

Flatland: The Book (Study Guide)

NAME: _____

Flatland is available in electronic format for free. <http://www.flatlandthefilm.com/novel.php>

Part One: This World

1–Of the Nature of Flatland

1. *True or False* Flatlanders call their world Flatland.
2. What shape is the narrator of Flatland?
3. Since Flatland is a plane, all shapes must appear to each other as what?
4. What happens to a Flatlander's appearance as they approach someone else? As they walk farther away?
5. Summarize the narrator's penny on a table example to describe flatland.
6. How many dimensions does Flatland have?
7. Is there a sun in Flatland?

2–Of the Climate and Houses of Flatland

8. What are the Flatlanders' cardinal directions?
9. From which direction does rain in Flatland always fall?
10. Which side of the house is the roof on?
11. Do the houses in Flatland have windows? Why or why not?
12. The houses were typically what shape? Why?
13. Describe the doors in houses for men and women and explain why two different doors are necessary.
14. What helps Flatlanders determine direction?
15. What are the only buildings allowed by law to be triangular? Why?

3–Concerning the inhabitants of Flatland

16. How long were most inhabitants?
17. What was the shape and ranking of women?
18. What are the various shapes and ranks of the men?
19. A male child typically has how many sides more than his father?
20. The children of isosceles triangles are also typically isosceles. Explain then how "his posterity may ultimately rise above his degraded condition."
21. What happens to the child of an Isosceles who is equilateral?
22. Why are equilateral triangle children of isosceles triangles considered a welcomed occurrence?
23. How are revolts from the lower isosceles class stopped?

4—Concerning the Women

24. How can a woman make herself invisible?
25. What must women do when walking in public places?
26. Why are Circles and Statesman wary of placing too many restrictions on the women?
27. What happens to women who suffer from a chronic cold, violent sneezing, or fits?
28. What additional safeguards help protect the population from murderous women?

5—Of Our Method of Recognizing One Another

29. Name three ways that Flatlanders are able to recognize one another.
30. What are the advantages and disadvantages of each of these methods?
31. How much does the brain (or acute angle) of an isosceles increase each generation until it achieves a perfect 60 degrees?
32. What is the fate of most of the isosceles who have an acute angle of 10 degrees or less?
33. What method of recognition is most commonly practiced among the lower classes?

6—Of Recognition by Sight

34. What method of recognition is most commonly used among the higher classes and in more temperate climates?
35. What is the most important factor in Flatland that allows recognition by sight?
36. What is the fate of those of the polygonal class that fail to pass the Final Test or Leaving Examination at the University?
37. An increasing minority of Statesmen, in order to show greater mercy, think that what should be done with those that do not pass their Final Test or Leaving Examination?

7—Concerning Irregular Figures

38. What is the fate of irregular figures in Flatland?
39. This chapter makes a case for regularity or symmetry. Although stressing symmetry, Abbott is mathematically careful when he states that “If our sides were unequal our angles *might be* unequal.” He is obviously aware that there are exceptions.

Give an example of a polygon with unequal sides, but with equal angles and of a polygon with equal sides, but with unequal angles.

8—Of the Ancient Practice of Painting

40. What was the Color Revolt?
41. Who is said to have started the color movement?

9—Of the Universal Colour Bill

42. What proposed actions did the Universal Color Bill call for?
43. Who was the author of the Universal Color Bill?

44. What were the key “problems” with the Universal Color Bill?

10–Of the Suppression of the Chromatic Sedition

45. How long did the agitation over the Color Bill continue?

46. What incident led to the ultimate downfall of the Universal Color Bill?

47. After the Universal Color Bill was struck down (following the slaughter of the isosceles in attendance and Chromatistes among them), what was the fate of color? Who left knew how to make the colorful paints?

