

The Planets: An Interactive Multimedia Teaching Resource

An Honors Creative Project (Honors 499)

by

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A handwritten signature in cursive script that reads "Karen L. Ford". The signature is written in black ink and is positioned above a thin horizontal line.

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"The Planets" Program Specifications

System Requirements:

- *68030 or greater processor, including Power Macintosh
- *Zip drive
- *Speakers or Headphones
- *Apple System Software version 7.0 or later
- *Quicktime software version 2.1 or later
- *24 MB RAM (with at least 8 MB available to "the Planets.")

To Start "the Planets":

- *Insert the Zip disk
- *When the Zip folder titled READ ME FIRST appears, double click first on the file called DOUBLE CLICK ME.TXT.
- *Follow the setup directions in the text file, and enjoy your journey to the Planets.

To retrieve journal entries:

*There are two ways to retrieve your students' journal entries from this program.

- #1: Run the program and check the journal entries saved at the end of each story while inside the program.
- #2: Find the corresponding text file (for example, the one marked Mercury.txt) double click on it, and read the entries outside the program. These can be opened in Macintosh simpletext or any word processor program.

**Made with Macromedia Authorware, Adobe Photoshop 5
and Adobe After Effects 3.1**

The Planets: An Interactive Multimedia Teaching Resource

--To Instructors: A word from the author--

It is undeniable, at least to me, that some sort of revolution is happening in the schools of today in regards to technology. Ask any of your students, do they own a computer at home? Play a high-tech video game? Know how to "surf the web?" The question might more prevalently be: do you? Chances are you will answer yes, but for all of you who love your home computer but wonder what the relevancy might be to your classrooms and lessons, this resource is for you.

I'll be honest. I cannot boast years and years of teaching experience, time tested methods, or the ability to chant instructional theory in my sleep. I am also admittedly a greenhorn to the experience of being on "the other side of the desk." To my credit, however, I am at least a slightly older member of your students' generation, one of the millions of kids who grew up with RAM on their minds and the reflection of Windows permanently burned into their glassy, sleep deprived eyes.

For lack of a better word, I "love" my computer. In my 22 years I have already owned four separate generations of them, from the PC jr. to the IMAC, and in every class, in every instructional situation I have been presented with since I can remember, I have always looked for a way to integrate this technology into the learning experience. This project, as well as my studies in Secondary Education and Telecommunications at Ball State University have given me that chance.

Included with this written summary and other supplemental materials is a computer zip disk containing a program that I hope will be useful to you as an instructor. My specialty is in English and literature, so this resource is geared toward the upper middle school or high school English teacher, though, as you

may discover, this project can also be useful to instructors in many other disciplines. What it is essentially is a diverse resource, useful in several different ways. Here is what you will find on the disk, and a summary of how this project may be used:

- The program itself is an interactive experience that integrates the study of our solar system with literature.

- When used by itself, this program is a thematic collection of short stories, poetry, and mythology texts supplemented with graphics, animation, interactive "footnotes," and journal prompts.

- When used in part or in conjunction with the lesson ideas and comments available in this portfolio, the disk's contents become a resource useful in creating thematic units, single lesson plans, or interdisciplinary work across several different subject areas.

-Why combine the study of literature with computers?-

Officially it seems that the jury is still out on the total effectiveness of using the computer in the classroom for substantial instruction. In light of this, I do not suggest that students simply be plunked down in front of this program and left to their own devices. With the proper instruction, I have however seen this type of technology used with great effectiveness, and to wonderful results.

While the computer is used in many schools to supplement instruction in the science classroom or in conjunction with business or secretarial courses, it seems to be virtually non-existent in English and literature. Maybe it is the lack of worthwhile software, (The selection *is* quite disappointing) or perhaps the material does not seem to lend itself to this type of implementation. Whatever the reason, I feel that it is time to integrate technology with English and broaden the

scope of English instruction. With this project, I feel that this goal is brought a little closer to being a reality.

The Planets: Lesson Plan Ideas

Mercury

Short story: "Transcript: Mercury Program" by Frank Herbert

Summary: This story is written as a transcript of a television program set on Mercury some time in the future, with other dialogue taking place outside of the broadcast from a ship on its way to the sun. This story is interesting in that it brings up several issues about the ethics of the broadcasting industry. Within the structure of the story, the reader sees the program and the day's events from two very distinct and different angles, giving a unique view of both the duality of the situation and of the planet itself.

Possible lesson plan/discussion topics:

- * Point of view
- * Ethics and morals in broadcasting
- * Future discoveries/exploration

Interdisciplinary implementation:

This story, and relating lesson plans, could be used to supplement instruction not only in English courses, but in science and telecommunications or broadcasting courses as well. The story's indirect discussion of the "right and wrong" of certain television forums, as well as its suggestion that even science can be commercialized would make this selection an interesting one to bring across the curriculum into either other discipline.

