

Pathmakers Training Session



Overview

- Introduction
- Importance
- Planning your presentation
- In the classroom
- Ideas for Follow-up
- Actua resources



Introduction

- About Actua
 - National, not-for-profit organization that supports the development and delivery of hands-on science, engineering and technology programs for youth
 - 28 members, 200,000 youth annually
 - Committed to reaching all youth
- National Girls Program
- Girls Mentorship Program



Importance

- Studies have shown a lack of interest girls have in fields of science, engineering and technology.
- Not a lack of knowledge!
- Important for girls to have role models to look up to!
- You are all excellent role models!



Planning Your Presentation...

Contacting the Teacher

- Briefing sheet mailed to teacher
 - Who you are, what you do, where you work, what you will be presenting (outline, tools, demo), personal bio
 - Advise that you will contact them by phone
- Ask the teacher what s/he wants
- Find out where they are in their curriculum
- Age of students, size and description of class, teaching formats, special needs
- Audio-visual needs
- Time, location
- Get feedback on your outline
- Class prep, send pamphlets, activities, etc.



Planning Your Presentation...

Approach

- Enthusiasm
- Encouragement
- Casual and confident
- Friendly
- Don't pretend to know everything
- Be yourself!



Planning Your Presentation...

Audience

- Grades K-3: Touch, taste, smell, hear, see.
 - Dramatize, puppets, toys, stories
- Grades 4-7: Hands-on, concrete, connect
 - Slides, short videos, specimens, models
 - Abstract thinking, 20-25 minute max
- Grades 8-9: Attitudes, hands-on
 - Slides, videos, fast pace, simplicity
- Grades 10-12: General, career
 - Lecture, variety, discussion time (25%)



Planning Your Presentation...

Content

- Overall structure of your presentation:
 - What do you want to do (students will gain knowledge in)
 - Capture their attention with a demo, game, funny story
 - Introduction (including an outline of what you are doing)
 - Body of your presentation (make connections, hands-on)
 - Conclusion (including a summary) and Questions
- Tips:
 - Connect content to students' lives
 - Make content interactive and hands-on
 - Be innovative in approach and ideas
 - Be flexible in content!
 - Help to demystify science, engineering and technology



Planning Your Presentation... Be A Story Teller!

- What do you do?
- Why did you choose science, engineering, technology?
- Your day at school/work (current)
- Your journey
- The best part about being an engineer
- Things you have overcome
- What you liked in elementary/high school, what you were like growing up?
- How you use engineering at home
- Who encouraged you? Who was your mentor?
- Your hobbies, your family
- Proud moments, dreams, inspirations
- Add a personal message



In the Classroom... Delivery Tips

- Back to attitudes!
- Discuss expectations
- Non-verbal contact
- Verbal contact
- Work with teachers
- Use student volunteers



In the Classroom... Girls in the Classroom

- Co-ed classrooms
- All-girls environments
- Get girls involved/actively engage
- Positive re-enforcement
- Don't overhelp
- Interesting work



In the Classroom... The Big Day

- Arrive at the school 20 minutes early
- Arrange to meet the teacher
- Check in at the office
- Bring a name tag and be prepared to answer the question, “Who are the Pathmakers?”
- Take time to prepare materials
- Have fun!!



Ideas For Follow-up

- Provide follow-up activities for the classroom like brain bumpers, word puzzles, simple and safe take-home projects
- Leave the class with resources like a handout or a Web site URL
- Leave your name and contact info (in case they have any other questions that come up)
- Get feedback from the teacher



Actua Resources

- Our web site: www.actua.ca
- Actua Girls site: www.girls.actua.ca
- Project Library: www.projects.actua.ca
- YES Mag: www.yesmag.ca
- E-mail: jen.salfi@actua.ca

