What’s the Scoop: Science and Technology

Mr. Andrew Scheid
Mrs. Emily Meyer

Yinghua Academy Middle School
Science Team

Mr. Andrew Scheid
11 years at Yinghua Academy
5th and 6th Grade Science

Mrs. Emily Meyer
3 years at Yinghua Academy
7th and 8th Grade Science
About Mr. Scheid

- Middle School Science Teacher
  - Yinghua Academy Grades 5, 6, 7, 8
  - 2022-2023 is my 12\textsuperscript{th} year at Yinghua
  - over 15 years of classroom teaching experience

- Masters Of Education
  - Framingham State University (study abroad)

- B.S. Biology
  - Northland College, Ashland WI

- Other Highlights:
  - Santa Cruz Cooperative School (Bolivia)
  - U.S. Forest Service, Superior National Forest
About Mrs. Meyer

Middle School Science Teacher
- Yinghua Academy Grades 5 and 7
- 3rd year at Yinghua
- Taught in both China and America (speaks Chinese)

Masters Of Science Education
- In-process - Hamline University

B.S. Dietetics (Human Food and Nutrition)
- University of St. Thomas, Houston, TX

Other Highlights:
- Lived in China for 10 years with my family (Beijing, Shanghai and Urumqi)
- I am also a licensed ESL teacher
Next Generation Science Standards

Science and Engineering Practices

1. Asking questions (for science) and defining problems (for engineering)
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations (for science) and designing solutions (for engineering)
7. Engaging in argument from evidence
5th Grade: General Science
6th Grade: Earth Science and Chemistry
7th Grade: Life Science (Biology)
8th Grade: Physical Science and Engineering
5th Grade

- 3-4 sessions per week (160+ minutes)
- What to bring to class:
  - Science Notebook (SNB)
  - Science Folder (green)
  - HOMEWORK in SNB
  - Colored Pencils

<table>
<thead>
<tr>
<th>Month</th>
<th>Grade 5: General Science</th>
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</thead>
</table>
| September | Scientific Method  
Life Science Intro                                      |
| October   | Plants: Structure and Function                        |
| November  | Ecosystems and Biomes                                |
| December  | Earth Science  
Water Cycle  
Weather                                      |
| January   | Solar System  
Earth, Moon, Sun                                      |
| February  | Landforms  
Weathering  
Erosion                                         |
| March     | Physical Science  
Force and Motion  
Energy                                      |
| April     | Matter: Particles  
States of Matter                                      |
| May       | Simple Machines  
Electricity  
Magnetism                                      |
# Science Notebook: The SNB

## Daily Do Now Question

<table>
<thead>
<tr>
<th>Date</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/3</td>
<td>What is a Force?</td>
</tr>
<tr>
<td>4/4</td>
<td>Describe Work:</td>
</tr>
<tr>
<td>4/5</td>
<td>What is a Machine?</td>
</tr>
<tr>
<td>4/6</td>
<td>Name the 6 Simple Machines.</td>
</tr>
</tbody>
</table>

## Weekly Vocabulary List

- force:
- friction:
- gravity:
- equilibrium:
- load:
- work:
- power:
- machine:
- fulcrum:
- lever:
- inclined plane:
Science EXPO Projects!

MAGNETIC ACCELERATION

TOFU-SION
Science Lab Activities

FLOWER DISSECTION

ELECTRICAL CIRCUITS
Science Lab Activities

SIMPLE MACHINES

MAPS AND LANDFORMS
Support Materials

- **Harcourt Science 5**
  - Published 2000

- **Delta Science Dictionary**

- **Hands-On Materials**
  - Data Collection
  - Measurement

- **Edpuzzle Online Videos**
<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>What days will my child have Science?</td>
<td>Not sure.</td>
</tr>
<tr>
<td>How large is the universe?</td>
<td>Unknown.</td>
</tr>
<tr>
<td>What is the cause of turbulence?</td>
<td>Way too many variables.</td>
</tr>
<tr>
<td>Where do we go next?</td>
<td>Math, Chinese Rm#235</td>
</tr>
</tbody>
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