Venus

Short story: "Before Eden" by Arthur C. Clarke

Summary: This story, interestingly enough, was written before scientists knew anything conclusive about Venus from probes, tests, or other exploration. As the author writes, this Venus is one "unspoiled by our assumptions and unruled by our scientific observations." This is a story of exploration and discovery that leads two scientists across Venus to find life and water. They do find life: it is plant-based, moving, and fascinating to read about. The characters collect samples, leave their refuse, and go on to collect their glory. Unfortunately, the refuse kills the species, ending creation on Venus, spoiling Eden.

Possible lesson plan/discussion topics:

- * Earth connections: In this age of conservation, recycling, and general ecological concerns, this story could be the basis of a very timely lesson regarding the future of our *own* planet. The message here: the pervasiveness of the human force, however unwilling or unwitting its intent.
- * Great explorers, past and present
- * Literary terms:
 - suspense
 - imagery

Interdisciplinary implementation:

The obvious connection here is to science and ecology/biology studies. A possible connection might be drawn between this story's concerns and our own planet's dilemma, including the discussion of things such as endangered species and the like. Another possible lesson plan connection might be made in the study

of interesting or rare plants and the significance that plant color has on plant habitat. (based on a minor, but interesting point made in the story.)

Historical connections might also be made here, where a unit detailing the stories of other great explorers and conquerors may be interesting. Perhaps other explorations held dire consequences for the lands they discovered?

Earth

Short story: "The Greatest Asset" by Isaac Asimov

Summary: A story about a proposition made by a future man to re-populate and diversify a very ordered, very controlled, and very bland future Earth.

Possible lesson plan/discussion topics:

- * Man's creative spirit and the will to create against the rigidity of practicality and the "good of all." The main character of the story takes a very unpopular and revolutionary position in his proposition to reconstruct the decimated Earth, and is ultimately rewarded for his creativity and spirit. A possible lesson plan here might first explore the Secretary's statement, "Man's greatest asset is the unsettled mind," and ultimately lead to discussion of the works of other great inventors, exploring the successes of those who were told "this will never work."
- * A great story to spark discussion or journals about the nature of the human spirit and the creative impulse.
- * Also a good story to ask students to construct an ending to.

Interdisciplinary implementation:

- * This story, like the one featured for Venus, also deals with ecology issues and would lend itself to research about the topic in a science classroom, with the possible goal of attempting to project the rate of decline of the Earth, or simply prove or disprove the conclusion reached in the story. The question to be addressed here is: Is it possible that the Earth will end up this way?

Mars

Short story: "The Love Affair" by Ray Bradbury

Summary:

This story, written from a Martian alien's point of view, tells the story of the invasion of Mars by humans, and the death and disease they have brought with them. Told in the first person by Sio, a Martian, this short work is essentially a love story, detailing Sio's feelings for a human girl he encounters close to his cave in the Martian hills.

Possible lesson plan/discussion topics:

- * Alien (Alternative) point of view in a story: Since this selection is not told from the "normal" human point of view, it becomes an interesting study in the power of perception.
- * The universal? concept of love: Sio admires and reveres some of the same things about the human woman that a human man might. This story might make for a great discussion about the generalized concepts of beauty and desire, as well as the possibility of a universal concept of love.
- * Media connections: Why is Mars the only planet in general human perception, as well as within this collection of stories, that has intelligent life? An interesting project might explore film and television representations of "little green men" over the course of media history, from "My favorite Martian" to "The X-Files."

Interdisciplinary implementation:

- * It seems that a lot of the selected stories contain blatant environmental overtones which imply that as we discover new worlds we will certainly destroy them if we are not careful. A scientific tie in might include exploration of how we as humans

have (or have not, as recent popular theory seems to say) destroyed our own planet, as well as research into such things as space junk or space pollution. The question might be: Are these stories a warning?

Jupiter

Short story: "Buy Jupiter" by Isaac Asimov

Summary:

This very short, humorous story invites the reader to eaves-drop on a possible future trade agreement between Earth and an alien race. The aliens here are interested in "buying" Jupiter from us, for an undisclosed reason. The course of the story details negotiations with the alien, as well as the Earth men's quest to find out why someone would *want* to buy Jupiter. The cause is eventually found out, and makes for a clever and surprising ending.

Possible lesson plans/discussion topics:

- * Create your own planetary ad (for Mars? Neptune?)
- * Advertising writing assignment
- * Literary terms:
 - narrator
 - point of view

Interdisciplinary implementation:

* Since this is such a short story, possibilities for interdisciplinary work seem few. However, a science class could certainly study Jupiter itself, as well attempt to determine if the facts presented in the story are accurate. Also, an economics or advertising/business class might wish to pursue the marketing aspect of the story, creating a whole Jupiter or Saturn ad campaign.

