

Splash Curriculum Alignment with NGSS and the California State Teaching Standards  
June 2020

Each lesson of Splash’s curriculum *Life in our Watershed: Investigating Vernal Pools* has been correlated to California Next Generation Science Standards, California Common Core State Standards for Mathematics, California Common Core State Standards for English Language Arts, and California History/Social Science Content Standards developed by the California Department of Education. The tables below summarize this correlation to the standards in a lesson-by-lesson format for grade levels 4 and 5. Additionally, the standards cited align with the hands-on activities and outdoor learning experiences that students engage in during their cumulative field trip day at Splash. Please refer to <https://www.cde.ca.gov/be/st/ss/> for detailed descriptions of the standards cited.

<b>Lesson 1: The Watershed Connection</b> Students review the water cycle and learn how a watershed functions.		
Subject	Grade 4	Grade 5
<b>NGSS Science</b>	4-ESS2-1, 4-ESS2-2 A & E	5-PS2-1, 5-ESS2-2 A & C
<b>History/ Social Science</b>		
History of California	4.1.3, 4.1.4, 4.1.5, 4.4.7	4.1.3, 4.1.4, 4.1.5, 4.4.7
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A,	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A,
Language	L3, L4, L6	L3, L4, L6

<b>Lesson 2: Introduction to Vernal Pools</b> Students learn the characteristics of a vernal pool.		
Subject	Grade 4	Grade 5
<b>Science</b>	4-ESS1-1	5-ESS2-1, 5-ESS3-1
<b>History/ Social Science</b>		
History of California	4.1.3, 4.2.1	4.1.3, 4.2.1
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10,	RI1, RI2, RI3, RI4, RI7, RI10,

	RFS3, RFS4-A	RFS3, RFS4-A
Language	L3, L4, L6	L3, L4, L6

### Lesson 3: The Three Phases of the Vernal Pool Ecosystem

Students learn the three phases of vernal pools and how this ecosystem is adapted to the wet and dry extremes of California's Mediterranean climate.

Subject	Grade 4	Grade 5
<b>Science</b>	4-LS1-1 A & D, 4-LS1-2	5-LS2-1 A & B
<b>History/ Social Science</b>		
History of California	4.1.3	4.1.3
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Language	L3, L4, L6	L3, L4, L6

### Lesson 4: Looking like a Scientist

Students raise and observe Fairy Shrimp in the classroom; They learn to apply the scientific method and present results using graphs.

Subject	Grade 4	Grade 5
<b>Science</b>	3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3 B & C	3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3 B & C, 5-PS1-2
<b>Mathematics</b>	OA, NBT, NF, MD, G	OA, NBT, NF, MD, G
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Writing	WS9	WS9
Language	L2, L3, L4, L6	L2, L3, L4, L6

### Lesson 5: Tools for the Pools

Students learn the concept of size and scale and learn which magnification tools are needed

to observe various critters.

Subject	Grade 4	Grade 5
<b>Science</b>		5-PS1-1, 5-PS1-3
<b>Mathematics</b>	OA, NBT, NF, MD, G	OA, NBT, NF, MD, G
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Language	L3, L4, L6	L3, L4, L6

**Lesson 6: Create Your Own Critter Guide**

Students learn to use organizational features of printed text to find information, discern main ideas, and create pages for a critter guide. Each student conducts research, and uses the information in future lessons.

Subject	Grade 4	Grade 5
<b>Science</b>	4-LS1-1, 4-LS1-2	5-PS3-1
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Writing	WS2, WS4, WS5, WS7, WS8, WS9-B	WS2, WS4, WS5, WS7, WS8, WS9-B
Language	L2, L3, L4, L6	L2, L3, L4, L6

**Lesson 7: Critter Commercial**

Students learn about other critters in the food web, as they complete a commercial for their vernal pool critter and take notes on other presentations. This lesson prepares students for the field trip, when they will share critter information with their group and their tour guide.

