

A Day of STEAM – Session Descriptions

August 8, 2019 | Puget Sound Educational Service District & Arts Impact



<p>1A 3/5 Arts Infused Science</p>	<p>Protecting Our Salmon: Superstars of the Northwest Meredith Essex</p>	<p>Respect and responsibility for our environment is explored through analyzing the interaction of human and natural systems and subsystems. Salmon and their local ecosystems are a focus with students observing, drawing, and cutting out a template for a salmon. Paper and other trash materials are then reused for collage salmon shapes, details, habitat, and symbols showing positive or negative human impact in ecosystem. Last, participants title their art and write an artist statement.</p>
<p>1B PreK-2 Arts/Math</p>	<p>Bee Friendly: The Math, Art and Science of Bees Remy Poon, Beverly Harding Buehler</p>	<p>Why are bees so important to humans? What can we do to help them survive as our climate changes? Do you know why bees build their hives with tessellated hexagons instead of any other kind of shape? Come explore the math and science and art of shapes that fit together in this STEAM lesson for PreK – 1st grade. We will buzz through the attributes of polygons, play with the many patterns we can make with tessellated shapes, and create our own 3D models of ideal bee habitats.</p>
<p>1C PreK-3 Early Learning</p>	<p>Ramps and Pathways: Bringing Physics, Engineering, and Inquiry into the Classroom Whitney White</p>	<p>Tap into children’s inner scientist by exploring physics and engineering in the PreK- 2nd grade space. In this hands-on session, you will design, build, and experiment with ramps and pathways to move an object from one end to the other. Leave with activities, questions, and teaching principles to bring this experience into your classroom.</p>
<p>1D Math/ Science</p>	<p>How can math and science modeling help us understand and solve the problem of plastic? Leslie Nielsen</p>	<p>Participants will use modeling to explore the problem of plastic disposal and how recycling and changing consumer use of plastic can lead to solutions. As we use modeling, we will learn about the modeling progression in mathematics and how it relates to and overlaps with modeling in the NGSS.</p>
<p>1E K-5 Climate Science</p>	<p>Do we really have to stop eating Salmon to save the Southern Resident Orca Whales? Cheryl Lydon</p>	<p>The NGSS encourages us to anchor student learning in local and relevant phenomena when possible. In this session you will have an adult-learning experience of anchoring the science learning in a current and important issue in Washington state: The plight of the Southern Resident Orca Whales.</p>

2A	Geometric Shapes in Action	Teachers/Participants identify attributes of shapes and parts of shapes in pattern blocks and in art. Students then draw and cut out circles, triangles, quadrilaterals, and irregular pentagons and hexagons to use as drawing templates. Templates are then traced in pen for a final composition. Direction of line and shape are arranged to create movement in composition. Teachers/Participants also partition shapes into halves, quarters, and thirds. Compositions are refined by adding linear details in pen and areas of color within shapes using watercolor pencil.
K-2 Visual Arts Math	Meredith Essex	
2B	Save the Salmon!	Participants engaged in a project-based learning lesson where we try to solve the challenge of helping salmon survive. We discover many challenges salmon face at every life stage and habitat. We create a dance to communicate how we can help overcome these challenges.
K-5 Arts Infused STEAM	Debbie Gilbert	
2C	Erosion at DIY Sand and Water Tables	What happens to land when water runs downhill? How do the shapes of the land change? Why do they? What can trees and plants do to change that? Young creative scientists and engineers learn the science of erosion at sand and water tables. In this hands-on arts infused science workshop we will design and build our own DIY water and sand tables that children can make, and predict and test our theories of erosion through sand, water and play. (Each teacher will take home the sand/water table that they create).
P-K Arts Infused Science	Beverly Harding Buehler, Whitney White	
2D	Exploring Biodiversity through Art and Mathematics	In this session, participants will use mathematics and art to understand and make sense of the biodiversity in the habitat surrounding PSESD and the Black River Complex. We will engage in the scientific and artistic practice of deep observation. From our observations we will explore and use mathematics to analyze and understand what we have observed.
3-5 Arts & Math	Leslie Nielsen	
2E	Is Climate Change Too Scary to Talk About with Kids?	Children can be overwhelmed by the troubles climate change can bring. In this session we will learn how learning about science by teaching Next Generation Science Standards can help students (and us) feel empowered and hopeful about our ability to meet this challenge.
K-5 Climate Science	Cheryl Lydon	