

WCI Parent Math Night

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Assumptions and Disclaimers

- You love math, or
- You like math (or maybe you are not this comfortable with math)

- Your children are strong in math, or
- Your children struggle with math



Assumptions and Disclaimers

- WCI is a great school with hard-working teachers and a great math department
- My children are much younger than yours



Outline for my time with you

- Some Math to Start
- Why Math?
- Math in the Real World
- Some Advice



Some Math to Start

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16



Some Math to Start

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25



Why Math?

- Why do we teach math?
- Why is mathematics important?
- What do we really want our students to get out of mathematics?



Why Math?

Skills



- Analytical, logical and systematic thinking
- Creative thinking
- Visualization
- Communication
- Ability to abstract



Applications



Math in the Real World (STEM and Post-Secondary)

- Math forms the basis of all Science, Technology, Engineering and Mathematics (STEM)
- “If you want a career in medicine these days you’re better off studying mathematics or computing than biology.” (Sir Rory Collins, head of clinical trials at Oxford University)
- “[For medicine, you need] math, logic, interpersonal skills, communication, problem solving. Biology is on the list, but not on the top of it for most specialties.”

- It is far more important to get a good grounding in mathematics than to get a high mark in mathematics
- How is math different at University?
 - More content
 - More independent learning and work
 - More “thinking”, less “doing”



Math in the Real World (STEM and Post-Secondary)

Question: Why should you consider studying math?

- You enjoy it
- You are good at it
- Math is the language of the pure and applied sciences
- Math is everywhere!
- Develops analytical, reasoning and problem solving skills and blends theory and practice
- Math graduates are well trained for the job market since they are versatile and adaptable



Math in the Real World (Applications)

- GPS
- Online security
- Kidney donations



Math in the Real World (Careers)

Careercast.com publishes an annual ranking of the top 200 professions based on five criteria inherent to every job: work environment, income, hiring outlook, physical demands and stress.

The top 20 jobs:

- 20: Petroleum Engineer
- 19: Physical Therapist
- 18: Optometrist
- 17: Network and Computer Systems Administrator
- 16: Meteorologist
- 15: Dietician Physical Therapist
- 14: Biomedical Engineer
- 13: Dental Hygienist
- 12: Human Resources Manager
- 11: Occupational Therapist



Job Rankings from WSJ

The top 10 jobs:

- 10: Actuary
- 9: Speech Pathologist
- 8: Computer Systems Analyst
- 7: Software Engineer
- 6: Mathematician
- 5: Diagnostic Medical Sonographer
- 4: Audiologist
- 3: Information Security Analyst
- 2: Statistician
- 1: Data Scientist



Some Advice

We all need to:

- Have a positive attitude towards mathematics (and other disciplines)
- Encourage our children to like mathematics
- Allow our children the opportunity to fail
- Help our children to leave many options open when they leave secondary school



Concluding Thoughts

- CEMC resources to support
- Try to incorporate more mathematical thinking into your lives (and those of your children)
- “Teaching makes all other professions possible”

