

## Individual Learning Packet

### Teaching Unit

# The Effect of Gamma Rays on Man-in-the-Moon Marigolds

by Paul Zindel

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## Note to the Teacher

This autobiographical play won the 1971 Pulitzer Prize for Drama. It explores how a child from a dysfunctional family manages to overcome her poor environment to emerge as a successful, hopeful young girl. Although, Zindel wrote Tillie as a female character, the characters and incidents from the play are autobiographical.

All references come from the Bantam Books edition of *The Effect of Gamma Rays on Man-in-the-Moon Marigolds*, copyright 1997.

## Biography of Paul Zindel

Paul Zindel was born in 1936 on Staten Island, New York. His father deserted the family when Paul was two years old, leaving him and his sister fatherless in a world where, unlike today, children from nontraditional families were teased and ridiculed.

Zindel's mother had an unusual childhood, making her an emotional cripple. She lived in a dream world and was never able to keep a job. Due to her mother's early death, her father paid families to take care of her. Zindel's grandfather earned his living selling vegetables from a wagon and spent the little he earned on luxuries for his daughter. Paul's sister suffered one convulsion as a child. She also owned a pet rabbit. When she reached puberty, her verbally abusive mother tried to teach her that men could not be trusted.

As a child, Zindel excelled in science. School and his teachers were his salvation from the turmoil of his home life. Paul graduated from Wagner College and taught high school chemistry for 10 years before becoming a published writer and winning the Pulitzer Prize in drama in 1971 for his play *The Effect of Gamma Rays on Man-in-the-Moon Marigolds*.

# The Effect of Gamma Rays on Man-in-the-Moon Marigolds

## Terms and Definitions

*Autobiography* – the relating of a person’s life by that person; **Example:** *The Autobiography of Benjamin Franklin*

*Epiphany* – a revelatory, personal experience through which the individual gains an insight, knowledge, or understanding of the self, other people, or the world; the situation itself may be important or trivial, but the understanding that emerges is life changing. **Examples:** When the Three Wise Men realize that the child they see is Divine, they experience an epiphany. Stephen Dedalus in *A Portrait of the Artist as a Young Man* has an epiphany when he observes a bird, which becomes the major turning point in his life.

*Generalization about Life* – a statement that can apply to humanity at large; a seemingly universal truth; **Examples:** “All men are created equal”; “Beauty is truth, truth is beauty.”

*Pun* – an expression that achieves emphasis or humor by utilizing:

- two distinctly different meanings for the same word. **Example:** “play” meaning “fun” and “play” meaning a performance on stage.  
or
- two similar sounding words. **Example:** close/clothes.  
**Example:** In *Romeo and Juliet*, one character, Mercutio, says after being fatally stabbed, “Ask for me tomorrow and you will find me a grave man.”

*Sarcasm* – the use of harsh words to deride and criticize; sometimes, sarcasm is apparent only by the way something is said rather than the actual words that are used; other times, the sarcasm is obvious. **Example:** In *The Catcher in the Rye*, Holden says about a taxi driver he dislikes that “he certainly was good company. Terrific personality.”

*Setting* – when and where the short story, play, poem, or novel takes place;  
**Examples:** *Macbeth* takes place in the eleventh century in Scotland. *The Old Man and the Sea* has its main setting on the ocean outside Havana, Cuba, in an unspecified time in the middle-to-late 20th century.

*Stage Directions* – the information given for the reader to visualize the setting, position of props, etc., in a play. Stage directions may give additional impressions of the characters through short descriptions and through what they do. **Examples:** “Exit”; “She reads from the newspaper.”

