

**3RD
GRADE**

**A Complete 5E Science
Unit with Lesson Plans**

PREVIEW

CHANGING HABITATS



5E Unit Plan

GRADE 3

Engage, Explore, Explain, Extend, Evaluate

CHANGING

HABITATS

**Engage, Explore, Explain,
Extend, Evaluate
NGSS 3-LS4-4**

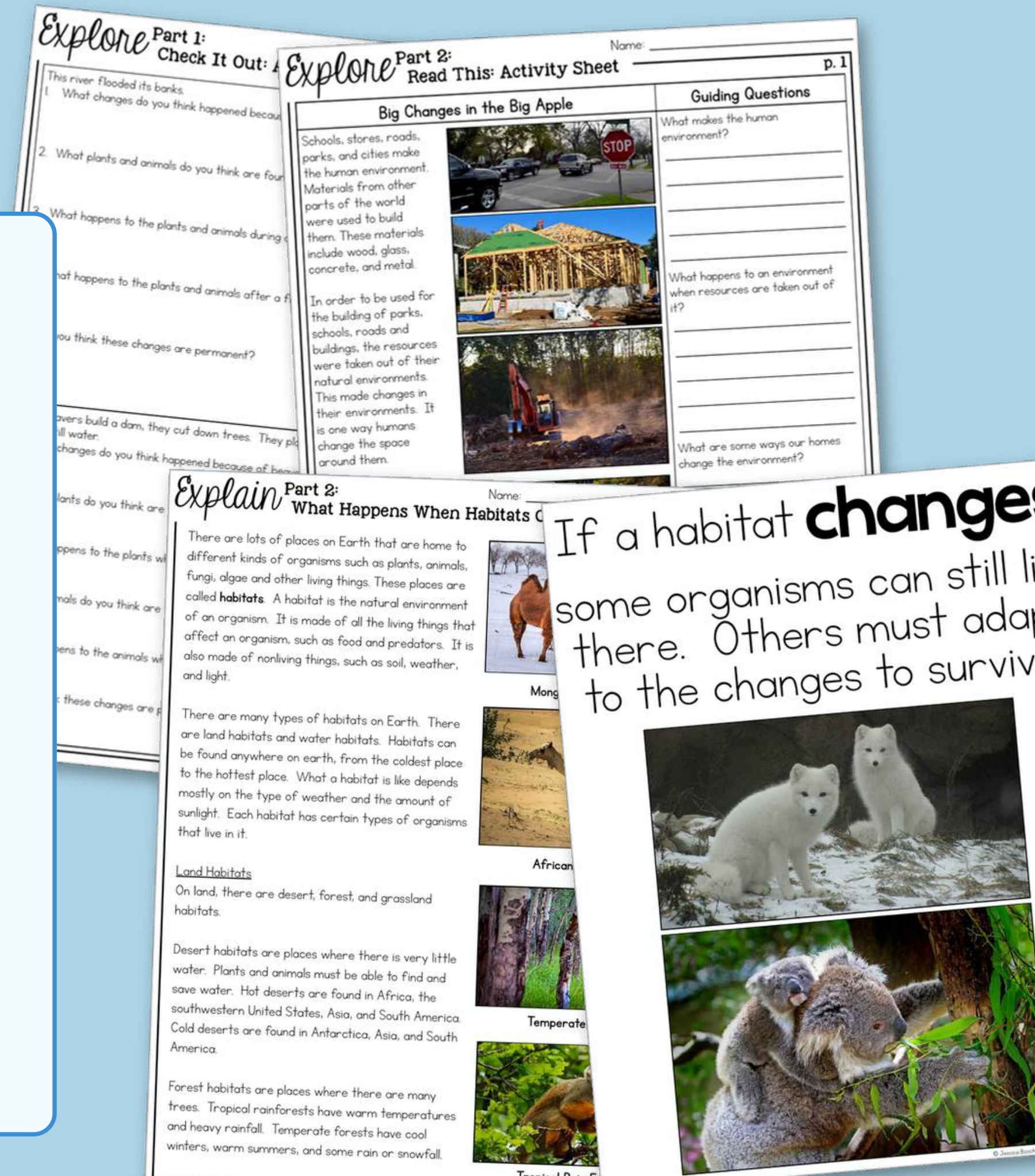


KEEP SCROLLING TO SEE WHAT'S INSIDE!