48. What is the fate of those who work in the one manufactory that produces colorful paint?

11–Concerning our Priests

49. What are the responsibilities of the Priests?

50. What are the two antagonistic decrees prescribed by Nature’s Law affecting Circular propogation?

12–Of the Doctrine of Our Priests

51. What is the name of the Circle who quelled the Color Revolt?

52. What happened to Flatlanders who were born with uneven, irregular sides?

53. Although A. Square makes an appeal for educating women, what reason does he give for this?

Part II: Other Worlds

13–How I had a Vision of Lineland

54. What is Arthur Square’s favorite recreation?

55. In Lineland, what shape are the King and Men?

56. What shape are the women of Lineland?

57. How did the inhabitants of Lineland determine the gender and age of each other?

58. Was it possible for Linelanders to pass each other?

59. Is proximity necessary for marriage and the generation of children in Lineland?

60. How are marriages consummated in Lineland?

61. How many mouths, voices, and eyes does each Lineland man have?

62. How many wives does each Lineland man have?

63. How do Linelanders figure out who they will marry?

64. How often does the marriage chorus occur?

65. How much time elapses after a marriage in Lineland before children are born?

66. How many children does each married couple have?

14–How I vainly tried to explain the nature of Flatland

67. How does the King of Lineland determine length (referred to in Lineland as Space)?

68. How does the King of Lineland react when A. Square tries to explain the second dimension?

15—Concerning a Stranger from Spaceland

69. When A. Square shows his grandson (the bright little Hexagon) how to determine the area of a square by squaring a side (a square with three inch sides, for instance, has an algebraic meaning—3 squared, and also has a geometric meaning—the area of a square), what analogy does the bright little Hexagon suggest? What is A. Square's reaction?
70. When the sphere appears to A. Square, what shape does A. Square see?

16—How the Stranger Vainly Endeavored to Reveal to Me in Words the Mysteries of Spaceland

71. A being from Spaceland can view the "insides" of a being from Flatland. (The interior of a polygon is not visible to a Flatlander because the edges get in the way, but to a Spacelander, the "insides" are visible.) By analogy, it follows that a creature from the fourth dimension could do what?

17—How the Sphere, Having in Vain Tried Words, Resorted to Deeds

72. What does the Sphere call the message he has come to proclaim to A. Square?
73. How often is the Sphere allowed to preach to the Flatlanders?
74. What was A. Square's reaction when the Sphere attempts to show him evidence of the third dimension first by removing a tablet from the cupboard without opening the door, then by telling him about his neighbors and neighborhood as seen from above, and finally prodding A. Square's insides?
75. After A. Square refused to believe the Sphere, what did the Sphere do in a final attempt to convince him of the third dimension?

18—How I came to Spaceland, and What I Saw There

76. What did the High Council decree would happen to all Isosceles of any degree who professed to have received revelations from another World?
77. What did the High Council decree would happen to all regular Triangles who professed to have received revelations from another World?
78. What did the High Council decree would happen to all Squares or Pentagons who professed to have received revelations from another World?
79. What did the High Council decree would happen to all those of higher (noble) rank who professed to have received revelations from another World?
80. When the Sphere presented himself before the High Council to proclaim that there was a land of Three Dimensions, how did the Council respond?
81. What was the fate of A. Square's brother, the Clerk, who had witnessed the appearance of the Sphere?

19—How, Though the Sphere Showed Me other Mysteries of Spaceland, I Still Desired More; and What Came of It

82. Why was Arthur unable to return to Flatland to speak on his brother's behalf when he heard of his brother's imminent imprisonment?

83. At first, A. Square has trouble perceiving a solid as it looks irregular to him. This is due to being unaccustomed to what three elements that allow two-dimensions to perceive three (as our eyes must do)?
84. Why is Arthur's lesson on the 3rd dimension ultimately cut short and Arthur returned to Flatland?

20—How the Sphere encouraged me in a vision

85. How many dimensions are there in Pointland?
86. How many Beings are there in Pointland?
87. As the Sphere and A. Square returned from their visit to Pointland, what does the Sphere confess to A. Square?

21—How I Tried to Teach the Theory of Three Dimensions to my Grandson, and With What Success

88. *True or False* A. Square was successful when he first attempted to convert his hexagon grandson to the Gospel of Three Dimensions.

22—How I then Tried to Diffuse the Theory of Three Dimensions by Other Means, and of the Result

89. What happens after A. Square forgets himself at the Local Speculative Society meeting and tells about his experiences with the third dimension?
90. How many converts did A. Square have to the Gospel of Three Dimensions?

Additional Thoughts, Questions, and Ponderments

91. Describe two key differences between *Flatland: the Book* and *Flatland: the Movie*. Explain why you think the makers of the movie chose to make each of the described changes.
92. At the beginning of Chapter 11 (Concerning our priests), the narrator explains that he must omit explanations of many Flatland matters, which may have been of interest to the reader. These topics include the following:
- Their method of propelling and stopping themselves, although destitute of feet.
 - The means by which they give fixity to structures of wood, stone, or brick, although of course we have no hands, nor can they lay foundations as we can.
 - The manner in which the rain originates in the intervals between their various zones, so that the northern regions do not intercept the moisture from falling on the southern.
 - The nature of their hills and mines, their trees and vegetables, their seasons and harvests.
 - Their Alphabet and method of writing, adapted to their linear tablets.

Pick one of the aforementioned topics and provide an explanation for how the Flatlanders may have accomplished it.