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| **SUGGESTED PACING** |
| **STRAND: LIFE SCIENCE (LS)** **Topic: Behavior, Growth and Changes** This topic explores life cycles of organisms and the relationship between the natural environment and an organism’s (physical and behavioral) traits, which affect its ability to survive and reproduce. **Content Statements:*** Plants and animals have life cycles that are part of their adaptations for survival in their natural environments.
* Over the whole earth, organisms are growing, reproducing, dying and decaying. The details of the life cycle are different for different organisms, which affects their ability to survive and reproduce in their natural environments.
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| **PRINT RESOURCES** | **DIGITAL RESOURCES** |
| *ScienceFusion** Unit 4, Lessons 1-3
* Unit 4, TE pages 145A-170A
* Unit 4, Inquiry Flip Chart pages 23-25
* Science and Engineering Leveled Readers:
	+ On-Level/Below Level: *How Do Living Things Change and Grow?*
	+ Above Level: *Surprising Adaptations*
 | *ScienceFusion** Unit 4, Lesson 1 Digital Lesson
* Unit 4, Lesson 2 Digital Lesson
* Unit 4, Lesson 3 Digital Lesson with Virtual Lab
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| **SCIENCE AND ACADEMIC VOCABULARY** |
| Cone, Flower, Germinate, Larva, Life Cycle, Metamorphosis, Pollen, Pollination, Pupa, Reproduce, Spore, Tadpole |
| **DIFFERENTIATION** | **FIELD EXPERIENCE CONNECTIONS** |
| Basic (Extra Support)* Unit 4 Response to Intervention - TE page 143K
* Unit 4 TE pages 146, 151, 156, 159, 162, 164

Advanced (Enrichment)* Unit 4 TE pages 146, 151, 156, 159, 162, 164

English Language Learners* Unit 4 TE pages 143L-143M, 147, 148, 158, 161, 163, 165
 | Chickquest: a Classroom Journey Through the Life Cycle of Chickens***Program Details*** A series of 18 standards-based lessons (30-45 minutes in length) taught over a 3-week period during which eggs are incubating in the elementary classroom. From monitoring living eggs to observing fluffy chicks, these lively activities pique curiosity, encourage collaboration and communication, and provide young scientists with unforgettable experiences. Students learn that agriculture is the number one industry in Ohio and can view a video of the inside of an egg-laying facility to understand the connection between animals, food production and the eggs in their refrigerator. These activities are designed to address the ODE Science Standards for Grade 3.For more information and to register for September 26 & 27, 2016 district-wide training visit: <grownextgen.org/events>  |
| **INQUIRY SKILLS** |
| * Classify
* Communicate
* Compare
* Formulate or Use Models
 | * Gather, Record, Display, or Interpret Data
* Infer
* Measure
* Observe
 | * Plan and Conduct a Simple Investigation
* Use Numbers
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| **HANDS-ON INQUIRY AND APPLICATION** |
| * “Make it Germinate” (Flipchart page 23, TE pages 143D, 145A)
* “Flowers and Cones” (Flipchart page 23, TE pages 143D, 145A)
* “Model a Life Cycle” (Flipchart page 24, TE pages 143E, 155A)
* “Plan a Life Cycle Observation” (Flipchart page 24, TE pages 143E, 155A)
* “How Do Living Things Change?” (Flipchart page 25, TE pages 143F, 169A-170A)
 | *Differentiated Inquiry** Unit 4, TE page 170A
	+ Continue the Life Cycle (Easy)
	+ Dissect Seeds (Average)
	+ Plant Different Seeds (Average)
	+ Cultivate Moss (Challenging)
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| **ASSESSMENTS/PROGRESS MONITORING** | **ASSESSMENT GUIDE** |
| * Sum it Up
	+ Unit 4, Lesson 1 - SE page 152, TE page 152
	+ Unit 4, Lesson 2 - SE page 166, TE page 166
* Brain Check and Apply Concepts
	+ Unit 4, Lesson 1 - SE pages 153-154, TE pages 153-154
	+ Unit 4, Lesson 2 - SE pages 167-168, TE pages 167-168
 | * Lesson Quiz
	+ Unit 4, Lesson 1 - page AG 37
	+ Unit 4, Lesson 2 - page AG 38
	+ Unit 4, Lesson 3 - page AG 39
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| **ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: ELA** |
| Journeys* Writing Connection - TE page 150
* Writing Connection: TE page 160
* Make Connections: TE page 168A
	+ Language Arts Connection: Write a Poem (Challenging)

*Journeys Connections*Lesson 6* Whole Group: Teacher Read Aloud: Bats Are the Best Beasts (T14)
* Whole Group: Anchor Text: Bat Loves the Night (T22)
* Whole Group: Poetry: A Bat is Born (T54)
* Small Group: Vocabulary Reader: Nighttime Animals (T76)
* Small Group: Struggling Reader: Chased by a Bat! (T82)
* Small Group: On Level Reader: A Sound in the Ground (T83)
* Small Group: Advanced Reader: Life in a Cave (T84)