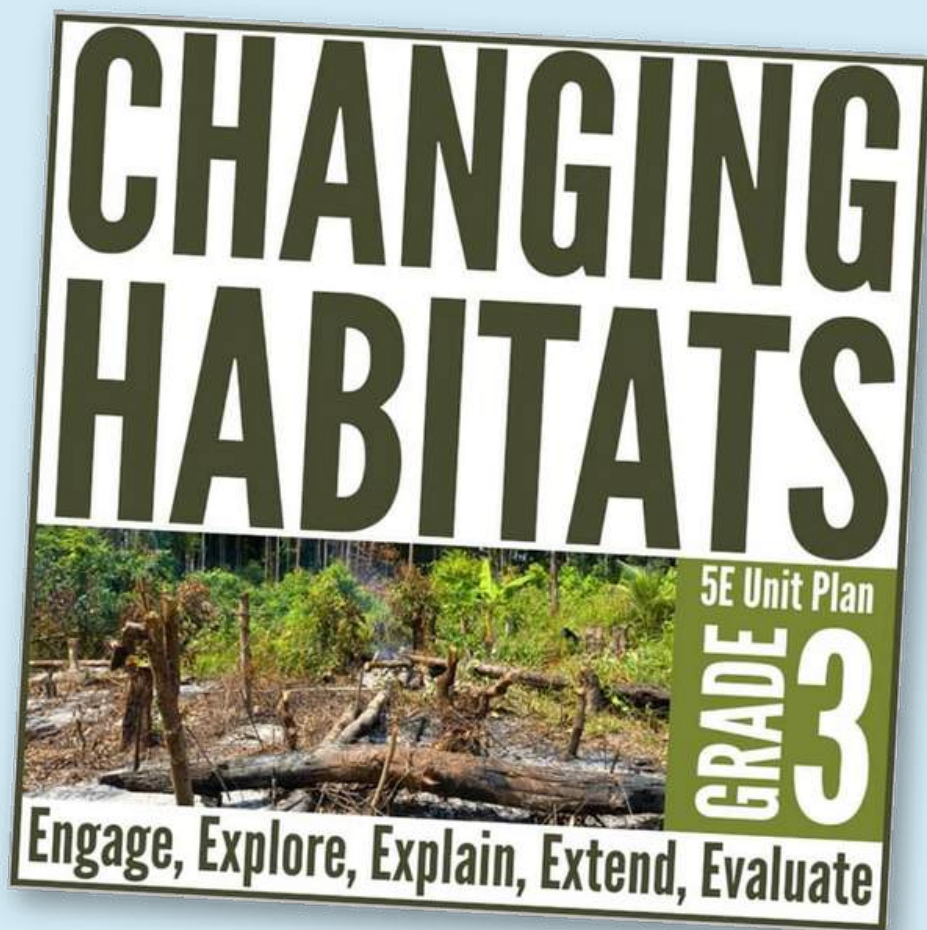
WHAT'S INCLUDED

5E CHANGING HABITATS UNIT

- ✓ 290+ Page 5E Unit Plan
- ✓ Lesson Plans for All 5 Phases
- ✓ Teacher Notes and Misconceptions
- ✓ Materials Checklist and 4 Timelines
- ✓ Habitat Change Investigations
- ✓ Reading Passages on Changing Habitats
- ✓ Vocabulary Cards and Big Idea Posters
- ✓ Exit Tickets in 3 Formats
- ✓ Performance Assessment
- ✓ Answer Keys for Student Pages
- ✓ Google Slides and Google Forms Versions



UNIT AT A GLANCE



- Students sort animals by habitat, study floods and highways, and build a terrarium.
- Teacher background, lesson plans, and student pages in every phase.
- Aligned to NGSS 3-LS4-4.

