

EPSD Curriculum and  **HMH SCIENCE DIMENSIONS 2018 Alignment TEMPLATE**

GRADE 1

**EPSD Unit 2: Characteristics of Living Things
Second Marking Period**

<p>Overview: In this unit of study, students develop an understanding of how plants and animals use their external parts to help them survive, grow, and meet their needs, as well as how the behaviors of parents and offspring help offspring survive. The understanding that young plants and animals are like, but not exactly the same as, their parents is developed. The crosscutting concept of patterns is called out as an organizing concept for the disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in obtaining, evaluating, and communicating information and constructing explanations. Students are also expected to use these practices to demonstrate understanding of the core ideas. This unit is based on 1-LS3-1 and 1-LS1-2.</p>		HMH Science Dimensions Program Resources			
		<p>Unit 4: Plant and Animal Structures Unit Video (giraffe reaching up to eat leaves); Unit Overview p. 137; Vocabulary p. 139 Connecting with NGSS p. 139J; Unit Project p. 139K; Unit Performance Task pp. 212-213; Unit Review pp. 214-216</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>Standards: (1-LS3-1) Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.</p>	<p>Instructional Days: 10-15</p>	<p>Lesson 1: Engineer It- What Parts Help Plants Live? pp. 140-157</p>	<p>Lesson 2: Engineer It- What Body Parts Help Animals Stay Safe? pp. 158-175</p>	<p>Lesson 3: Engineer It- What Body Parts Help Animals Meet Their Needs? pp. 176-195</p>	<p>Lesson 4: How Do Plants and Animals Respond to Their Environment? pp. 196-211</p>
		<p>D/P- CYSI (video) Seeds twirling and helicopter propelling p. 141</p> <p>D/P- CYSI Observing plants can give people ideas to</p>	<p>D/P- CYSI (video) Hedgehog rolling into a ball p. 159</p> <p>D/P- CYSI Students identify ideas they can get from observing a hedgehog to keep</p>	<p>D/P- CYSI (video) Giraffe eating from a tree p. 177</p> <p>D/P- CYSI Students identify how they can get an idea from observing the</p>	<p>D/P- CYEI (digital pictures) Trees growing in unusual ways p. 197</p> <p>D/P- CYEI Why are the tree growing in</p>
<p>Objective: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of</p>					

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<p>these traits exists in a group of similar organisms.</p>	<p>solve problems. p. 141</p>	<p>something safe. p. 159</p>	<p>giraffe to make a tool that reaches high places. p. 177</p>	<p>unusual ways? p. 197</p>
<p>Topics: Twenty-First Century Themes and Skills include: Environmental Literacy • The Four C’s.</p>	<p>D/P- Plant Parts (Students view digital pictures and explore online to find out more about the parts of the plants.) p. 142</p>	<p>D/P- Moving Away from Danger (Students view digital pictures and explore online to find out more about how animals use their parts to move away from danger.) pp. 160-161</p>	<p>D/P- Parts to Find Food (Students explore online to find out more about how animal eyes and ears help animals.) pp. 178-180</p>	<p>D/P- Plant Places (Students explore online to learn about plants and their adaptations.) p. 198</p>
<p>Essential Questions: How are young plants and animals alike and different from their parents? What types (patterns) of behavior can be observed among parents that help offspring survive?</p>	<p>D/P- DTM Represent Data (Students count the parts of a small plant with flowers and complete the graph.) p. 143 P- AWYK (ENB) Students observe a real plant and draw and label it in their ENB; students use evidence to describe what each plant part does. p. 143 D/P- Shape Up (Students explore online to discover more about how the shape of each plant part helps the plant.) pp. 144-145</p>	<p>P- AWYK (ENB) Read, Write, Share! (Students work with a partner to research how animals move to stay safe and draw pictures of the animals; students identify how the animals move using the words: runs, climbs, swims or flies.) p. 161 D/P- Hiding from Danger (Students explore online to find out more about how animals use their shape and</p>	<p>P- AWYK (ENB) Student identify how they can get an idea from observing animal ears to make something that helps them hear better; students use evidence to explain and record information in their ENB. p. 180 D/P- Parts to Eat Food (Students explore online to learn more about how animals grab and eat food.) pp. 181-182 P- DTM Students work with class to</p>	<p>P- DTM Students measure a plant accurately with connecting cubes and tell how the height of a stem might help the plant survive in its environment. p. 198 D/P- HO Activity Change How a Plant Grows (Students make observations from an investigation to construct an evidence-based account for a plant’s growth pattern; students can watch video online about how to set up and perform the</p>

