

Ohio Science Correlation (Grade 11)

Reference: [Academic Content Standards p.154 \(Word document\)](#)

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>	2. Analyze how the regular and predictable motions of Earth, sun and moon explain phenomena on Earth (e.g., seasons, tides, eclipses and phases of the moon).	Yenka Light and Sound	On-line activity: - Light Rays 3 – Eclipses
	9. Explain the effects of biomass and human activity on climate (e.g., climatic change and global warming).	Yenka Inorganic Chemistry	Online activity: - The Formation of Acid Rain Model: - Coal Fires (Energy)

Life Sciences

Area	Indicator	Product	Content
<i>Characteristics and Structure of Life</i>	2. Recognize that chemical bonds of food molecules contain energy. Energy is released when the bonds of food molecules are broken and new compounds with lower energy bonds are formed. Some of this energy is released as thermal energy.	Yenka Inorganic Chemistry	Related online activities: - Energy Changes in Reactions (1) - Energy Changes in Reactions (2) And model: - Fuels and foods (Energy)

Physical Sciences

Area	Indicator	Product	Content
<i>Force and Motion</i>	3. Describe real world examples showing that all energy transformations tend toward disorganized states (e.g., fossil fuel combustion, food pyramids and electrical use).	Yenka Inorganic Chemistry Yenka Motion	Related online activities: - Combustion - Power Transmission

If you have any questions about Yenka or this document, please contact [Esther Droop](#) or visit www.yenka.com