

<h1 style="margin: 0;">Lesson Plan</h1>	
<p>Description</p> <p>In this guided online lesson, students will learn the steps of scientific research, what scientific integrity is and why it matters from a health information perspective. They will explore the scientific process through an experiment about handwashing and learn how scientists use this process to solve real-world problems. Each learning objective is followed up by an online game or hands-on activity to reinforce the concepts.</p>	<p>Materials</p> <ul style="list-style-type: none"> A computer or laptop for each student OR overhead screen to work through as a class The E-lesson file available online Washable Paint (approximately palm full amount required for each person doing experiment) Dish soap (small amount required for each person doing experiment) Sink(s) for applying paint and washing hands
<p>Big Ideas</p> <ul style="list-style-type: none"> Scientific research is a systematic way of gaining scientific knowledge Scientific research starts with a question, followed by hypothesis, experiments, results and conclusion It is important that research results can be repeated 5 principles of scientific integrity are respect, honesty, care, patience, and practice Reliable research is done with scientific integrity, and this is how we know we can trust it Research is an amazing tool that teaches us new things, and makes our daily lives better, easier, and healthier When we have good information, we can make good health decisions 	<p>Specific Expectations</p> <p>A1.1 Use scientific research process and associated skills to conduct investigations A1.2 Use scientific experimentation process and associated skills to conduct investigations A3.2 Investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 5</u> B1.1 Assess effects of a variety of social and environmental factors on human health and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial</p>

<p>Introduction</p> <p>Scientists follow the scientific method and scientific integrity to learn new information that we can apply in our daily lives. It's important for us all to know what this method involves and what scientific integrity looks like, so we know how to interact with the information that comes at us. Understanding scientific integrity gives us a foundational awareness of how scientific information is obtained and can help us distinguish between reliable versus unreliable sources.</p>	
<p>Action</p> <ol style="list-style-type: none"> 1. Decide whether there is capacity for students to work through lesson on individual devices/in pairs or whether lesson will be done as a class 2. Decide whether there is capacity for every student to do the handwashing experiment, or whether just the teacher or a couple students will demonstrate 	
<p>Consolidation/Extension</p> <p>Further discussions can be had about the effects of lack of or incorrect health information on healthy choices and outcomes.</p>	
<p>Accommodations/Modifications</p> <ul style="list-style-type: none"> • If internet connection is a concern: Click on the button to download lesson so it can be used offline • In the top right corner there is tab labelled "captions" where transcripts of each voiceover can be found • When playing the YouTube videos, captions can be activated by clicking the "cc" button in the bottom right corner 	<p>Assessment</p> <p>Students can be graded on their scores on the follow up activities.</p>
<p>Additional Resources</p> <p>Feedback survey https://survey.alchemer.com/s3/7094497/IPF-Teacher-Student-Evaluation</p>	