Subject	Grade 4	Grade 5
<b>Science</b>	3-5-ETS1-1, 3-5-ETS1-2, 4-ESS2 E	5-PS3-1, 5-LS2-1 A, 3-5-ETS1-1, 3-5-ETS1-2
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10,	RI1, RI2, RI3, RI4, RI7, RI10,

	RFS3, RFS4-A	RFS3, RFS4-A
Writing	WS2, WS4, WS5, WS7, WS8, WS9-B	WS2, WS4, WS5, WS7, WS8, WS9-B
Speaking and Listening	SL1-A-D, SL2, SL4	SL1-A-D, SL2, SL4
Language	L1, L2, L3, L4, L6	L1, L2, L3, L4, L6

### Lesson 8: What's for Dinner?

Students explore how a food web works, where their critter fits in the food web, and the importance of plants and water quality to aquatic food webs.

Subject	Grade 4	Grade 5
<b>Science</b>		5-PS3-1, 5-LS2-1 A & B
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Language	L3, L4, L6	L3, L4, L6

### Lesson 9: Flower Facts

Students learn the biology of flowers and how and why pollination occurs.

Subject	Grade 4	Grade 5
<b>Science</b>	4-LS1-1 A, 4-ESS2 E	5-LS1-1, 5-LS2-1
<b>Mathematics</b>	OA, NF, MD, G	OA, NF, MD, G
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Language	L3, L4, L6	L3, L4, L6

### Lesson 10: Create Your Own Flower Guide

Students learn to use organizational features of printed text to find information, discern main ideas, and create one page for a flower guide.

Subject	Grade 4	Grade 5
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<b>Science</b>	3-5-ETS1-1, 3-5-ETS1-2, 4-LS1-1 A, 4-ESS2 E	5-LS1-1, 5-LS2-1, 3-5-ETS1-1, 3-5-ETS1-2
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Writing	WS2, WS4, WS5, WS7, WS8, WS9-B	WS2, WS4, WS5, WS7, WS8, WS9-B
Language	L3, L4, L6	L3, L4, L6

<b>Lesson 11: Create an Origami Book</b> Students create a unique book to share their knowledge of vernal pools.		
Subject	Grade 4	Grade 5
<b>Science</b>	4-ESS3-1, 3-5-ETS1-1	5-ESS3-1, 3-5-ETS1-1
<b>Mathematics</b>	MD, G	MD, G
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Writing	WS2, WS4, WS5, WS7, WS8, WS9-B	WS2, WS4, WS5, WS7, WS8, WS9-B
Language	L2, L3, L4, L6	L2, L3, L4, L6

<b>Lesson 12: Water Quality</b> Students learn about the importance of clean water and see the effects of pollution using the watershed model and living Fairy Shrimp. Students think of ways to reduce their pollution contribution.		
Subject	Grade 4	Grade 5
<b>Science</b>	4-ESS3-1 A	5-ESS3-1
<b>Mathematics</b>	OA, MD	OA, MD
<b>History/ Social Science</b>		
History of California	4.4.6, 4.4.7	4.4.6, 4.4.7

<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Language	L3, L4, L6	L3, L4, L6

<b>Lesson 13: How You Can Help</b>		
Students review the importance of keeping water clean and explore ways to share their knowledge with others.		
<b>Subject</b>	<b>Grade 4</b>	<b>Grade 5</b>
<b>Science</b>	4-ESS3-1, 3-5-ETS1-2 B, 4-ESS2 E	5-ESS3-1, 3-5-ETS1-1, 3-5-ETS1-2 B
<b>English Language Arts</b>		
Reading	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A	RI1, RI2, RI3, RI4, RI7, RI10, RFS3, RFS4-A
Writing	WS2, WS4, WS5, WS7, WS8, WS9-B	WS2, WS4, WS5, WS7, WS8, WS9-B
Speaking and Listening	SL1-A-D, SL2, SL4	SL1-A-D, SL2, SL4
Language	L1, L2, L3, L4, L6	L1, L2, L3, L4, L6