Table of Contents		
5E Section	Objectives	Durations
Teacher Notes / Common Misconceptions / Materials		
Vocabulary Cards & Big Idea Posters		
Exit Tickets		
Engage	Students will access their prior knowledge about how habitats change and the effects those have on organisms. Student interest in habitat change will be elicited. The teacher will be able to identify student misconceptions about habitat change and how it affects adaptations.	Part 1 (Whole Class) 15 minutes Part 2 (Whole Class) 15 minutes Part 3 (Whole Class) 15 minutes
Explore	Students will work together to investigate what happens as habitats change. They will do this by observing different changes in habitats and how this affects the organisms in those habitats. Students will gather general information about changing habitats. Students will begin to think about how species are adapted to their habitats, and how changes in those habitats may make species unable to survive there.	Part 1 (Whole Class) 15 minutes Part 2 (Whole Class) 15 minutes Part 3 (Whole Class) 15 minutes
Explain	Students will work collaboratively to observe and discover how changes in habitats affect the organisms that live there. Students will listen to the teacher's explanation about what happens when habitats change. Students will use the new information to revise their explanations about changing habitats and how these changes might affect the organisms that live there.	Part 1 (Whole Class) 20 minutes Part 2 (Whole Class) 20 minutes Part 3 (Whole Class) 20 minutes
Extend	Students will apply what they have learned about changing habitats to a new situation. Students will deepen their understanding of how changes in habitats affect the organisms living in them, gaining a more generalized knowledge of this specific scientific concept. The teacher will resolve all persisting student misconceptions about how changing habitats may affect the organisms living in them.	Part 1 (Whole Class) 20 minutes Part 2 (Whole Class) 20 minutes Part 3 (Whole Class) 20 minutes
Evaluate	Students will evaluate their own understanding of habitat change. Students will be able to demonstrate knowledge of the concepts and vocabulary. The teacher will encourage students to ask questions that could lead to future investigations.	Part 1 (Whole Class) 15 minutes Part 2 (Whole Class) 15 minutes Part 3 (Whole Class) 15 minutes

Teacher Notes

Changing Habitats

SE Instructional Model
This Lesson Plan is an inquiry-based unit using the SE Instructional Model. Through open student-led, with the teacher acting mainly as the facilitator. Through open real-life experiences, guided investigations, and research, the students gain understanding of the scientific topics that are covered in the lessons. Each model serves as a foundation to the next, creating a coherent model that activities, and units.

The 5 E's of this method are as follows:
Engagement: Student interest is engaged. They ponder everything they a topic. The teacher identifies any misconceptions at this point.
Exploration: Students explore the topic through hands-on activities. They and reflect more with their classmates on what they know and experience continues to guide by asking open-ended questions.
Explanation: Students connect prior knowledge to experiences they had phase. The teacher explains the concepts, and students draw conclusions investigations.
Extension: Students take their new knowledge and apply it to novel situations poses new questions and provides opportunities for students to investigate point a student's knowledge about a specific topic begins to generalize.
Evaluation: Students evaluate their learning process. They are able to by performance, informal, and formal assessment. The teacher uses assessment to evaluate the students.

For more information on the 5 E's, read the blog post series on SE Teaching why we chose to use the SE method of instruction and provide an in-depth each stage of the model.

Google Sheets Resources
Click the link below to access the FREE DIGITAL UPGRADE. Available Teacher Presentation, Student Sheets, and Exit Cards.

[Click here to upgrade to the FREE Digital Upgrade](#)

Teaching Timeline Options

Changing Habitats

Below and on the following page are four different timeline options for structuring your teaching time with the SE Changing Habitats Unit. 1 & Biodiversity Science Stations; these are included in Option 4.

