Hosting a presentation about Architecture OR Architecture Career Day: Middle School or Junior High School Classrooms

• Thank you for downloading this resource!
• This power point is a sample presentation for a Middle School or Junior High School class created by a Wyoming AIA-Member Architect.
• The sample presentation (beginning Slide 3) is meant to be presented by an AIA Architect that is local to the community.
• The power point is meant to be used in cooperation by the teacher and architect to customize a presentation that will meet the teachers goals for the students.
PowerPoint Guide

• An average presentation takes about an hour and 15 minutes, but can be shortened as needed based on the teacher’s needs and available time.
• Additional tips:
  • Customize the presentation/agenda each time based on what the teacher would like to see included
  • Adjust presentation based on the interest/reaction of the particular class
  • Try to stay very general and short on each item or the time gets away too fast
• Take questions at specific times you ask for them to control the class, and maximize time
Architecture Career Day

What is an Architect?
Marshmallow Challenge
Project Spotlight
Design A School
Architect: [ahr-ki-tekt] noun

1. A person who engages in the profession of architecture.

2. A person professionally engaged in the design of certain large constructions other than buildings and the like: landscape architect; naval architect.

3. The deviser, maker, or creator of anything.
Education Requirements:

Junior High/Middle School
- Drawing
- Art
- Geometry/Algebra

High School
- More Drawing
- More Art, Sculpture, Painting
- More Algebra/Calculus
- Physics & Chemistry
- Technology Classes /Shop Classes

Four Typical College Options
1) Five years bachelor’s degree
   Ex. University of Arizona

2) Five-year master’s degree in architecture
   Ex. Montana State University

3) Four-year bachelor’s degree in design related field from a non-accredited university
   Ex. Arizona State University

4) Four-year bachelor’s degree in non-design related field
   Three-year master’s degree from accredited university
Licensing Requirements:

Internship & Training:

IDP Program – Approximately 3 years to complete

Architectural Registration Exams:

AREs – 7 Exams

- Site Design
- Schematic Design
- Building Systems
- Building Design & Construction Systems
- Programming
- Construction Documents
- Structures
- Building Design & Construction Systems
Career Responsibilities:

Ensure health and life safety of the public

Design buildings and spacial relationships

Coordinate owners, engineers, city officials

Career Characteristics:

Great Listener

Good Communicator

Artistic and creative

Problem solver

Organized
### Income Range:

<table>
<thead>
<tr>
<th>Role</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intern</td>
<td>$42,000</td>
</tr>
<tr>
<td>Project Manager</td>
<td>$55,000</td>
</tr>
<tr>
<td>Architect</td>
<td>$70,000</td>
</tr>
<tr>
<td>Principal (Owner)</td>
<td>$115,000</td>
</tr>
</tbody>
</table>

Between July 2009 and November 2009, employment at American architecture firms dropped from 224,500 to 184,600, according to the US Department of Labor. And yet the US Department of Labor predicts that over the next ten years, employment of architects will increase more rapidly than the average for all occupations.
Cross-over careers:

- Work for contractor / be a contractor
- Interior Designer
- Movie Set Designer
- Urban Designer
- City Planner
- Landscape Architect
- Lighting Designer
- Acoustic Designer
- Kitchen Designer
- Cost Estimator

Architecture Career Day
Marshmallow Challenge

Architecture Career Day
Marshmallow Challenge Rules:

• Build the Tallest Freestanding Structure: The winning team is the one that has the tallest structure measured from the table top surface to the top of the marshmallow. That means the structure cannot be suspended from a higher structure, like a chair, ceiling or chandelier.

• The Entire Marshmallow Must be on Top: The entire marshmallow needs to be on the top of the structure. Cutting or eating part of the marshmallow disqualifies the team.

• Use as Much or as Little of the Kit: The team can use as many or as few of the 20 spaghetti sticks, as much or as little of the string or tape. The team cannot use the paper bag as part of their structure.

• Break up the Spaghetti, String or Tape: Teams are free to break the spaghetti, cut up the tape and string to create new structures.

• The Challenge Lasts 18 minutes: Teams cannot hold on to the structure when the time runs out. Those touching or supporting the structure at the end of the exercise will be disqualified.

• Ensure Everyone Understands the Rules: Don’t worry about repeating the rules too many times. Repeat them at least three times. Ask if anyone has any questions before starting.
Math Example:

Calculate Occupant Load for Classroom:

1) Measure Room Dimensions

2) Calculate Area:
   30’ x 30’ = 900 square feet

3) Reference Building Code
   Educational – Classroom Area

4) Calculate occupants per classroom
   1 occupant per 20 square foot net
   900/20 = 45 occupants
Design a School

Building Program
- Gymnasium
- Boys & Girls Locker Rooms
- Cafeteria
- Student Commons
- Principals Offices
- 20 classrooms
- Wood Shop
- Metal Shop
- Kitchen
- Foods Room
- Sewing Room
- 4 Restrooms
Architecture Career Day
To Find a Local Architect:

1. Please visit the AIA Wyoming website:
2. Click on the “Find An Architect” tab
3. Click on the “Find An Architect Member” tab
4. Type in your location (or nearest larger city) in the search box

OR

1. Please visit the AIA Wyoming website:
2. Click on the “Find An Architect” tab
3. Click on the “AIA Wyoming Firm Map” tab
4. The map shows which cities have member architectural firms

OR

AIA Wyoming
PO Box 21833
Cheyenne, WY 82003
t) 307.286.5519
e) Info@aia-wyoming.org
w) www.aia-wyoming.org