**WHAT IS A SCIENTIST?**

Many young students are exposed to the idea of science through the discoveries of Einstein and Ben Franklin; Present Your PhD (PyPhD) aims to end these stereotypes by providing hands-on ways to explore the world of scientists and science researchers. We describe the variety of people and the topics they study, and introduce the concept of research, while inviting students to picture themselves as a scientist, both now and in the future.

<table>
<thead>
<tr>
<th>KEY LEARNING(S)</th>
<th>UNIT ESSENTIAL QUESTIONS</th>
<th>INSTRUCTIONAL TOOLS (WE PROVIDE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientists are real people</td>
<td>What does a scientist look like?</td>
<td>PowerPoint</td>
</tr>
<tr>
<td>Anyone can be a scientist</td>
<td>What does a scientist do?</td>
<td>Drawing sheets</td>
</tr>
<tr>
<td>The concept of research</td>
<td>What is a graduate student? Are they scientists?</td>
<td>Blacklight and tube of GFP (green fluorescent protein)</td>
</tr>
<tr>
<td>There are many different kinds of science and research</td>
<td>What is research?</td>
<td>Lab coats, goggles, gloves</td>
</tr>
<tr>
<td>You can do research, too!</td>
<td>Am I a scientist? What can I do to participate in science?</td>
<td>Balloons</td>
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</tbody>
</table>

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**WHAT IS A SCIENTIST**

Introduce the idea of science as a profession

Scientists come from all different backgrounds, are different ages, and do different things

Scientists ask questions about the world, then they make a guess about the answer to that question. This is called doing research.

There are lots of different kinds of research and different levels of difficulty. Anyone- even children- can do research!

**LESSON ESSENTIAL QUESTIONS #1**

What does a scientist look like?

Do you know any scientists?

Who gets to be a scientist?

**LESSON ESSENTIAL QUESTIONS #2**

What does a scientist do?

How does a scientist do their job?

**LESSON ESSENTIAL QUESTIONS #3**

What kinds of research is there?

What kinds of research can you do?

**LESSON ESSENTIAL QUESTIONS #4**

**VOCABULARY #1**

Scientist

**VOCABULARY #2**

N/A

**VOCABULARY #3**

Research

**VOCABULARY #4**

N/A
<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-)30-0min</td>
<td>PyPhD presenters arrive, meet with teachers, and set up</td>
</tr>
<tr>
<td>0:00</td>
<td>Presenters focus the students and begin Power Point</td>
</tr>
<tr>
<td>0-3</td>
<td>Introductions</td>
</tr>
<tr>
<td>3-8</td>
<td>Slides 2-5</td>
</tr>
<tr>
<td>8-15</td>
<td>Drawing activity</td>
</tr>
<tr>
<td>15-20</td>
<td>Slides 7-11</td>
</tr>
<tr>
<td>20-23</td>
<td>Slide 12 student responses</td>
</tr>
<tr>
<td>23-28</td>
<td>Slides 13-15, balloon activity</td>
</tr>
<tr>
<td>28-30</td>
<td>Slides 17-18</td>
</tr>
<tr>
<td>30-40</td>
<td>Drawing activity</td>
</tr>
<tr>
<td>40-45</td>
<td>Slides 19-20, closing remarks</td>
</tr>
<tr>
<td>45-1hour</td>
<td>Observe GFP, look at PPE (flexible)</td>
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</tbody>
</table>