Option 1: Using Only 5E Unit Plans a

Day 1	Day 2	Day 3	Day 4
Engage Activities 45 minutes	Explore Activities 55 minutes	Explain Activities 60 minutes	Extend Activities 60 minutes

Option 2: Using Only 5E Unit Plans in Time Blocks

Day 1	Day 2	Day 3	Day 4
SE Unit Plan Engage Activities 45 minutes	SE Unit Plan Explore Activities Part 1 & 2 35 minutes	SE Unit Plan Explore Activity Part 3 20 minutes	SE Unit Plan Explain Activities Parts 1 & 2 40 minutes
Day 6	Day 7	Day 8	Day 9
SE Unit Plan Extend Activities Parts 1 & 2 40 minutes	SE Unit Plan Extend Activity Part 3 20 minutes	SE Unit Plan Evaluate Activities Parts 1 & 2 30 minutes	SE Unit Plan Evaluate Activity Part 3 15 minutes

Materials Checklist

5E Changing Habitats

Use the following checklist to make sure you have all the materials for your lessons.

Engage <ul style="list-style-type: none">☐ Activity Sheets☐ Picture Sheet☐ Assortment of animals from around the world. Ideas: Box of animal crackers (1 per group), stickers (like https://amazon.to/2H5wja) or Animal Sheet (provided)☐ Scissors☐ Glue	Explore <ul style="list-style-type: none">☐ Activity Sheet☐ White sand (to fill pan to 2 inches) (https://amazon.to/2TwG0Qa)☐ Plastic pipette (like https://amazon.to/2GCoPPk) or Garden syringe (https://amazon.to/2JtrRCX)☐ 9 x 13 inch (roughly) baking pan or small kitty litter pan☐ 50 mL water (in a beaker or cup)☐ Blue food coloring☐ Small fake or real plants or leaves (no soil/dirt on them)--about 5 per group☐ Ruler☐ Tray (optional)	Evaluate <ul style="list-style-type: none">☐ Activity Sheets☐ 'What I Know' Self-Check☐ Performance Pages☐ Answer Cards☐ Worksheet Activity Sheet☐ Glue☐ Scissors
Explain <ul style="list-style-type: none">☐ Activity Sheets☐ Check It Out Activity Sheet☐ You Try It Activity Sheet☐ Quart jar or 2-liter bottle, top cut off (you will tape this back on when you are finished)☐ Pebbles☐ Activated charcoal (optional)☐ Sphagnum or peat moss, dried (optional)☐ Potting soil☐ Small plants (succulents, ferns, grasses, cacti, orchids, begonias--all these plants can come from cuttings)☐ Fresh moss (optional)☐ Spray bottle of water☐ Tray	Extend <ul style="list-style-type: none">☐ Changing Habitat Links Sheet☐ Activity Sheet☐ Colored Pencils☐ Invasive Species Card☐ Device☐ Quiz Game Boards (optional laminated)☐ Question Card☐ Score Sheet☐ Bingo markers (discs, buttons, bingo daubers, dry/wet erase markers, etc.)	

Table of Contents

Teacher Notes

Timeline Options

Materials Checklist

ENGAGE



Spark curiosity with animal habitats

1 What Is This?

Students look at a picture and answer questions about the place and its living things.

2 My Experiences

Students think about what a pet reptile or rabbit needs to live.

3 Introducing Changing Habitats

Students place animals in the four habitats where they belong.

