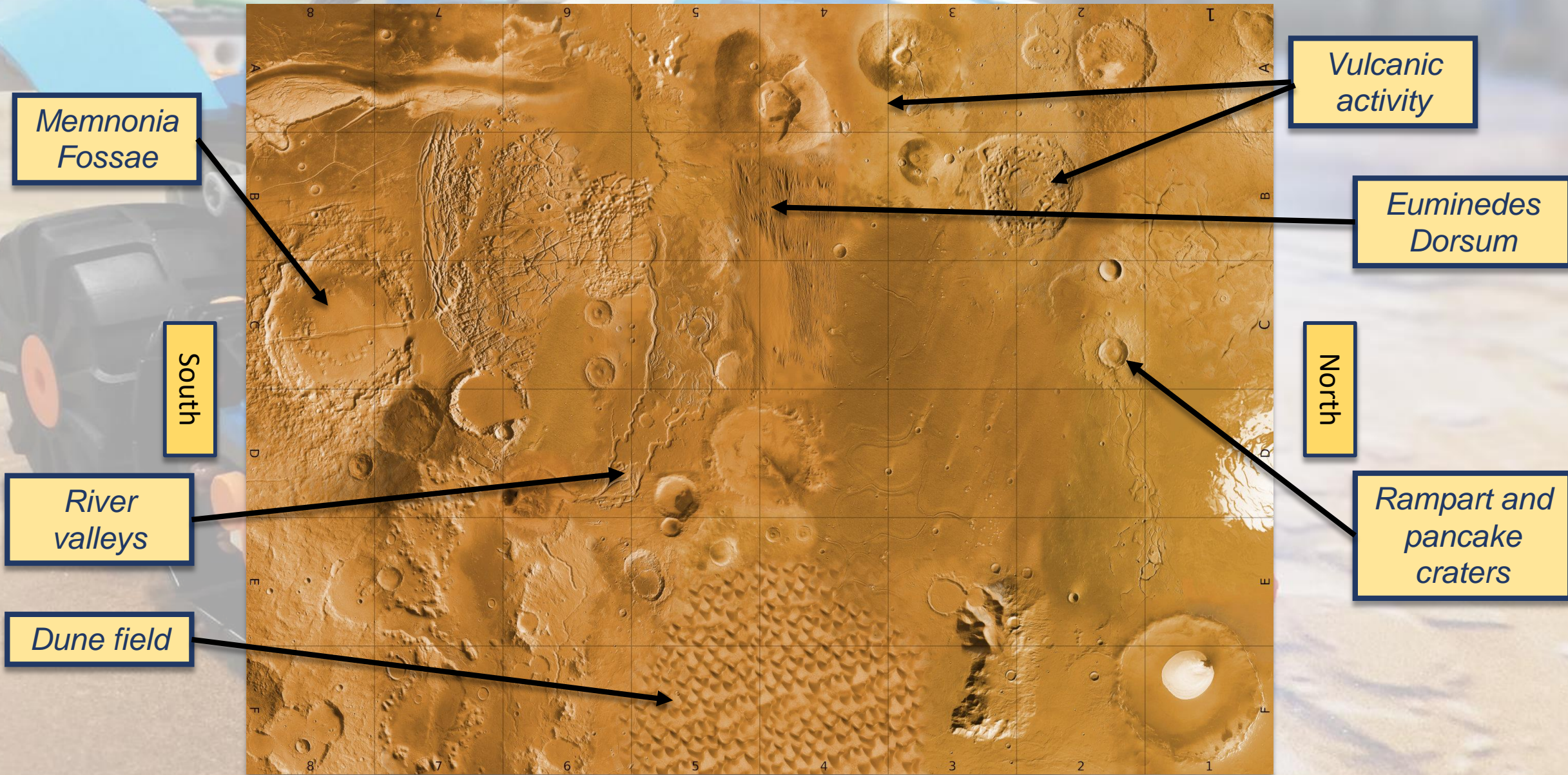
Gameplay



The rovers



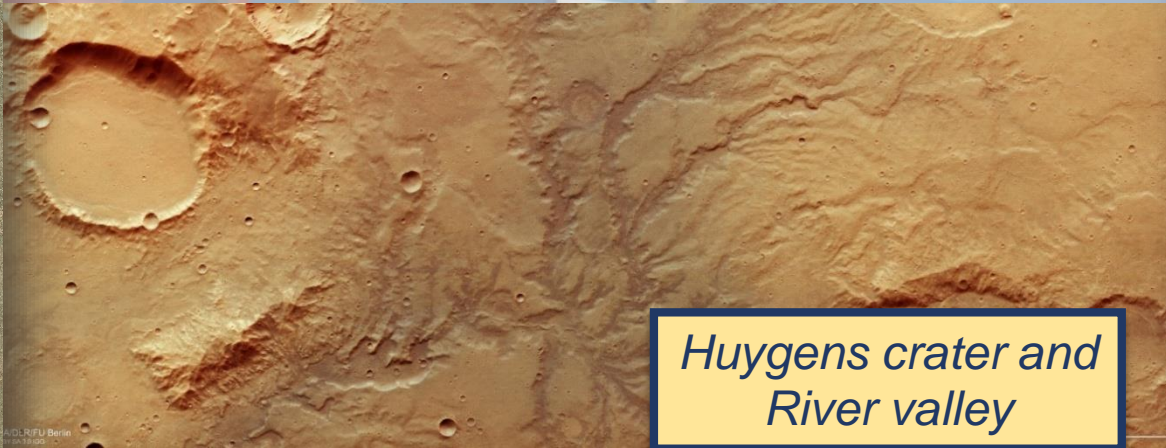
The gamefield



How does it work? – An example



Arizona crater



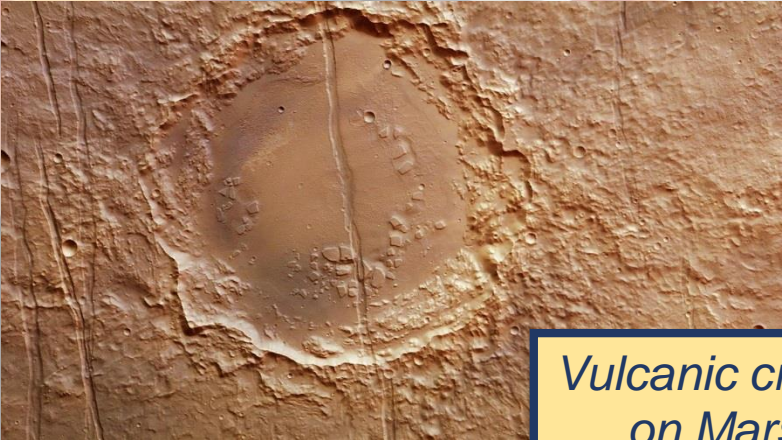
Huygens crater and River valley



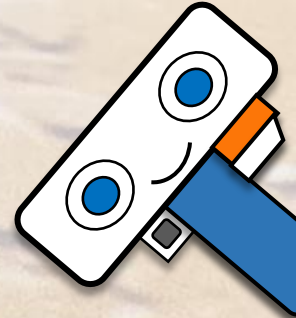
Nile



Crater Lake



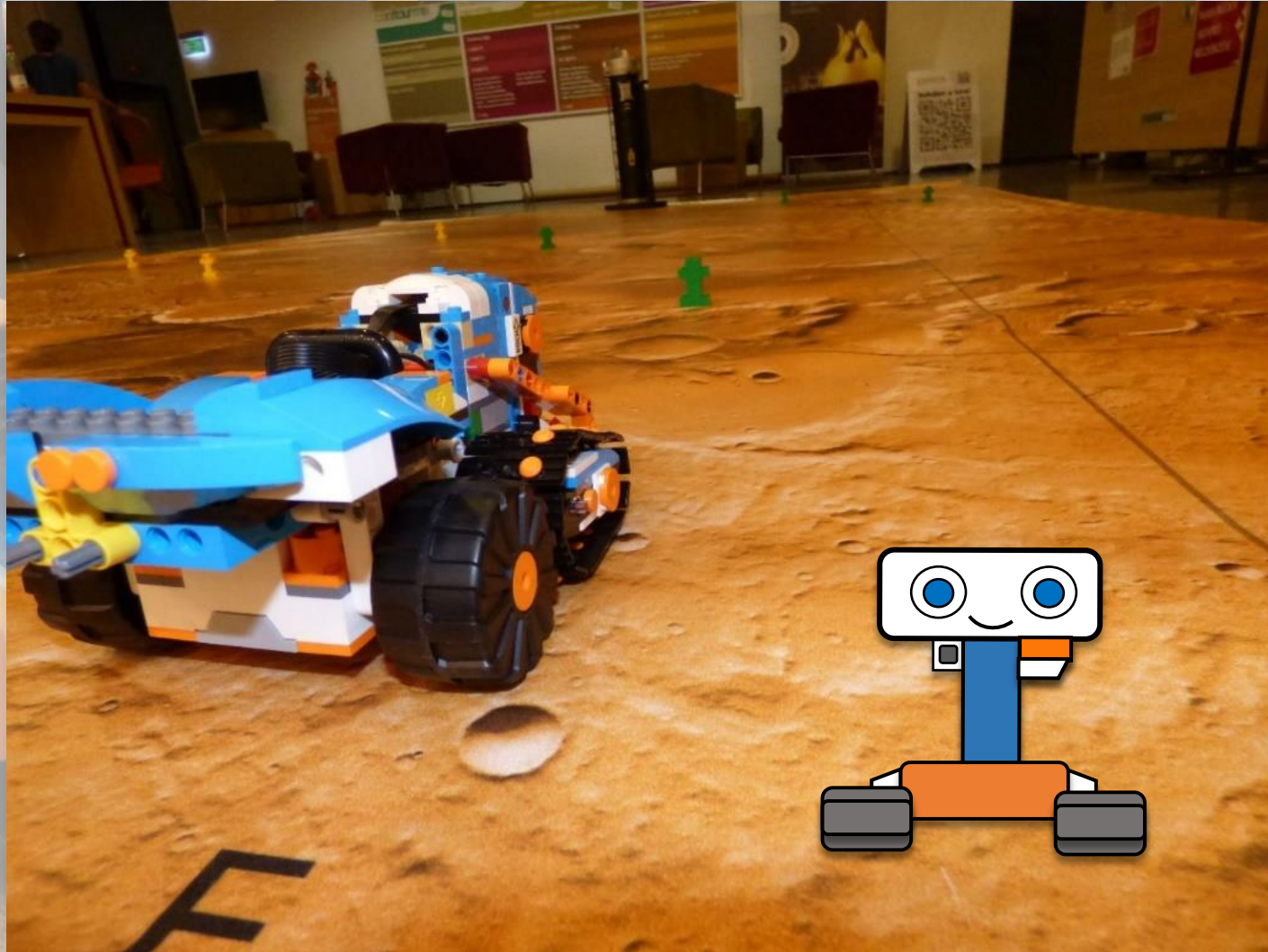
Vulcanic crater on Mars



Application of the game



Conclusion and future research



Thank you for your attention!



References

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Pictures used

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- **Nile Valley**
- <https://water.usgs.gov/edu/photos-satellite.html> (retrieved: march 2019)
- **Lake Cater**
- <https://zoom.earth/#45.617147,-120.855474,10z,sat> (retrieved: march 2019)
- **Mars Valley**
- https://www.esa.int/spaceinimages/Images/2019/02/Dried_out_river_valley_network_on_Mars (retrieved: march 2019)
- **Last Picture**
- <https://www.bama.hu/kozelet/helyi-kozelet/mars-expedicios-interaktiv-oktatojatekot-keszített-ket-pecsi-tudos-1587625/> (retrieved: march 2019)