

SUGGESTED ACTIVITIES FOR *DO THE MATH: SECRETS, LIES, AND ALGEBRA*

Summary

This is a well-written funny book about middle school, told in the voice of Tess, an eighth grader who looks at life in mathematical terms. She deals with standard middle school issues—friendships and loyalty, family dynamics, boys, and peer pressures. In an unusual (for middle school books) twist, Tess is not uncomfortable with her skills in math and her point of view—she takes them for granted.

Points to Discuss:

- Cheating on tests
- Peer pressure
- Making ethical adult decisions
- Courage to stand up for yourself
- Keeping secrets
- Being true to yourself

Classroom Activities

1. Do the “Draw a Mathematician” test—simply ask each child to draw a mathematician. Collect and post all the drawings, leaving names off. Discuss the general impressions—are they mostly men who are older and nerdy-looking?
2. Investigate the Poster Project: <http://www.pdksciart.com/homepage.htm>.
3. Talk about stereotypes—how we view other people based on our own impressions, marketing, etc. How are mathematicians stereotyped? What about Tess? Does she fit these stereotypes? What do you think she will do in her life?
4. Tess writes such funny but true observations about her life: “Inequalities: Since who you are greater than ($>$) and who you are less than ($<$) is kind of the point of eighth grade.”
 - Ask each student to use algebraic terms to describe an event in his or her life.
 - Use the graphing exercise to ask each student graph a time in his or her life.

OTHER RESOURCES

Web Sites for Teachers

Preservice Elementary Teachers' Visual Images of Themselves as Mathematics Teachers. Research on teachers attitudes toward math.

<http://www.thefreelibrary.com/Preservice+elementary+teachers'+visual+images+of+themselves+as...-a0168354720>

Making Students Aware they are Mathematicians. Lesson plan on stereotypes about math.

http://www.k12academics.com/making_students_aware_they_are_mathematicians.htm

Interactive Online Math Lessons. Resources for K-12 mathematics and tools for adapting content and for monitoring student work.

http://enlvm.usu.edu/ma/nav/browse_by.jsp

Fun Math Web Sites

Games, Puzzles, Problems, Brain Teasers & More Fun

<http://cte.jhu.edu/techacademy/web/2000/heal/siteslist.htm>

Math Sites

<http://www.kidsites.com/sites-edu/math.htm>

PBS Kids Cyberchase

<http://pbskids.org/cyberchase/games.html>

Books for Students

A Gebra Named Al. Wendy Isdell. Free Spirit Publishing, Inc. 1993. ISBN: 0-915793-58-X.

Multiplying Menace: The Revenge of Rumpelstiltskin. Pam Calvert. Charlesbridge Publishing. 2006. ISBN: 1-57091-890-2.

The Number Devil: A Mathematical Adventure. Hans Magnus Enzensberger. Henry Holt & Company. 1998. ISBN: 0-8050-5770-6.

Books For Educators

Math Doesn't Suck: How to Survive Middle School Math Without Losing Your Mind or Breaking a Nail. Danica McKellar. Penguin Group. 2007. ISBN: 1-59463-039-9.

Mathematics Teaching Today: Improving Practice, Improving Student Learning, Second Edition. National Council of Teachers of Mathematics. 2007. ISBN: 978-0-87353-598-4.