

A Conics Flip Book

For this chapter, you will be creating a flipbook to explain the characteristics of the conic sections that we will be studying. This project will be worked on in class daily. A final product will be due on Monday, February 9, 2015

Materials: 4 sheets of paper (3 white, 1 colored), ruler, stapler, pencil/colored pencils/markers, notes

To create your flipbook:

- 1) Take a sheet of white paper and turn it so that it is longer than it is wide. Measure 6" from the left-hand side of the paper and mark that distance. Fold the paper so that you end up with a crease running parallel to the left-hand side. The bottom part of the paper should be 6" long while the top part is 5" long. Make sure that the paper is folded neatly!!
- 2) Take another sheet of white paper and do the same thing, only measure 7" from the left-hand side this time. When you fold the paper, the bottom part should be 7" long while the top part is 4" long. Put the first piece of paper inside the second one to begin creating your book.
- 3) For the third sheet of white paper, you will measure 8" from the left-hand side. Once folded, the bottom part will be 8" long, and the top part will be 3" long. Put your first two folded sheets inside the third one.
- 4) For the colored sheet of paper, measure 9" from the left-hand side. Once folded, the bottom part will be 9" long, and the top part will be 2" long. Put the folded sheets of white paper inside the folded sheet of colored paper.
- 5) Make sure everything is lined up neatly, then staple your book together. Use no more than 3 staples, and the staples should be about $\frac{1}{4}$ " from the fold. The fold will become the top of your book.

What should be included in your flipbook:

- 1) The colored sheet of paper at the top should include your name, the class period, and the words "Conic Sections" and everything should be written neatly.
- 2) The six sections of white paper are for the conic sections we will be studying: circles, ellipses, hyperbolas, parabolas, unidentified conics, and degenerate conics. Use one section for each shape in the order mentioned. For each shape, you should include a labeled diagram and all of the characteristics that apply to that shape. Include information for both x-major and y-major conics. Make sure you label your diagrams correctly.

Things to remember:

- 1) **NEATNESS COUNTS!!!** Line the paper up carefully when you fold and staple. Use a ruler or a pattern to draw your shapes. Draw them in pencil first, then go back over it with a colored pencil or marker. Either write neatly or use a computer and then cut and paste.
- 2) **ACCURACY COUNTS!!!** Be sure your diagrams and information are correct.
- 3) **DO NOT WAIT UNTIL THE LAST MINUTE!!!** Start on this project now and do a little at a time.

Grade Sheet - Conics Flipbook

Name _____

The book itself:

Put together neatly _____ / 5

Put together correctly

Colored sheet on the outside _____ / 1

Correct spacing between pages _____ / 7

Stapled correctly _____ / 2

The information in the book:

Pages in the correct order _____ / 3

Overall neatness _____ / 8

Overall use of color _____ / 5

Identifying information

Your name, your class period, etc _____ / 4

Circle

Diagram _____ / 3

Description (including the definition and labels) _____ / 6

Ellipse

Diagrams (including labels) _____ / 10

Description (including all 6 characteristics) _____ / 6

Hyperbola

Diagrams (including labels) _____ / 10

Description (including all 7 characteristics) _____ / 7

Parabola

Diagrams (including labels) _____ / 10

Description (including all 8 characteristics) _____ / 8

Unidentified Conics

Explanation as to how to identify _____ / 10

Description of how to "complete the square" _____ / 10

Degenerate Conics _____ / 10

Total _____ / 125

FINAL GRADE _____ / 100

Comments: _____
