

Your fractal story is to be a print-out of a word-processed document which is double-spaced and at least three pages long, but no more than five pages long.

It will be graded on content (up to 70 points) and spelling, grammar and punctuation (up to 30 points).

**Audience:** This is the people for whom you are writing the paper; you want to communicate your ideas to them (and **not** to Mrs. Jones). Your paper is to be suitable for children in a K - 6 class.

**Topic:** Choose one of the fractals that are described in your textbook, and **write a story** which conveys the essence of this fractal. It may be helpful to think of writing a fable or a fairy tale type of story.

Your story should cover the following fractal concepts:

- 1) self-similarity
- 2) a repeating process that continues "forever"
- 3) the reduction in scale that occurs as the process repeats

Your story may focus on one of these concepts but should include all three.

Your story should include a paragraph that names and accurately describes the fractal - this paragraph may be in the story itself or in a separate section.

**Reminder of Academic Integrity:** You may decide to base your story on a classic fable or fairy tale, but you must adapt the story to your chosen fractal and you must write the story in your own words without assistance from other people or other sources.

Your paper will be graded using the criteria given in the form on the back of this paper.

On the day that the papers are returned to the class, several students will be asked to read their papers in class. If students are willing, we may be able to arrange to read some of the stories to students at DiLoreto School - an elementary school in New Britain.

Name \_\_\_\_\_

Grade: \_\_\_\_\_  
(maximum grade is 100 points)

The grade is the total of the points listed below:

Giving an accurate mathematical description of the fractal:

\_\_\_\_\_ [up to 15 points]

**Your own** fairy tale or fable for the specific fractal:

Creatively written: \_\_\_\_\_ [up to 25 points]

Conveys the concepts of:

1) self-similarity \_\_\_\_\_ [ up to 20 points]

2) a repeating process that continues "forever" \_\_\_\_\_ [ up to 20 points]

3) the reduction in scale that occurs as the process repeats \_\_\_\_\_ [ up to 20 points]

Spelling: \_\_\_\_\_ [up to 10 points may be deducted]

Grammar: \_\_\_\_\_ [up to 10 points may be deducted]

Punctuation: \_\_\_\_\_ [up to 10 points may be deducted]

(In the categories of spelling, grammar and punctuation, the first error will count as 2 points off and subsequent errors will count as 1 point off, up to the maximum of 10 points for each category.)