

# Ohio Science Correlation (Grade 10)

Reference: [Academic Content Standards p.149 \(Word document\)](#)

## Introduction

This document correlates Yenka Science software to the content performance indicators of the Ohio science core curriculum. It highlights specific areas of the curriculum that are covered by Yenka Science and points to resources that will be useful when teaching the material.

The terminology we have used in this document is as follows:

- **Product:** this is the relevant Yenka Science product, covering Physics and Chemistry. These products can be used independently of each other, and more information can be found on the [Yenka website](#).
- **Online activity:** these are lesson plans for classroom activities for use with the Yenka software. Students work through these independently by interacting with a Yenka simulation, following notes and answering questions to learn about an aspect of the curriculum material. Some of these lesson kits are suitable for use as a whiteboard presentation, and are referred to as *online demonstrations*.
- **Model:** a short pre-made Yenka model with instructions, which will give pupils the opportunity to apply their knowledge of a subject. These models are found under the *Content* tab when Yenka is opened.

Since all the Yenka Science titles are simulators, they will help you to cover other areas of the curriculum too. This is just a list of the activities and models that are currently available; there are plenty of other experiments you can simulate. You may wish to look at the tutorials under *Getting Started* in Yenka, and the [training videos](#) provided on the website, to explore more of the potential uses of the software, and show you how to create your own models.



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## Earth and Space Sciences

Area	Indicator	Product	Content
<i>Earth Systems</i>	5. Explain how the acquisition and use of resources, urban growth and waste disposal can accelerate natural change and impact the quality of life.	Yenka Inorganic Chemistry	Online activities: - <a href="#">The Formation of Acid Rain</a> - <a href="#">Acid Rain and the Environment</a>  Models: - Coal fires (Energy) - Products of burning (Energy) - Acid rain (Acids, Bases and Salts)

## Life Sciences

Area	Indicator	Product	Content
<i>Diversity and Interdependence of Life</i>	19. Illustrate how uses of resources at local, state, regional, national, and global levels have affected the quality of life (e.g., energy production and sustainable vs. nonsustainable agriculture).	Yenka Inorganic Chemistry	Related models: - Coal fires (Energy) - Products of burning (Energy)

## Scientific Enquiry

Area	Indicator	Product	Content
<i>Doing Scientific Enquiry</i>	1. Research and apply appropriate safety precautions when designing and conducting scientific investigations (e.g. OSHA, MSDS, eyewash, goggles and ventilation).		Safety precautions are highlighted in many of the Yenka activities and demonstrations. In particular, hazards associated with the use of chemicals are pointed out, and students are made aware of the additional safeguards required to conduct the experiments in a real laboratory situation.

	<p>2. Present scientific findings using clear language, accurate data, appropriate graphs, tables, maps and available technology.</p>	<p>Yenka Motion</p> <p>Yenka Electricity</p> <p>Yenka Inorganic Chemistry</p>	<p>Graphs and tables are used widely throughout Yenka science, and students are expected to both read data correctly, and present their own findings in a clear and accurate way. Several examples of this are in the following online activities:</p> <ul style="list-style-type: none"> <li>- <a href="#">Kinetic Energy Formula</a></li> <li>- <a href="#">Speed or Velocity</a></li> <li>- <a href="#">Light Bulb Resistance</a></li> <li>- <a href="#">Changing Current</a></li> <li>- <a href="#">Mixing Acids and Alkalis</a></li> <li>- <a href="#">Calcium Carbonate Reaction Rate Change</a></li> </ul>
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If you have any questions about Yenka or this document, please contact [Esther Droop](#) or visit [www.yenka.com](http://www.yenka.com)