NASA Astrobiology Program

LIFE IN THE UNIVERSE

Why is Astrobiology so useful in education?

- Astrobiology tugs on those age-old questions that are buried deep in our DNA, and builds on our natural curiosity.
- The collaborative essence of astrobiology lends itself perfectly to working and learning in teams.
- The inherent challenges of exploration are ideal scenarios for problem-based learning.
- Astrobiology scoffs at the notion that 'everything is already known' and offers students a tangible sense that they can discover something and make an authentic contribution.

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Educational Materials in Astrobiology

http://astrobiology.nasa.gov/classroom-materials/

Some created by NASA, some created by trusted partners:

- Educator Guides with hands-on activities, curricula, lesson plans and units
- Card games, “board” games
- Videos: from short talks to full length PBS broadcasts
  - FameLab! http://famelab.arc.nasa.gov
- Radio show segments, podcasts
- Web-interactives
- Posters, “trading” cards, graphic novels

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Educator Guides with hands-on activities, curricula, lesson plans and units:

- Life on Earth…and Elsewhere? (~grades 5-8)
- Rising Stargirls Activity Book (STEAM)
- ExoPlanet Activity Guide (ASP)
- Exploring Ice in the Solar System (grades K-5)
- Voyages Through Time (9th grade/year long)
- Astrobiology: An Integrated Approach (9th grade/year long)

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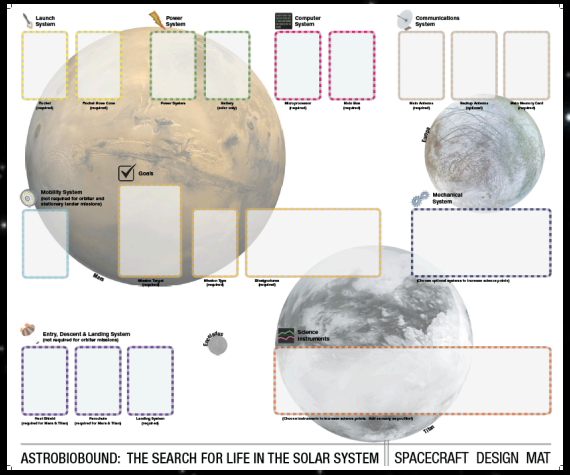
Card Games and "Board Games"

- Astrobio-Bound! (MS and HS)
- Extrem-o-philes in the Classroom (MS and HS)



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VIDEOS!

- Finding Life Beyond Earth (NOVA) – also clips and lesson plans)
- Alien Planets Revealed (NOVA)
- The Search for the Origins of Life (MSU-PBS) also clips and lesson plans)
- Planetary Lake Lander series (NASA) - short clips

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Web-based Interactives

- Alien Safari (JPL)
- Extreme Planet Makeover (JPL)
- Virtual Field Trips (ASU)
- A Historic Timeline of the Search for Other Worlds (Planet Quest/JPL)
- A Needle in Countless Haystacks (TED-Ed)
- Coursera courses X 2!

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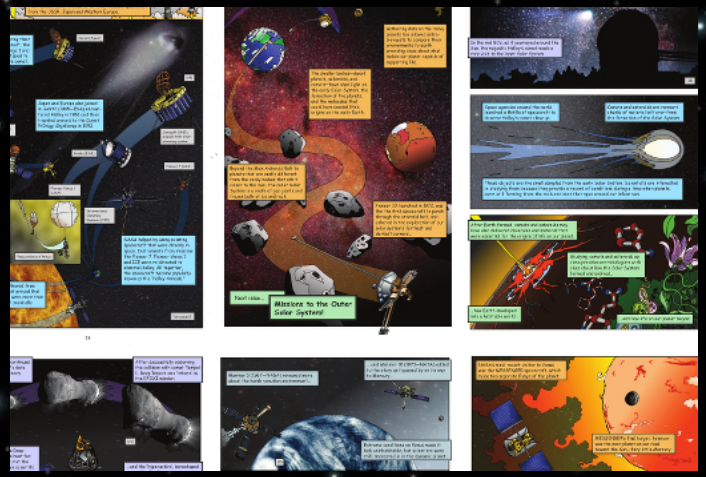
Posters, "Trading Cards," Graphic Novels

- Astrobiology Education Poster (NASA) – with lesson plans, too
- Astrobiology Graphic Histories (NASA) issues 1-5
- Extremes of Life Trading Cards (NASA)
- Planetary Maps Designed for Children (ICA)
- Solar System Poster (NOVA)



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