Saturn

Short story: "Pressure" by Harrison Harrison

Summary: This story details the adventures of two scientists and a pilot who venture to the center of Saturn in an attempt to make future travel to the planet possible. The suspense in this selection is intense and eerie, and would be especially formidable to those of us who are claustrophobic, as the whole story takes place within a small, sealed metal sphere under thousands of tons of pressure from Saturn's atmosphere.

Possible lesson plan/discussion topics:

- * Characterization: The story involves three very different men, each characterized vividly, using several different writing techniques.
- * Suspense: Along with the main source of suspense in the story, the main characters also have to deal with another, less literal "pressure," a topic that would make for great discussion. The story also offers several good false leads that hint at a possible conclusions.
- * Complete the ending exercise: The instructor might wish to have students write an outcome for the story.

Interdisciplinary implementation:

- * A science tie-in for this story might include the study of pressure and vacuum properties, as well as general research into the composition of Saturn. Do scientists think that we can actually "land" on Saturn, a planet usually considered to be made entirely of gasses?

Uranus

Short story: "Dies Irae" by Charles Sheffield

Summary:

A futuristic story set on a base outside of Uranus (on a moon, we may assume). At the time of the story, humans are mining Uranus for the elements used to create a power supply, as well as building fusion reactors on the planet's surface using genetically-engineered workers, cross-bred from many species, including the human one. The main character, a man sent to monitor the workers, discovers that some have become self-aware, and are beginning to question their existence, as well as their purpose in life. He agonizes over telling anyone, but finally confides in a former priest. The story ends with a disturbing proposition: If we created the workers in our image to ready the universe for our coming, then in whose image are we created?

Possible lesson plans/Interdisciplinary Implementation:

- * With this story, I felt that all of the good lesson plan ideas I had involved interdisciplinary work, so I collapsed the two categories into one.
- * Environmental Issues: The workers (called Ergas) create fusion plants on Uranus for human benefit, an activity that is not only polluting Uranus, but killing *them* as well. A correlation may be drawn between the story's events and happenings here on our own planet.
- * Philosophy/Religion connection: In dealing with the story's final statement, discussion about various schools of philosophy or religion may be helpful. In short, this story contained the best, thought provoking theme of all the selections. A great discussion or interdisciplinary project opportunity in whatever form you choose.

Neptune

Short story: "One Sunday in Neptune" by Alexei Panshin

Summary:

A short, strangely ended story that leaves little to the reader's imagination, this selection, written by a Russian author, tells the story of two men's quest to find life on Neptune. Though the majority of the story is taken in describing the characters of the two main players, the overlying theme seems to be one of discovery and fame.

Possible lesson plans/discussion topics:

- * Characterization: This story offers good examples of characterization in its presentation of two very different main characters.
- * Russian literature connection: Written by a Russian author, this story offers a view from the other side of the space race.

Interdisciplinary Implementation:

- * History and Social Studies connections may be made with this story in exploration of America's race for space with the Russians, or American/Russian competition in general.

Pluto

Short Story: "Wait it Out" by Larry Niven

Summary:

An interesting exploration story with a twist, this selection is narrated in the first person by an astronaut commissioned to be the first man to set foot on Pluto, the most distant planet. Told in the present with a lengthy flashback, the reader is taken through the events of the narrator's day on Pluto, from his landing, to his untimely half-death.

Possible lesson plans/discussion topics:

- * Point of view and writing style: Written very differently than the other selections, this story is very first person, very introspective and very interesting.
- * Complete the story writing exercise
- * Art project: Draw the Plutonian landscape and its inhabitants
- * Flashback

Interdisciplinary implementation:

- * Tie-ins with the sciences and psychology are possible here, including the possible study of human emotion and fear, and theories of life after death. Another science project idea might regard research of cryogenics in America.

Interdisciplinary Thematic Unit Ideas:

* While working with this resource, several different interdisciplinary units may be possible. Here are a few examples:

-Science Fiction Writing and Science: This unit would explore the connections between stories and poetry of the type featured in this resource and true science by recognizing the authors' attempts to integrate scientific terms or ideas (however wrong or fictional) into literature.

-Adventure and Exploration: This unit would look at the stories in the collection in terms of how they each allude to the motivation for exploration. Six themes seem to arise in study of the stories: exploration for money, fame, adventure, science, curiosity, and necessity. An interdisciplinary unit in this vein might include history tie-ins and research regarding past explorers and their motives.

-Mythology/Astronomy: A unit combining astronomy and literature might look at the planet's names, the myths behind them, and the stars in the sky that correspond to the ancient legends.