Teacher background, lesson plans, student pages, and answer key

EXPLORE



Investigate how habitats change

1 Check It Out

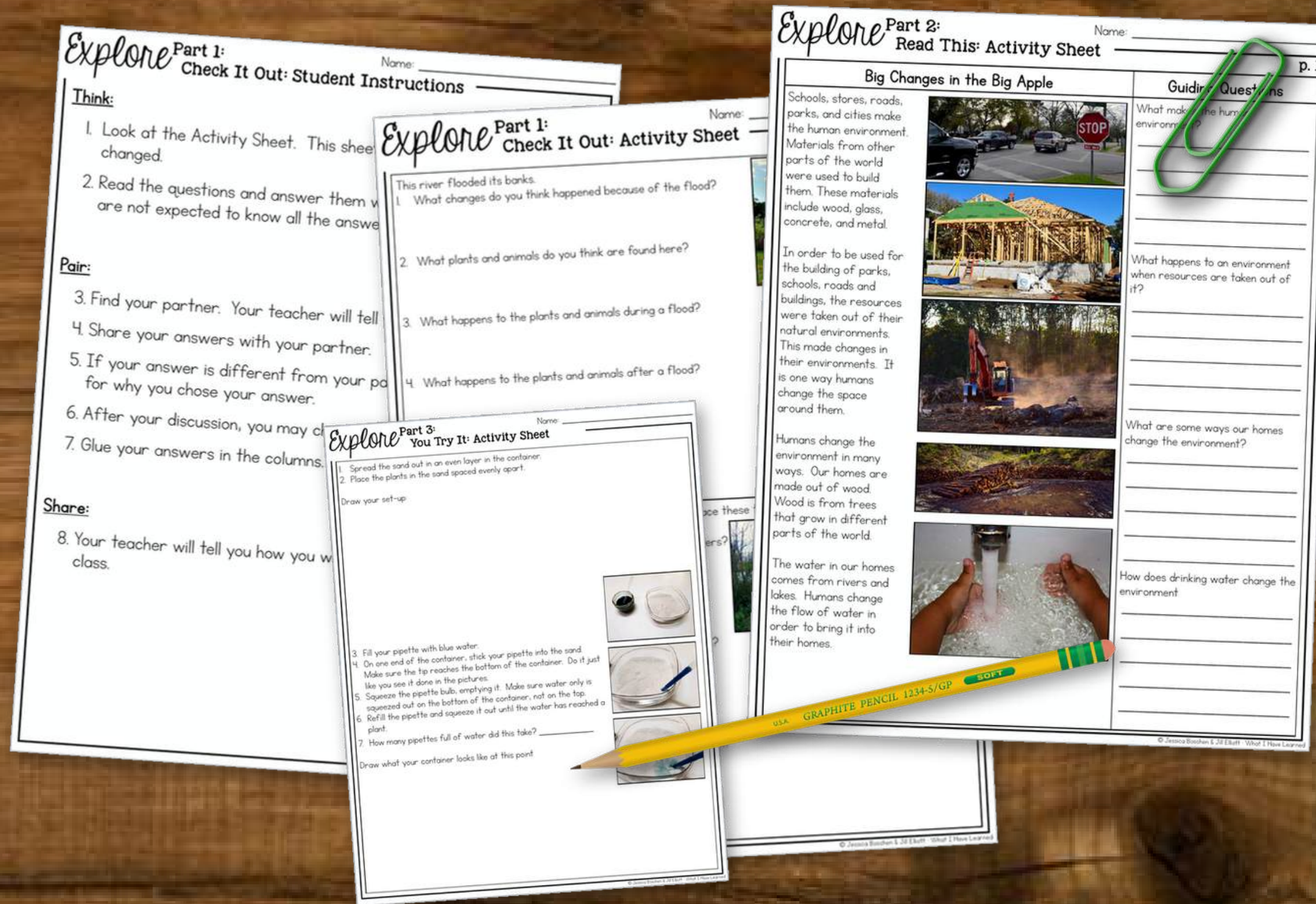
Students look at a flooded river and a new desert highway and predict what changes.

2 Watch and Read This

Students read how people changed the habitat in the Big Apple.

3 You Try It

Students make a sand model and test how water changes a habitat.