Lesson 8* Whole Group: Teacher Read Aloud: Sweet Berries (T196)

Lesson 18* Whole Group: Teacher Read Aloud: The World Tree (T202)
* Whole Group: Anchor Text: A Tree is Growing (T210)
* Small Group: Struggling Reader: Daffodil Spring (T274)
* Small Group: On Level Reader: Wind in the Pines (T275)
* Small Group: Advanced Reader: The Power of Corn (T276)

Lesson 20* Whole Group: Teacher Read Aloud: Clever Colonies (T388)
* Small Group: Vocabulary Reader: Emperor Penguins (T456)
* Small Group: Struggling Reader: Watch Out! Polar Bears! (T462)

Lesson 22* Whole Group: Anchor Text: The Journey: Stories of Migration (T112)
* Small Group: Vocabulary Reader: Flight of the Swallows (T168)
* Small Group: Struggling Reader: Monarchs on the Move (T174)
* Small Group: On Level Reader: Fish on the Move (T175)
* Small Group: Advanced Reader: Rescuing the Whooping Crane (T176)

Lesson 24* Small Group: Vocabulary Reader: Sea Lions (T354)
* Small Group: Advanced Reader: Friends with Wings (T362)
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| **ACADEMIC CONNECTIONS TO OTHER DISCIPLINES: MATH** |
| Math Expressions* Math Connection - TE page 149
* *Math Expressions Connections:*
	+ Unit 4 Lesson 6: Round to the Nearest Ten MX TE pages 452-456
* Make Connections - TE page 154A
* Math Connection - Solve a Word Problem (Average)
* *Math Expressions Connections:*
	+ Unit 2 Lesson 10: Write First Step Questions for Two Step Problems MX TE pages 250-254
	+ Unit 2 Lesson 11: Make Sense of Two Step Word Problems MX TE pages 258-260
	+ Unit 2 Lesson 13: Play Multiplication and Division Games MX TE page 271
	+ Unit 5 Lesson 7: Write First Step Questions for Two Step Problems MX TE pages 612-614
	+ Unit 5 Lesson 8: Solve Two Step Word Problems MX TE pages 618-626
	+ Unit 5 Lesson 9: Equations and Two Step Word Problems MX TE pages 630-632
	+ Unit 5 Lesson 10: Practice with Two Step Word Problems MX TE pages 636-638
* Math Connection - TE page 157
* *Math Expressions Connections:*
	+ Unit 1 Lesson 2: Multiplication as Equal Groups MX TE pages 13-15
	+ Unit 1 Lesson 6: Building Fluency with 2s and 5s MX TE page 60
	+ Unit 1 Lesson 9: Building Fluency with 2s, 5s, 9s, and 10s MX TE page 85
	+ Unit 1 Lesson 14: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 85-86
	+ Unit 1 Lesson 16: Solve and Create Word Problems MX TE pages 147-148
	+ Unit 1 Lesson 18: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s MX TE pages 159-160
	+ Unit 2 Lesson 4: Write Word Problems and Equations MX TE pages 204-208
	+ Unit 2 Lesson 7: Practice with 6s, 7s, and 8s MX TE page 230
	+ Unit 3 Lesson 10: Solve Word Problems Involving Time MX TE pages 367-368
	+ Unit 3 Lesson 14: Use Graphs to Solve Time and Measurement Word Problems MX TE pages 396-398
	+ Unit 4 Lesson 3: Place Value in Word Problems MX TE pages 432-434
	+ Unit 4 Lesson 4: Practice with Place Value MX TE page 439
	+ Unit 4 Lesson 8: Discuss Addition Methods MX TE page 468
	+ Unit 4 Lesson 9: The Grouping Concept in Addition MX TE page 478
	+ Unit 4 Lesson 17: Solve Word Problems MX TE pages 538-542
	+ Unit 5 Lesson 1: Addition and Subtraction Situations MX TE pages 556-561
	+ Unit 5 Lesson 2: Word Problems with Unknown Addends or Unknown Factors MX TE pages 568-572
	+ Unit 5 Lesson 3: Word Problems with Unknown Starts MX TE pages 576-580
	+ Unit 5 Lesson 4: Comparison Problems MX TE pages 587-594
	+ Unit 5 Lesson 5: Comparison Problems with Misleading Language MX TE pages 598-600
	+ Unit 5 Lesson 6: Word Problems with Extra, Hidden, and Not Enough Information MX TE pages 604-608
* Make Connections - TE page 168A
* Math Connection - Draw It to Scale (Average)
* *Math Expressions Connections::*
	+ Unit 1 Lesson 11: Multiplication and Area MX TE page 107
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