



Tooling & Manufacturing Association

# Essay Contest

for Illinois students in the seventh and eighth grades

## Explore technology, math, and science and

# WIN!

cash for your school and a savings bond for you!

First Place: \$250 U.S. Savings Bond for student, \$250 for school

Second Place: \$150 U.S. Savings Bond for student, \$150 for school

Third Place: \$100 U.S. Savings Bond for student, \$100 for school

Choose a common object (such as a skateboard, CD player, bicycle, satellite dish, car) and describe the technology of the manufacturing process:

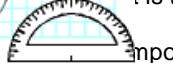


- how is a product developed?  
how is computer aided design (CAD) used?
- what is the product made of – what raw materials are used?
- how are robotics, automation, and computers used in the manufacturing process?
- give examples of how math and science are important to manufacturing

The Tooling & Manufacturing Association represents over 1000 member companies in the tooling and manufacturing industry. We provide a variety of services including: technical assistance, trade shows, seminars, and more. We also provide retirement, and profit sharing plans for our members.



$$A = \pi r^2 s$$



The Tooling & Manufacturing Association is a national trade association serving precision metalworking, plastic and non-metallic material processing, local metalworking and plastics association in the U.S. Membership is open to all individuals and companies who are involved in the tooling and manufacturing industry. We provide a variety of services including: technical assistance, trade shows, seminars, and more. We also provide retirement, and profit sharing plans for our members.



Many well-paying jobs are available in manufacturing each year - including entry-level jobs with a solid, promising future. Entry level positions with TMA member companies can lead to apprentice training programs - *often paid for by the employer*. Journeyman tool & die makers, moldmakers and machinists are skilled professionals who work in high-tech environments. The TMA Related Theory Apprentice Training Program results in college credits that are applicable to a two- or four-year degree. Manufacturing design, management and engineering are also excellent career paths.

Tooling & Manufacturing Association  
1177 S. Dee Rd., Park Ridge, IL 60068  
847/825-1120 www.tmanet.com



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# Essay Contest

technology

- where are the parts for the product made?
- where are they assembled?
- how does the product get to the consumer (you!)?

Tooling & Manufacturing Association  
1177 S. Dee Rd., Park Ridge, IL 60068847/825-1120 [www.tmanet.com](http://www.tmanet.com)



# Essay Contest

The contest is open to Illinois students in 7th or 8th grade. All students must have a sponsoring adult: teacher, tutor, mentor, or counselor associated with an educational program.

TMA is not responsible for entries lost in delivery. Entries can be dropped off at TMA Monday through Friday between 8:00 a.m. and 4:00 p.m.

1. Essays should be approximately 500 words, typed and double spaced on 8 1/2" x 11" white paper. Only one entry per person will be accepted. There is no entry fee.

5. All entries become the property of the Tooling & Manufacturing Association and may be published without further permission or remuneration.

2. Students must use a minimum of four sources. It is recommended that a combination of recently published materials, including periodicals and the Internet, are used along with at least one personal interview with a manufacturer. TMA can supply a list of manufacturers in your area. Sources, including interview subjects, must be cited at the end of the paper; citations are *not* to be counted as part of the 500 words. An overview of the industry can be found on the TMA web site at [www.tmanet.com](http://www.tmanet.com).

## Rules

6. Winners will be notified by April 18, 2003. The winning students, their parents, and their teachers will be invited to the annual TMA Precision Metalworking Competition awards presentation, scheduled for May 16 in Rosemont, Illinois at the Embassy Suites.

Prizes will be presented at that time; winner need not be present to receive prize.

3. Each entry must be accompanied by an official entry form. The title of the paper and the student's name, school or educational program, and adult sponsor must appear in the top right-hand corner of **each** page of the entry; all pages should be numbered. Do **NOT** staple pages together.

7. Prizes are U.S. Savings Bonds for students, with an equivalent monetary prize for the winners' school. First place is a \$250 savings bond and \$250 for the school; second place prize in \$150 values, third place, \$100. TMA reserves the right to offer similar prizes without notice.

4. Entries must be received by **4:00 p.m., January 24, 2003**, at TMA, 1177 S. Dee Rd., Park Ridge, IL 60068.

8. Essays will be judged on accuracy, depth of research and writing quality by members of the TMA Education and Recruitment Committee or its designees. Judges' decisions are final.

Manufacturing Contest Entry Form  
Deadline for entry: January 24, 2003

name		home telephone area code /
home address		grade (circle one) 7                      8
	city/state/ZIP	Social Security #
school/program		required for prizes; information will NOT be given to any entity other than the U.S. Treasury Dept.
school/program address	city/state/ZIP	school telephone area code /
sponsor's name, title		course title
sponsor's signature		
Yes! Please send me ___ (maximum 2) 2002 Math Posters to my home address.		



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