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## Objectives

By the end of this Unit, the student will be able to:

1. understand the importance of stage directions to help the reader establish characterization, gain an impression or picture of the setting, and define sensory information including appropriate sound effects, lighting, mannerisms, and music.
2. cite incidents from the story which support the following themes:
  - young people need to view life with hope;
  - there is an order or pattern to the universe;
  - nature created people with innate ability to solve problems.
3. define vocabulary words from the story.
4. agree or disagree with the following generalizations by Beatrice:
  - some people are born to talk and others to listen;
  - money makes money;
  - nobody is too busy for anything they want to do;
  - if you are different, people try to get rid of you.
5. find examples of sarcasm and puns in the play.
6. discuss the irradiated marigolds as symbols of the impact a poor home environment has on Tillie, Ruth, and Beatrice.
7. point how the growth potential of the marigolds illustrates the following theme: a child can mature into a complete adult even if he or she comes from a dysfunctional family.
8. define “autobiographical” and discuss the extent to which this play is autobiographical.
9. write a character sketch of Beatrice, including her relationship with her daughters, her childhood, and whether or not she is a good mother; point out how her character changes by the end of the play.
10. comment on what the following items might represent in the play: radiation, paper on the windows, the atom, the flashlight, cigarette smoke, the cloud machine.
11. discuss why or why not the rabbit may be seen as a symbol of the shame the family feels.

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## Questions for Essay and Discussion

1. State whether or not you believe Beatrice is a good mother. Cite incidents from the play to support your answer.
2. Zindel often begins his plays with a true incident from his own life. What incident does he use to begin this play? List three other elements from this play that help to define it as an autobiographical play.
3. What is the significance of the paper on the windows?
4. Why does Beatrice kill the rabbit at the end of the play?
5. In what ways are the growth patterns of the irradiated marigolds similar to the kind of women Ruth and Tillie will one day become?
6. Define the following vocabulary words from the story: effeminate, hermaphrodite, saccharine, loon, thrombosis
7. Cite incidents from the story to prove or disprove the following statement: Tillie is hopeful for her future despite her terrible childhood.
8. One of Zindel's favorite themes is the idea that nature created humans in such a way that we have the ability to solve problems. List one problem each of the main characters manages to solve by the end of the play.
9. Comment on the significance of the atom to the story. What main theme is suggested by Tillie's voice-over when she marvels at the idea that the atoms in her hand may have once been part of a fern?
10. Beatrice states several generalizations about life in this play. Using experiences from your own life, do you agree or disagree with the following generalization: "If you're just a little bit different in this world, they try to kill you off."

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## The Setting

1. The setting for this play provides the reader with important background information. It also begins to establish the personalities of the characters. What does the quotation below from the setting reveal to the reader about the quality of Tillie’s home life?

“A room of wood which was once a vegetable store—”

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2. Who are the other occupants of this home? What does the description of the room reveal about Beatrice?

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3. What does the description of the window suggest to the reader about the quality of the family’s relationship to the outside world?

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**ACT I**

VOCABULARY

**effeminate** - having qualities generally associated with women  
**hermaphrodite** - a person with the characteristics of both sexes  
**saccharine** - an artificial sweetener

**hermaphrodite** - a person with the characteristics of both sexes

**loon** - a stupid, clumsy person

**misbegotten** - born out of wedlock

**radioactive** - capable of giving off radiant energy in the form of particles or rays

**thrombosis** - a clot that blocks blood circulation-

**varicose** - abnormally swollen or dilated thrombosis - a blood clot that blocks circulation  
**exasperate** - to anger, to irritate

The following questions begin with Tillie’s recorded voice over at the beginning of Act I and end when the voice-over continues.

1. Why do you think the stage directions at the beginning of ACT I calls for music suitable for “lost children, the near misbegotten”?

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2. When discussing his writing, Paul Zindel states that there are four important ideas he tries to convey to his readers: good wins over evil; nature has created people so that we have the ability to solve problems; there is sense to the universe; and young people need to view life hopefully, as if it is a wonderful adventure. Discuss which idea or ideas you think Zindel is suggesting in Tillie’s recorded voice message at the beginning of this act.

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12. Find an example of the way Beatrice verbally abuses Tillie.

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**This section ends when the stage goes black; Beatrice hangs up the phone after talking to Mr. Goodman about the dangers of radioactive marigolds.**

13. Find an example of sarcasm in this section.

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14. Why do you think the stage directions instruct Beatrice to use a saccharine voice when she is addressing Nanny?

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15. What kind of business does Beatrice want to run instead of caring for other people's elderly relatives?

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16. Why are Tillie's marigolds special? In what ways is Tillie's family life similar to the radioactive environment the marigolds must try to overcome?

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17. What one mistake does Beatrice claim is responsible for her miserable life?

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