



## Software Glitch

A

The software on the Large Area Telescope failed, and must be reprogrammed.

*Your opponent loses a Satellite or Object card. You choose and discard one of those cards from his or her hand, and place it in the Discard Pile.*



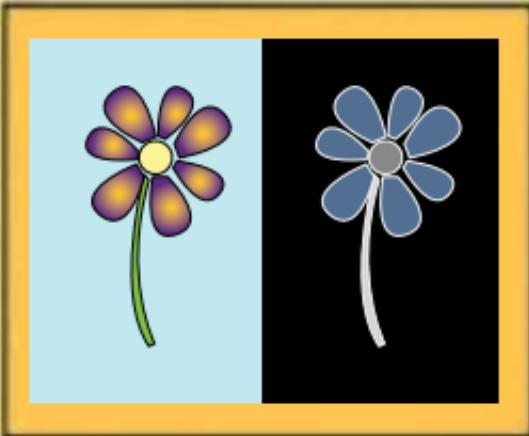


## Shake n' Bake

An instrument did not pass the heat and vibration testing to prepare for launch.

*Your opponent returns any Satellite or Object card from the mat to his or her hand.*





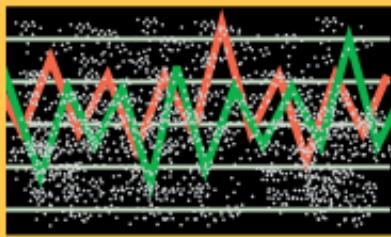
## False Positive



Fermi detected a potential gamma ray, but it turned out to be a cosmic ray.

*Your opponent loses 2 turns.*





*Take any 2 cards from  
your opponent's hand.*

## Interference



Solar activity  
prevented Fermi from  
obtaining data.



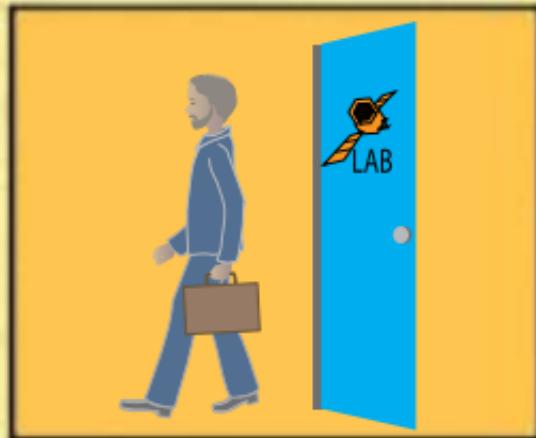


## Disorientation

Your opponent's satellite received signals from many different spots, and doesn't know where to point.

*You discard one of your opponent's Action cards. Place it in the Discard Pile.*





## Lead Scientist

A

A lead scientist was assigned to another project.

*Your opponent loses an Experience card.  
You choose the Experience card, and  
place it in the Discard Pile.*