Teacher background, lesson plans, student pages, and answer key

EXPLAIN



Build explanations from evidence

1 What Does It Mean?

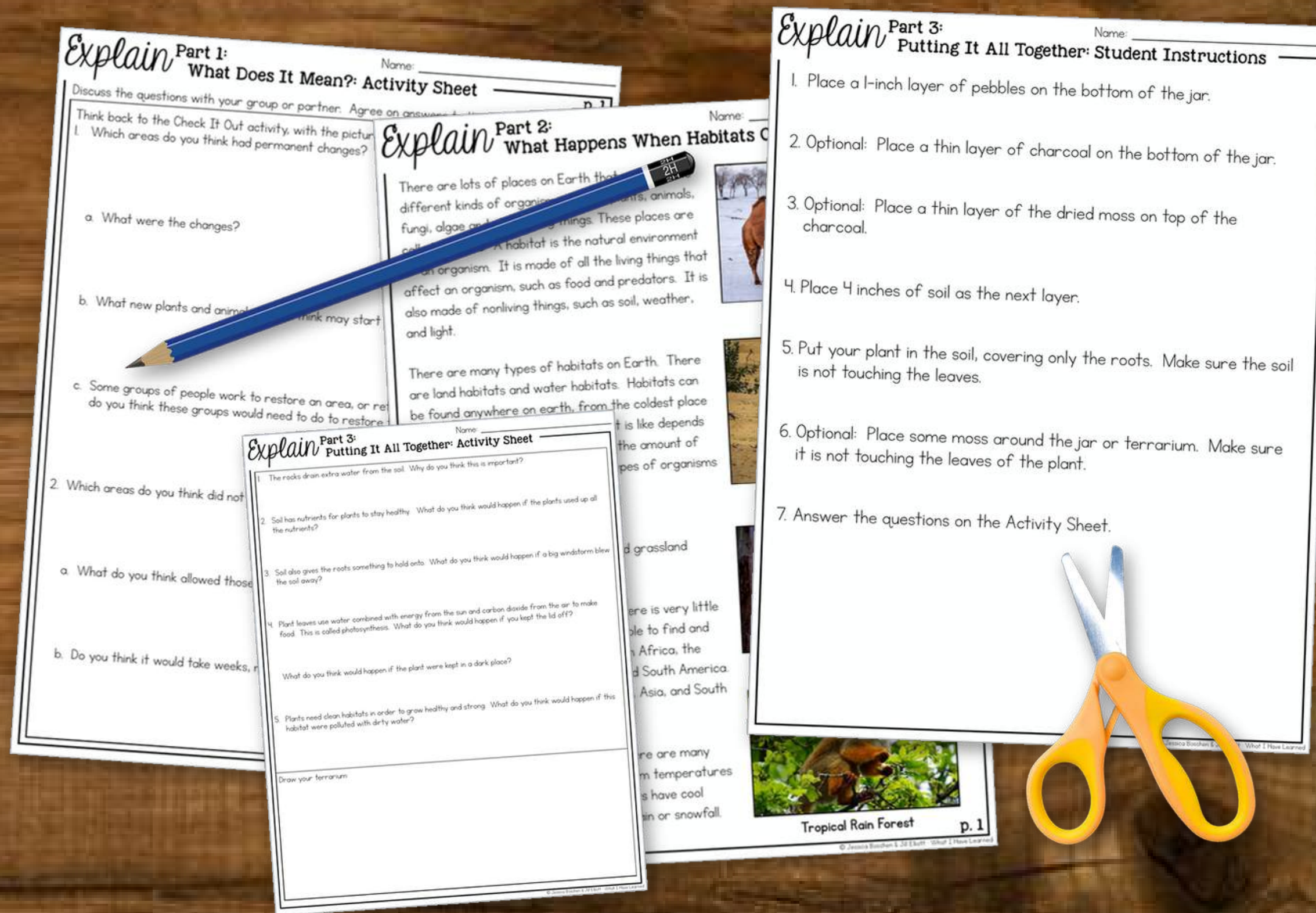
Students decide which changes are permanent and which can be repaired.

2 What Happens When Habitats Change?

Students read about habitats, then sum up what happens to the organisms.

3 Putting It All Together

Students build a terrarium and explain how each part helps the plants.



