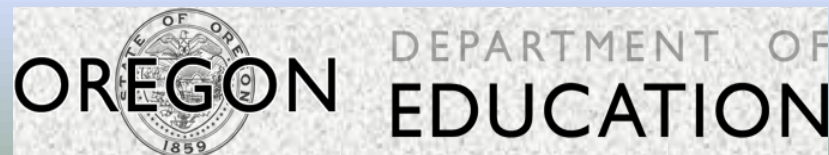


Alignment of Oregon Science Standards

Crosswalk of 2009 Oregon Science Standards to
2014 Oregon Science Standards (Next Generation Science Standards)



Alignment of Oregon Science Standards

2014 Science Standards (Next Generation Science Standards) and 2009 Science Standards

Introduction

These pages show how the content, practices, and cross-cutting concepts (CCC) associated with the new Oregon Science Standards (NGSS) adopted in March 2014 align to the Oregon Science Standards adopted in February 2009. It is important to remember that the new Oregon Science Standards (NGSS) will be phased in so that districts can implement changes in local curriculum, provide appropriate professional development for teachers and administrators, and provide students with opportunities to learn the content, practices, and cross-cutting concepts prior to assessment. Oregon students will continue to be assessed on the Oregon 2009 Science Content Standards via OAKS Science until a new science assessment that aligns with the newly adopted standards is developed and becomes operational in 2018-2019.

Purpose

The purpose of this document is to provide educators with a view of the alignment between the 2009 content standards currently required as part of each Oregon district's curriculum and instruction in the subject area of science, and those contained in the new 2014 Oregon Science Standards (NGSS). An examination of the content of these pages is meant to provide at least some clarification on the following issues:

- What content, practices, and cross-cutting concepts are new and have not previously been a part of Oregon's 2009 Science Standards?
- What content, practices, and cross-cutting concepts will now need to be part of the curriculum at an earlier (or later) grade level than where they are currently taught and assessed?
- In what instances are similar skills being addressed, but with a somewhat different emphasis or with different expectations regarding the degree of sophistication?

Organization of the Alignment Tables

The rows in the table show whether there is a corresponding 2009 Oregon science standard(s) for each of the new 2014 Oregon science standards (NGSS) performance expectation (PE) in the areas of content, practices, and cross-cutting concepts (CCC). Codes designate the degree of alignment: S = Strong; P = Partial; D = Different Grade; N = New (not in any 2009 ORSS). The 2009 Oregon Science Standards that are not aligned to any new 2014 Oregon Science Standard (NGSS) are included at the end of the document. The bulleted statements at the beginning of the document provide summary information about the differences between the two sets of standards.

Alignment of Oregon's 2014 Science Standards (NGSS) with 2009 Oregon Science Standards (2009 ORSS)

Degree of Alignment Codes: **S** = Strong; **P** = Partial; **D** = Different Grade; **N** = New (not in any 2009 ORSS)

2009 Oregon Science Standards that are not aligned to any New Oregon Science Standard (NGSS) are included at the end of the document. The bulleted statements at the beginning of the document provide summary information about the differences between the two sets of standards..

Grade: 1

- *Waves and Their Applications in Technologies for Information Transfer* is a new concept not in the 2009 ORSS.
- The 2009 ORSS Life Science Standards partially correlate to NGSS Life Science Topic if you combine some of the Grade 1-3 Life Science Standards, but the **application** of content knowledge greatly increases the rigor for students' understanding.
- Content for 2009 ORSS Standards K-1 combined is a strong alignment to NGSS.
- NGSS Engineering Design Standards are K-2 grade-band specific.

NGSS PE	2009 ORSS	NGSS Content	NGSS Practice	NGSS CCC	Notes on Alignment
<i>1-PS4 Waves and Their Applications in Technologies for Information Transfer</i>					
1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	1.3S.1 1.3S.2	N	P	N	<i>Waves and Their Applications in Technologies for Information Transfer</i> is a new concept not in the 2009 ORSS.
1-PS4-2. Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.	1.3S.1 1.3S.2	N	P	N	
1-PS4-3. Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.	1.3S.1 1.3S.2	N	P	N	
1-PS4-4. Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	1.4D.1 1.3S.1	N	P P	N	
<i>1-LS1 From Molecules to Organisms: Structures and Processes</i>					
1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	1.1L.1 1.2L.1 1.4D.1 1.3S.1 1.4D.2	P P	P P	S	NGSS are more specific than the 2009 ORSS.
1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	1.1L.1 3.1L.1 2.3S.2	P D	D/P	D	
<i>1-LS3 Heredity: Inheritance and Variation of Traits</i>					
1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	1.1L.1 3.1L.1 1.3S.2 2.3S.2	P D P		D	

Alignment of Oregon's 2014 Science Standards (NGSS) with 2009 Oregon Science Standards (2009 ORSS)

Degree of Alignment Codes: **S** = Strong; **P** = Partial; **D** = Different Grade; **N** = New (not in any 2009 ORSS)

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Grade: 1

NGSS PE	2009 ORSS	NGSS Content	NGSS Practice	NGSS CCC	Notes on Alignment
<i>1-ESS1 Earth's Place in the Universe</i>					
1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.	K.1E.1 K.2E.1 2.2E.1 1.3S.2 2.3S.2	D/P D/P D			The observations recorded need to reflect the patterns.
1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	2.2E.1 1.3S.2 2.3S.2	D			
<i>K-2-ETS1 Engineering Design</i>					
K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	K.3S.1 K.4D.1 1.4D.1. 2.4D.1 2.4D.3		P P D D D	P	Engineering Design content of the 2009 ORSS K-2 learning progression when combined with Science Inquiry creates a strong alignment. All of these are partially aligned, because the NGSS are based on a grade K-2 band.
K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	K.4D.2 2.4D.3		P D	P	
K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	K.4D.1 2.3S.1 2.4D.3		P D D	P	
2009 ORSS not aligned to any NGSS:					
1.3S.3 Describe why recording accurate observations is important in science.					
1.4D.3 Show how tools are used to complete tasks every day.					