

EPSD Curriculum and  HMH SCIENCE DIMENSIONS 2018 Alignment TEMPLATE

GRADE 1

EPSD Unit 3: Mimicking Organisms to Solve Problems
Second Marking Period

<p>Overview: In this unit of study, students develop an understanding of how plants and animals use their parts to help them survive, grow, and meet their needs. Students also need opportunities to develop possible solutions. As students develop possible solutions, one challenge will be to keep them from immediately implementing the first solution they think of and to instead think through the problem carefully before acting. Having students sketch their ideas or make a physical model is a good way to engage them in shaping their ideas to meet the requirements of the problem. The crosscutting concept of structure and function is called out as an organizing concept for the disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in constructing explanations, designing solutions, and in developing and using models. Students are expected to use these practices to demonstrate understanding of the core ideas.</p>	HMH Science Dimensions Program Resources		
	<p>Unit 5: Living Things and Their Young Unit Video (lion licking her cub to clean it); Unit Overview p. 217; Vocabulary p. 219 Connecting with NGSS p. 219H; Unit Project p. 219I; Unit Performance Task pp. 270-271; Unit Review pp. 272-274</p>		
	<p>Standard for all Units: Interactive Glossary (D); Leveled Readers (D); Beginning-of-Year Test (D/P); Unit Pretest (D/P); Lesson Quizzes (D/P); Unit Test (D/P)</p> <p>Note: Refer to the Curriculum Alignment Common Language (CACL) Guide to decipher acronyms.</p>		
	<p>Lesson 1: How Do Plants Look Like Their Parents? pp. 220-235</p> <p>D/P- CYEI (digital pictures) Young plant and parent plant p. 221</p> <p>D/P- CYEI Student identify how they can tell if two plants are the same kind of plant. p. 221</p> <p>D/P- Young and Old (Students explore online to find out more about parent</p>	<p>Lesson 2: How Do Animals Look Like Their Parents? pp. 236-253</p> <p>D/P- CYSI (video) Adult swan and her young p. 237</p> <p>D/P- CYSI Students see a young animal and they want to find an adult animal that is of the same kind. Students identify what they should look for. p. 237</p>	<p>Lesson 3: How Do Animals Take Care of Their Young? pp. 254-269</p> <p>D/P- CYEI (video) Frog carrying tadpole up a tree p. 255</p> <p>D/P- CYEI How do animals help their young survive? p. 255</p> <p>D/P- Staying Safe (Students explore online to find out more about how</p>
<p>Standards: (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</p>	<p>Instructional Days: 20-25</p>		

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<p>survive, grow, and meet their needs. (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.</p>		<p>plants and their offspring.) pp. 222-223 P- AWYK (ENB) Students conduct research and draw pictures to show how a young plant may look different from its parent plant; students justify features of their drawings with evidence from the lesson or from personal observations. p. 223 D/P- Compare Parts (Students explore online to compare parts of young plants and parent plants.) pp. 224-225 P- AWYK Read, Write, Share! (Students work in small groups to research how an adult plant looks when it is young; students draw a picture to compare the young plant to the adult plant.) p. 225 D/P- Compare Adult Plants (Students watch video and explore online to learn more about how plants of the same kind are alike and different.) pp. 226-227</p>	<p>D/P- Animals Grow (Students explore online to find out more about how a panda grows and changes.) pp. 238-239 P- AWYK (ENB) Students work with a partner to draw pictures to show an animal when it is young and when it is an adult; students talk with partner about how their animal grows and changes, provide evidence and record evidence in their ENB. p. 239 D/P- Compare Parts (Students watch video and explore online to compare the body features of young animals and their parents.) p. 240 D/P- HO Activity Observe Brine Shrimp (Students explore how brine shrimp hatch and change as they grow into adults; student can watch video about how to set up and perform the activity.) pp. 241-242</p>	<p>animals stay safe.) pp. 256-257 D/P- DTM Compare Numbers (Students compare numbers to find out which number is greater.) p. 258 P- AWYK (ENB) Students work with classmates to find pictures of animals and their young staying safe; students talk about what the animals do to stay safe, use evidence to make a chart to show patterns and record in their ENB. p. 258 D/P- Finding Food (Students watch videos and explore online to learn more about how animals find food.) p. 259 P- AWYK (ENB) Students observe animals around their school and identify what the animals are doing to find food and survive; students use evidence to make a chart to show patterns they observe and record information in their ENB. p. 260</p>
<p>Objective 1: Students will be able to name at least three foods that birds eat. Students will be able to name three adaptations birds have for survival.</p> <p>Objective 2: Students will explore various methods of seed dispersal.</p> <p>Objective 3: Students will solve a human problem by mimicking the external parts of plants or animals. Students will also participate in small-group conversations.</p> <p>Objective 4: Students will work through a series of stations that allow them to look at adaptation that ants have. Students will design a wood-chopping tool based on an ant’s tool to chop a blade of grass.</p>				
<p>Topics: Animal and Plant Parts Themes and Skills include: The Four C’s</p> <ul style="list-style-type: none"> • Environmental Literacy 				