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	<p>P- AWYK (ENB) Students work in small groups to explain what will happen to a leaf if they cover it with dark paper; students conduct the mini experiment and record answers in ENB. p. 145 D/P- Looking to Nature (Students explore online to find out more about how people mimic what they see in nature.) pp. 146-148 P- AWYK (ENB) Read, Write, Share! (Students work with a partner to research pictures of plants, name solutions that look like those plants, and use evidence to support their claim.) p. 148 D/P- Plant Give Ideas (Students</p>	<p>color to hide.) pp. 162-163 P- AWYK Students use an idea they got from observing an animal and design something to wear that would help them hide during a game of hide-and-seek. p. 163 D/P- Facing Danger (Students explore online to discover more about how animals have parts that help them face danger.) p. 164 P- AWYK (ENB) Students use ideas from observing animals to design a box to keep things safe; students use evidence to explain how the parts keep it safe and record information in their ENB. p. 164 D/P- Staying Safe in Weather (Students explore online to</p>	<p>identify how many flat and sharp teeth people have and make a tally chart. p. 182 D/P- Parts to Breathe and Take in Water (Students watch videos and explore online to find out more about how animals take in oxygen and water) pp. 183-185 P- AWYK Read, Write, Share! (Students look in books with a partner and find one animal that uses lungs and one animal that uses gills; students use evidence to record their explanation.) p. 185 D/P- Animals as Models (Students watch video and explore online to find out more about how engineers use</p>	<p>activity.) pp. 199-200 P- CER Students should make a claim about why their plant grew the way it did and provide evidence. p. 200 D/P- Plants and Season (Students watch video about how plants survive in different season and explore online to find out more about how plants change with the season.) p. 201 P- AWYK (ENB) Students describe some possible effects of a plant not getting sunlight and use evidence to explain their ideas; students draw and write about a way to test their ideas. p. 201 D/P- Animals Use Senses (Students take a closer look</p>
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	<p>explore online to find out more about how plants stay cool.) p. 149 D/P- AWYK Students work with a small group to observe a plant, talk about its shape and what each part does, and use ideas from observing the plant to think of a new solution; students draw, discuss and label their solution. p. 150 D/P- Hands On Activity Engineer It: Observe Plants to Design (Students use an idea from a plant to design and build something that will help keep them cool on hot days; students can view video online about how to set up and perform the activity.) pp. 151-152</p>	<p>find out more about animal parts and weather.) pp. 165-166 P- AWYK (ENB) Student work with a partner to experience the insulating effect of blubber by protecting one hand with shortening and putting both hands in cold water; students tell which hand stays warmer and record their explanation in their ENB. p. 166 D/P- Observe Animals (Students explore online to learn more about how animals can be models for solutions.) pp. 167-168 D/P- DTM Students look at pictures of birds for ideas and design two paper airplanes; students</p>	<p>animals as models to solve problems.) pp. 186-188 P- AWYK (ENB) Students look at classroom tools to think about what animal each tool could have been modeled after; students discuss ideas with classmates and record answers in their ENB. p. 188 D/P- HO Activity Engineer It: Observe Animals to Design (Students use an idea from an animal to design and build a tool that would help them pick up food; students can view video online about how to set up and perform the activity.) pp. 189-190 P- CER Students make a claim that identifies how their</p>	<p>at digital pictures online to learn how animals use different senses to gather information about their environments.) pp. 202-203 P- AWYK (ENB) Students work in groups and talk about how they use their eyes, ears, nose and hands to notice things around them; students use evidence to share their ideas with peers and record ideas in their ENB. p. 203 D/P- Animals on the Move (Students watch video and explore online to find out more about why animals move from place to place.) pp. 204-205 P- AWYK Read, Write, Share!</p>
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	<p>D/P- TIF (enrich) People in Science and Engineering: Janine Benyus; Plants We Eat pp. 153-154</p> <p>D/P- Lesson Check p. 155 D/P- Self Check pp. 156-157 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 139I P-Extension p. 139I P- COLLAB p. 139J P- Connecting with NGSS p. 139J</p> <p>D- Science Safety HB D- CCC-HB D- ELA-HB D- M- HB D- SEP-HB D- ScienceSarurs Reference HB</p>	<p>compare how far each airplane flies. p. 168 D/P- HO Activity Engineer It: Design a Shoe (Students identify problems related to keeping feet safe and use ideas about animal body parts to develop a solution the problem.) pp. 169-170 P- CER Students make a claim about how their preferred solution helps protect feet from the cold and cite evidence. p 170</p> <p>D/P- TIF (enrich) Careers in Science and Engineering: Bioengineer; New Body Parts for Animals pp. 171-172</p> <p>D/P- Lesson Check p. 173</p>	<p>tool is like an animal part. p. 190</p> <p>D/P- TIF (enrich) Animals Can Use Tools; Hear Like a Bat pp. 191-192</p> <p>D/P- Lesson Check p. 193 D/P- Self Check pp. 194-195 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 139I P-Extension p. 139I P- COLLAB p. 139J P- Connecting with NGSS p. 139J</p> <p>D- Science Safety HB D- CCC-HB D- ELA-HB D- M- HB D- SEP-HB D- ScienceSarurs Reference HB</p>	<p>(Students work with a partner to learn about an animal in their area that moves when the weather changes; students draw a picture of the animal, discuss why the animal moves and use evidence to support thoughts. p. 205 D/P- Animals and Seasons (Students explore online to find out more about how animals change with the seasons.) p. 206 P- AWYK (ENB) Students conduct research to learn about an animal in their area; students describe how the animal changes with the seasons and provide evidence to support their claims. p. 206</p>
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		<p>D/P- Self Check pp. 174-174 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 139I P-Extension p. 139I P- COLLAB p. 139J P- Connecting with NGSS p. 139J</p> <p>D- Science Safety HB D- ELA-HB D- M- HB D- SEP-HB D- ScienceSarurs Reference HB</p> <p>D- YSI Simulation Build a Safety Helmet</p>		<p>D/P- TIF (enrich) Careers in Science and Engineering: Forest Ranger; Insects in Winter pp. 207-208</p> <p>D/P- Lesson Check p. 209 D/P- Self Check pp. 210-211 D- Lesson Quiz</p> <p>P- DI (ELL/RTI) p. 139I P-Extension p. 139I P- COLLAB p. 139J P- Connecting with NGSS p. 139J</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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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.
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.

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