* Waves and their Application Technologies is a new concept.
* The Oregon Life Science Standards partially correlate to NGSS Life Science Topic if you combine some of the Grade 1-3 Life Science Content Standards, but the **application** of content knowledge greatly increases the rigor for students’ understanding.
* Content for Oregon Standards K-1 combined is a strong alignment to NGSS.
* NGSS Engineering Design Standards are K-2 grade-band specific. Future work will determine grade-level learning progression.

| NGSS PE | ORSS | Content | Practice | CCC | Notes on Alignment |
| --- | --- | --- | --- | --- | --- |
| 1-PS4 Waves and Their Applications in Technologies for Information Transfer | | | | | |
| 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 | Waves and their application technologies is a new concept. |
| 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 |  |
| 1-LS1 From Molecules to Organisms: Structures and Processes | | | | | |
| 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 is more specific than the 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 |  |
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| 1-LS3 Heredity: Inheritance and Variation of Traits | | | | | |
| 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 |  |
| 1-ESS1 Earth's Place in the Universe | | | | | |
| 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 | P  D | 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 | P  D | P  D |  |
| K-2-ETS1 Engineering Design | | | | | |
| 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  P  D  D  D | P | Engineering Design content of the ORSS K-2 learning progression when combined with Science Inquiry creates a strong alignment.  All of these will be partial alignment because they 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  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 | P  D  D | P |  |
|  | | | | | |
| The following ORSS are 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. | | | | | |