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<p>Essential Questions: How can humans mimic how plants and animals use their external parts to help them survive and grow?</p>	<p>P- AWYK (ENB) Students work in a group to sort pictures of plants by kind and use evidence to explain how they sorted; Students record explanation in their ENB. p. 227</p> <p>P- DTM Students compare the heights of three plants, order their plants from shortest to tallest, and draw to show how they ordered their plants. p. 228</p> <p>D/P- HO Activity Grow Carrot Tops (Students grow two carrot plants from carrot tops and record observations over a ten-day span, compare the plants, and look for patterns; students can watch video about how to set up and perform the activity.) pp. 229-230</p> <p>P- CER Using the HO Activity, students make a claim and support claim with evidence. p. 230</p> <p>D/P- TIF (enrich) People in Science and Engineering: Gregor Mendel; Watch a Pumpkin Grow pp. 231-232</p>	<p>P- CER Students write a claim that explains whether animals of the same kind look different from each other as they grow. p. 242</p> <p>P- AWYK (ENB) Students observe animals and describe their body parts; students use evidence to support their claims and record in their ENB. p. 243</p> <p>D/P- Compare Body Coverings (Students compare and contrast the body features of young animals and their parents and explore online to learn more about body coverings of young animals and their parents.) pp. 244-245</p> <p>P- AWYK Read, Write, Share! (Students research an animal to find out what its covering looks like when it is young and when it is an adult; students draw pictures to show what they found.) p. 245</p>	<p>D/P- Young Animals Learn (Students explore online to find out more about what young animals learn from their parents.) p. 261</p> <p>p- AWYK Read, Write, Share! With a partner, students reflect on what they have read about how parents take care of their young and make a list of ways that the parents act the same as and differently from their young. p. 262</p> <p>D/P- HO Activity Compare How Animals Learn (Students gather information on how polar bears and lions teach their young to find food and stay safe and use the information to construct evidence about how the animals are alike and different. pp. 263-264</p> <p>P- CER Student write a claim that describes how polar bears and lions are similar in teaching their offspring to survive, and how they are different in</p>
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	<p>D/P- Lesson Check p. 233 D/P- Self Check pp. 234-235 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 219G P-Extension p. 219G P- COLLAB p. 219H P- Connecting with NGSS p. 219H</p> <p>D- Science Safety HB D-CCC-HB D- ELA-HB D- M- HB D- SEP-HB D- ScienceSarurs Reference HB</p>	<p>D/P- Animals of the Same Kind (Students explore online to find out more about animals of the same kind that appear different.) pp. 246-247 D/P- DTM Compare and Order Length (Students compare dogs from shortest to tallest.) p. 248 P- AWYK (ENB) Students work with a partner to look through books for animals of the same kind; students use evidence to show and tell how they are alike and different and draw animals in their ENB. p. 248</p> <p>D/P- TIF (enrich) The Butterfly Life Cycle; Pet Investigation Technology pp. 249-250</p> <p>D/P- Lesson Check p. 251 D/P- Self Check pp. 252-253 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 219G P-Extension p. 219G P- COLLAB p. 219H</p>	<p>teaching their offspring to survive. p. 264</p> <p>D/P- TIF (enrich) Careers in Science and Engineering: Zookeeper; On Their Own pp. 265-266</p> <p>D/P- Lesson Check p. 267 D/P- Self Check pp. 268-269 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 219G P-Extension p. 219G P- COLLAB p. 219H P- Connecting with NGSS p. 219H</p> <p>D- Science Safety HB D- CCC-HB D- ELA-HB D- M- HB D- SEP-HB D- ScienceSarurs Reference HB</p>
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		<p>P- Connecting with NGSS p. 219H</p> <p>D- Science Safety HB D- ELA-HB D- M- HB D- ScienceSarurs Reference HB</p> <p>D- YSI Simulation Watch us Grow</p>	
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Curriculum Alignment Common Language (CACL) Guide K-5

Acronym	Word/Phrase	Description
AWYK	Apply What You Know	Hands on opportunities for students to apply learning.
CER	Claims Evidence Reasoning	Students make a claim and gather evidence along the way (during EXPLORATORY activities) to support claim.
CYEI	Can You Explain It	Lesson phenomenon used to ENGAGE students in learning at the beginning of the lesson.
CYSI	Can You Solve It	Lesson phenomenon used to ENGAGE students in learning at the beginning of the lesson.
D	Digital	Program resources and features in interactive digital form.

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DI (ELL/RTI) Extension COLLAB Connections to Science	Differentiated Instruction (English Language Learner/Response to Intervention) Collaboration Connections to Science	A page that lists all learning activities used to differentiate learning, engage students in collaborative activities and connect learning to other subjects.
DTM	Do the Math	Integrated subject learning.
ENB	Evidence Notebook (prompt)	Student notebook or journal used to gather evidence during EXPLORATORY learning activities to support their claims.
ENGIT	Engineer It	Integrated subject learning.
HB CCC-HB ELA-HB M-HB SEP-HB	Handbooks Crosscutting Concepts English Language Arts Math Science and Engineering Practices	Students who need extra support in grasping concepts or to refresh student knowledge of skills.
HO	Hands-On (Activity)	Student collaboration activities.
LS	Language Smarts	Integrated subject learning.
P	Print	Program resources and features in print form.
TIF	Take It Further (enrich)	Enrichment activities for students in print or digital.

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YSI	You Solve It (Simulation)	Open-ended simulation-based learning with multiple answer options.
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