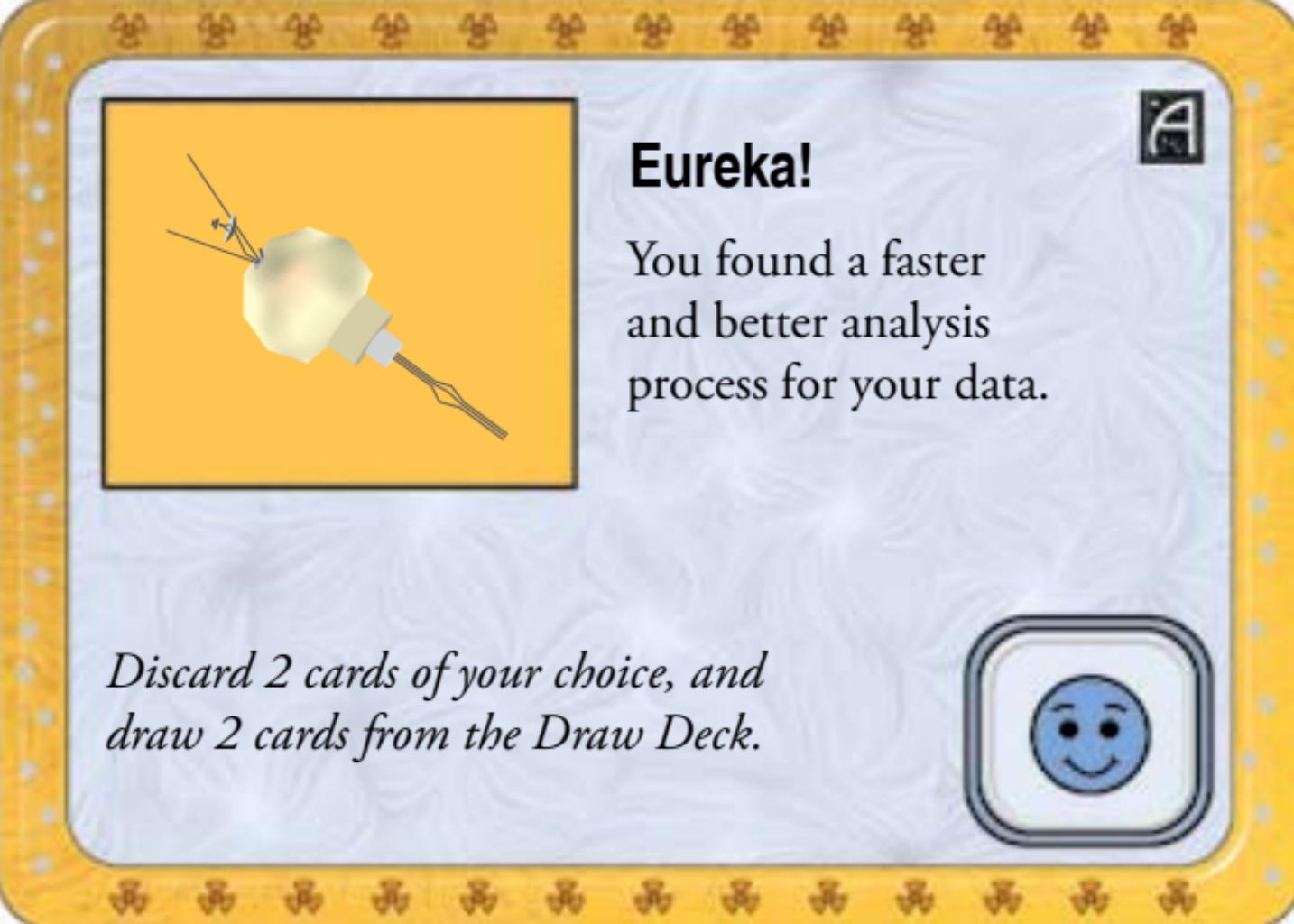


## Funding Boost

Your proposal for further testing has been accepted, and NASA agrees to raise your budget.

*Play another turn.*

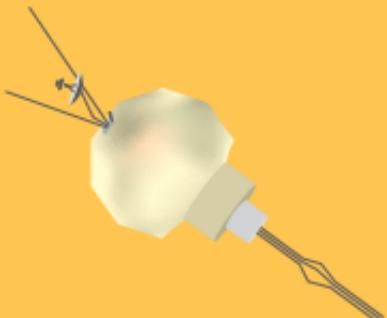


A decorative border at the top and bottom of the slide features a repeating pattern of a yellow bomb icon with a black outline and a white star in the center.

A

## Eureka!

You found a faster  
and better analysis  
process for your data.

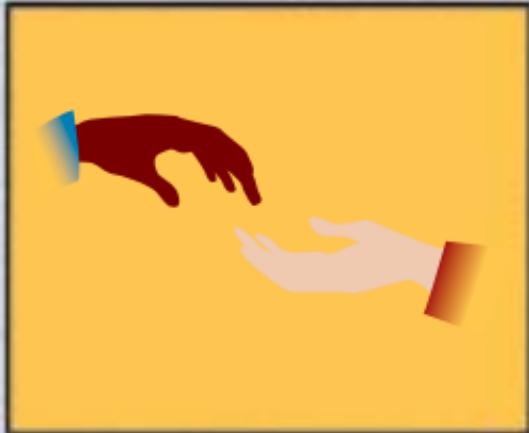


*Discard 2 cards of your choice, and  
draw 2 cards from the Draw Deck.*



A decorative border at the top and bottom of the slide features a yellow background with small, faint icons of test tubes and microscopes repeated along the edge.

A



## Cooperation

The testing deadline is approaching. You cooperate with your opponent to get Fermi ready on time.

*Trade one card with your opponent.  
You both can choose which cards to trade.*



A stylized yellow border with a repeating pattern of small, yellow, flower-like icons.

## Unexpected Gamma-Ray Burst

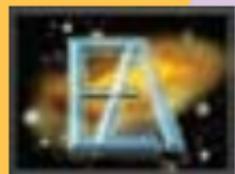
An unexpected burst occurred, and your satellite caught it!

*You can play a Satellite or Object card - you do not need the required Experience cards.*





GLAST



## ED Team Up

The Educators collaborated and did a workshop on Fermi at the National Science Teachers Association meeting.

*Choose any card from the Draw Deck and then shuffle the deck.*



AI

## Unexpected Event

The Science Team  
made huge progress  
in the construction  
of the Large Area  
Telescope towers.



*Cancel the effect of an Action played by  
your opponent. This card can be played  
at any time during your turn or your  
opponents' turn.*





**Science Team**

## Factoid

The Fermi satellite's orbit is about 560 km in altitude.

