Alignment of Activities

The following shows the alignment of *A Head Start on Science* activities with the Scientific Inquiry, Physical Sciences, Life Sciences, and Earth Sciences strands of the California Preschool Learning Foundations.

Please note: *A Head Start on Science: Encouraging a Sense of Wonder* (Ritz, 2007) was created long before our current standards documents. The information below represents the best fit between the activities in A Head Start on Science and the California Preschool Learning Foundations (2012). Some modification of the activities may be needed to better align with the specific standards listed here.

The Senses

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Useful Hand Lenses	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.3** Identify and use a greater variety of observation and measurement tools. May spontaneously use an appropriate tool, though may still need adult support. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Looking at Me	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.3** Identify and use a greater variety of observation and measurement tools. May spontaneously use an appropriate tool, though may still need adult support. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**LS1.2** Indicate greater knowledge of body parts and processes (e.g., eating, sleeping, breathing, walking) in humans and other animals.

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Prism Play	**1.2** Observe objects and events in the environment and describe them in greater detail. **2.1** Record information more regularly and in greater detail in various ways, with adult assistance, including pictures, words (dictated to adults), charts, journals, models, photos, or by tallying and graphing information.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Color Walk	**1.2** Observe objects and events in the environment and describe them in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound). **ES1.1** Demonstrate increased ability to investigate and compare characteristics (size, weight, shape, color, texture) of earth materials such as sand, rocks, soil, water, and air.
Shape Walk	**1.2** Observe objects and events in the environment and describe them in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Light to See	**1.2** Observe objects and events in the environment and	

Activity

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Sound: Shake, Rattle, and Roll	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
A Sound Walk	**1.2** Observe objects and events in the environment and describe them in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Vibrations	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate,

Activity	Scientific Inquiry	Physical, Life, and Earth Science
A Touch Collage	**1.2**	

Activity	Scientific Inquiry	Physical, Life, and Earth Science
A Windy Day		

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Shadows on my Playground	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.6** Demonstrate an increased ability to make inferences and form generalizations based on evidence.	**ES2.1** Demonstrate an increased ability to observe and

Physical Science

Activity	Scientific Inquiry	Physical, Life, and Earth Science
What's Magnetic?	**1.1** Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment. **1.2** Observe objects and events in the environment and describe them in greater detail. **1.6** Demonstrate an increased ability to make inferences and form generalizations based on evidence. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Magnetic Scavenger Hunt	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.5** Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect).	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Magnetic Force through Objects	**1.1** Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment. **1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail.	0.09.2(l)-4.68(r)-3.9(o-1.6253(, s)-2.3h)-3.9(op)10.8h)-4.6(a)9.2(l)-1.6(r)6.b(onm)17.l)-4

Activity	Scientific Inquiry	Physical, Life, and Earth Science

Activity

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Building with Blocks	-	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Will it Roll?	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **1.5** Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect). **1.6** Demonstrate an increased ability to make inferences and form generalizations based on evidence. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound). **PS2.2** Demonstrate an increased ability to observe and describe in greater detail the motion of objects (in terms of speed, direction, the ways things move), and to explore the effect of own actions on the motion of objects, including changes in speed and direction.

Activity

Critters

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Critters: Roly-Poly Sow Bugs	**1.1** Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment. **1.2** Observe objects and events in the environment and describe them in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**LS1.1** Identify characteristics of a greater variety of

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Critters: Snails	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.3** Identify and use a greater variety of observation and measurement tools. May spontaneously use an appropriate tool, though may still need adult support. **2.2** Share findings and explanations, which may be	

Activity	Scientific Inquiry	Physical, Life, and Earth Science

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Looking for Birds	**1.2**	

Activity	Scientific Inquiry

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Water Drops	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound). **PS2.1** Demonstrate an increased awareness that objects and materials can change in various ways. Explore and describe in greater detail changes in objects and materials (rearrangement of parts; change in color, shape, texture, form, and temperature).
Water Magic	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **1.5** Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect). **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Bubble Makers	**1.1** Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment. **1.2** Observe objects and events in the environment and describe them in greater detail. **1.3** Identify and use a greater variety of observation and measurement tools. May spontaneously use an appropriate tool, though may still need adult support. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **1.5** Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect). **1.6** Demonstrate an increased ability to make inferences and form generalizations based on evidence. **2.1** Record information more regularly and in greater detail in various ways, with adult assistance, including pictures, words (dictated to adults), charts, journals, models, photos, or by tallying and graphing information. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound).
Sand Sculptures	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.3** Identify and use a greater variety of observation and measurement tools. May spontaneously use an	

Activity	Scientific Inquiry

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Making Oobleck	**1.2** Observe objects and events in the environment and describe them in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound). **PS2.1** Demonstrate an increased awareness that objects and materials can change in various ways. Explore and describe in greater detail changes in objects and materials

Seeds

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Seeds in Our Food	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4**	

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Sorting Seeds	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.3** Identify and use a greater variety of observation and measurement tools. May spontaneously use an appropriate tool, though may still need adult support. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**PS1.1** Demonstrate increased ability to observe, investigate, and describe in greater detail the characteristics and physical properties of objects, and of solid and nonsolid materials (size, weight, shape, color, texture, and sound). **LS1.1** Identify characteristics of a greater variety of animals and plants and demonstrate an increased ability to categorize them.
How are Seeds Alike?	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**LS1.1** Identify characteristics of a greater variety of animals and plants and demonstrate an increased ability to categorize them.
Soaking Seeds	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail. **1.5** Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to teanei(s)-2.3(t)-4.6(o t)eh tons, oa6(o t)-3.9(f)6.9ad (.8(s)-2.3(t)-4.6(o t)-4.6(e)2 >>BDp(a)-D 20 e, c	

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Seeds to Plants	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.5** Demonstrates an increased ability to make predictions and check them (e.g., may make more complex predictions, offer ways to test predictions, and discuss why predictions were correct or incorrect). **2.2** Share findings and explanations, which may be correct or incorrect, more spontaneously and with greater detail.	**LS1.1** Identify characteristics of a greater variety of animals and plants and demonstrate an increased ability to categorize them. **LS2.1** Observe and explore growth in humans, animals, and plants and demonstrate an increased understanding that living things change as they grow and go through transformations related to the life cycle (for example, from a caterpillar to butterfly). **LS2.2** Develop a greater understanding of the basic needs of humans, animals, and plants (e.g., food, water, sunshine, shelter).
Terrariums	**1.2** Observe objects and events in the environment aste1(a)	

Activity

Activity	Scientific Inquiry

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Adopting a Tree		

Activity	Scientific Inquiry	Physical, Life, and Earth Science
Leaves: Falling for You!	**1.2** Observe objects and events in the environment and describe them in greater detail. **1.4** Compare and contrast objects and events and describe similarities and differences in greater detail.	**LS1.1** Identify characteristics of a greater variety of animals and plants and demonstrate an increased ability to categorize them. **LS2.1** Observe and explore growth in humans, animals, and plants and demonstrate an increased understanding that living things **ES2.3** Demonstrate an increased ability to notice and describe the effects of weather and seasonal changes on their own lives and on plants and animals.