E

*You can add up 1 point toward your next object.*

1





**Science Team**

## Factoid

Intense flashes of invisible light come from the edge of the cosmos.

E

*You can add up 1 point toward your next object.*

1





**Science Team**

## Factoid

Fermi's Gamma-ray Burst Monitor has 2 types of detectors to detect powerful bursts in a wide energy range.

E

*You can add up 2 points toward your next object.*

2





**Science Team**

## Factoid

Gamma-ray astronomy studies the most energetic objects and phenomena in the Universe.

E

*You can add up 1 point toward your next object.*

1





**Science Team**

## Factoid

Fermi orbits the Earth once about every 90 minutes.

E

*You can add up 2 points toward your next object.*

2





**Science Team**

## Factoid

The Fermi Gamma-ray Burst Monitor has 14 different detectors.

E

*You can add up 2 points toward your next object.*

2





**Science Team**

## Factoid

The Fermi Large Area Telescope sees almost one quarter of the sky at all times.

E

*You can add up 5 points toward your next object.*

5





**Science Team**

## Factoid

The Fermi Large Area Telescope sees almost one quarter of the sky at all times.

E

*You can add up 2 points toward your next object.*

2





**Science Team**

## Factoid

Fermi supports 10  
Educators who teach  
about Fermi science  
around the country.

E

*You can add up 1  
point toward your  
next object.*

1





**Science Team**

## Factoid

The Large Area  
Telescope data provide  
high resolution maps of  
the gamma-ray sky.

E

*You can add up 3  
points toward your  
next object.*

3





**Educators**

## Factoid

The Fermi Large Area Telescope sees almost one quarter of the sky at all times.

*You can add up 5 points toward your next object.*

**5**





## Factoid

Fermi's Gamma-ray Burst Monitor has 2 types of detectors to detect powerful bursts in a wide energy range.

*You can add up 5 points toward your next object.*

5





**Educators**

## Factoid

There are 2 instruments on board Fermi: the Large Area Telescope, and the Gamma-ray Burst Monitor.

*You can add up 1 point toward your next object.*

1





## Factoid

The Fermi satellite's orbit is approximately 560 km in altitude.

*You can add up 3 points toward your next object.*

3





**Educators**

## Factoid

The Fermi team is composed of scientists from around the world.

*You can add up 2 points toward your next object.*

2





**Educators**

## Factoid

The Fermi mission is designed to last at least 5 years.

*You can add up 2 points toward your next object.*

2





**Educators**

## Factoid

Gamma-ray astronomy studies the most energetic objects and phenomena in the Universe.

*You can add up 3 points toward your next object.*

**3**





## Factoid

The Fermi Gamma-ray Burst Monitor has 14 different detectors.

*You can add up 5 points toward your next object.*

5





## Factoid

The Large Area Telescope and Gamma-ray Burst Monitor are the two Fermi instruments.

*You can add up 3 points toward your next object.*

3





**Educators**

## Factoid

The Fermi mission studies powerful objects and explosive events.

*You can add up 1 point toward your next object.*

**1**





## Factoid

Fermi orbits the Earth once about every 90 minutes.

*You can add up 2 points toward your next object.*

2





Wild

## Factoid

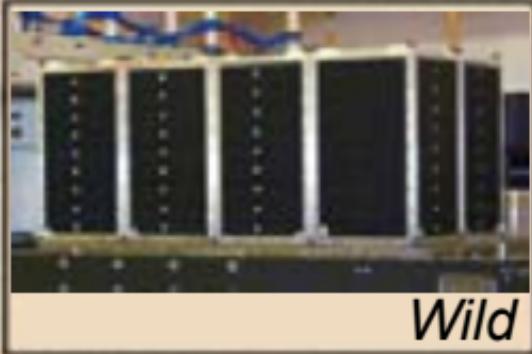
Fermi launched on a Delta rocket from Cape Canaveral, Florida on June 11, 2008.

E

*You can add up 2 points toward your next object.*

2





Wild

## Factoid

The Fermi team is composed of scientists from around the world.

E

*You can add up 5 points toward your next object.*

5





Wild

## Factoid

The Large Area Telescope is an imaging wide field-of-view telescope.

*You can add up 2 points toward your next object.*

2





Wild

## Factoid

The Large Area  
Telescope has 16  
towers of detectors.

*You can add up 3  
points toward your  
next object.*

3





Wild

## Factoid

The Fermi mission studies powerful objects and explosive events.

*You can add up 5 points toward your next object.*

5





Wild

## Factoid

There are 2 instruments on board Fermi: the Large Area Telescope, and the Gamma-ray Burst Monitor.

*You can add up 1 point toward your next object.*

1