Teacher background, lesson plans, student pages, and answer key

EXTEND



Apply habitat change to new places

1 Where Are Habitats Changing?

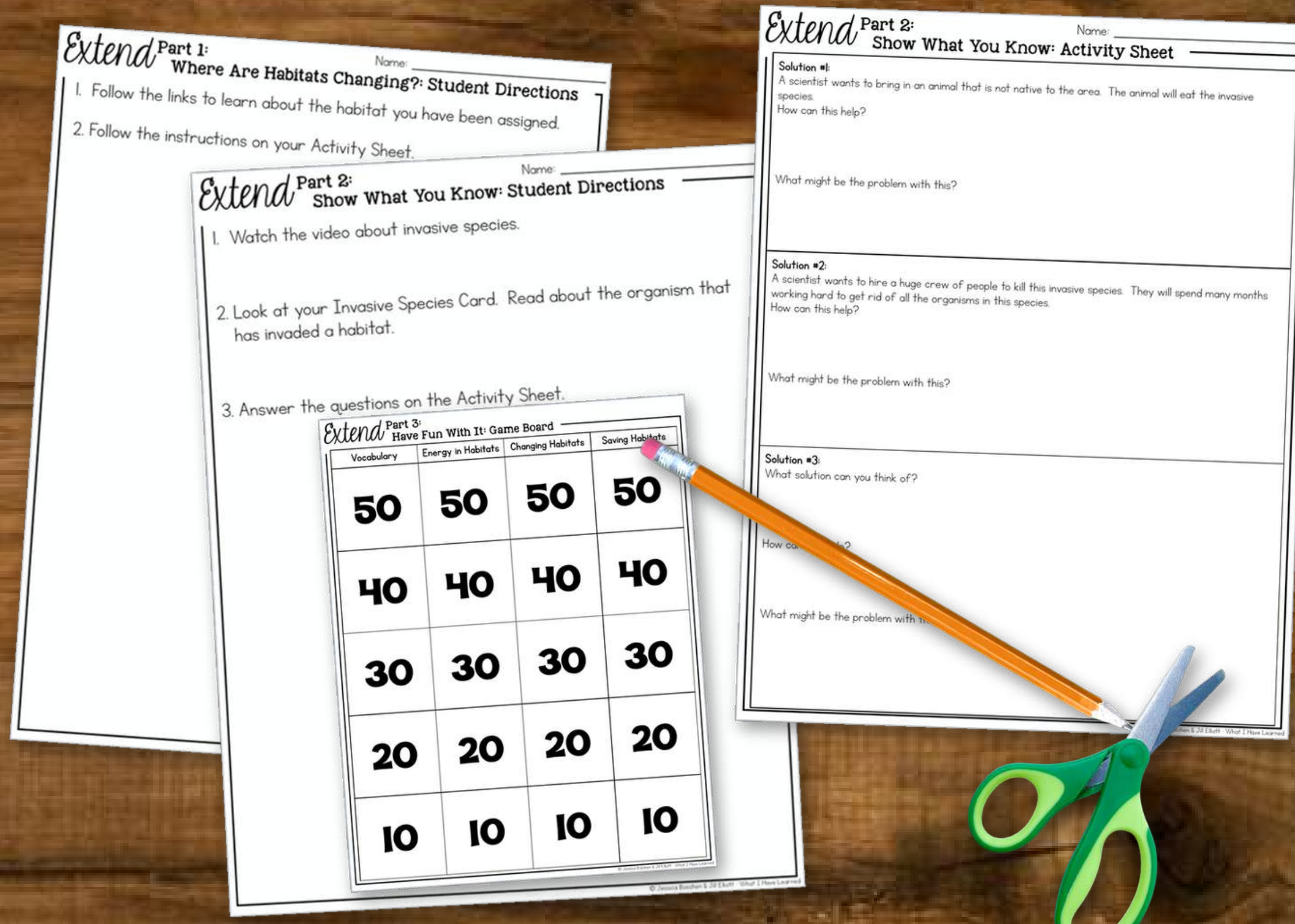
Students follow links to research a habitat and complete an activity sheet.

2 Show What You Know

Students watch a video on invasive species and weigh possible solutions.

3 Have Fun With It

Students play a quiz game board with points in four categories.



Teacher background, lesson plans, student pages, and answer key

EVALUATE



Check understanding with evidence

1

What I Know

Students name producers and consumers and score themselves with a rubric.

2

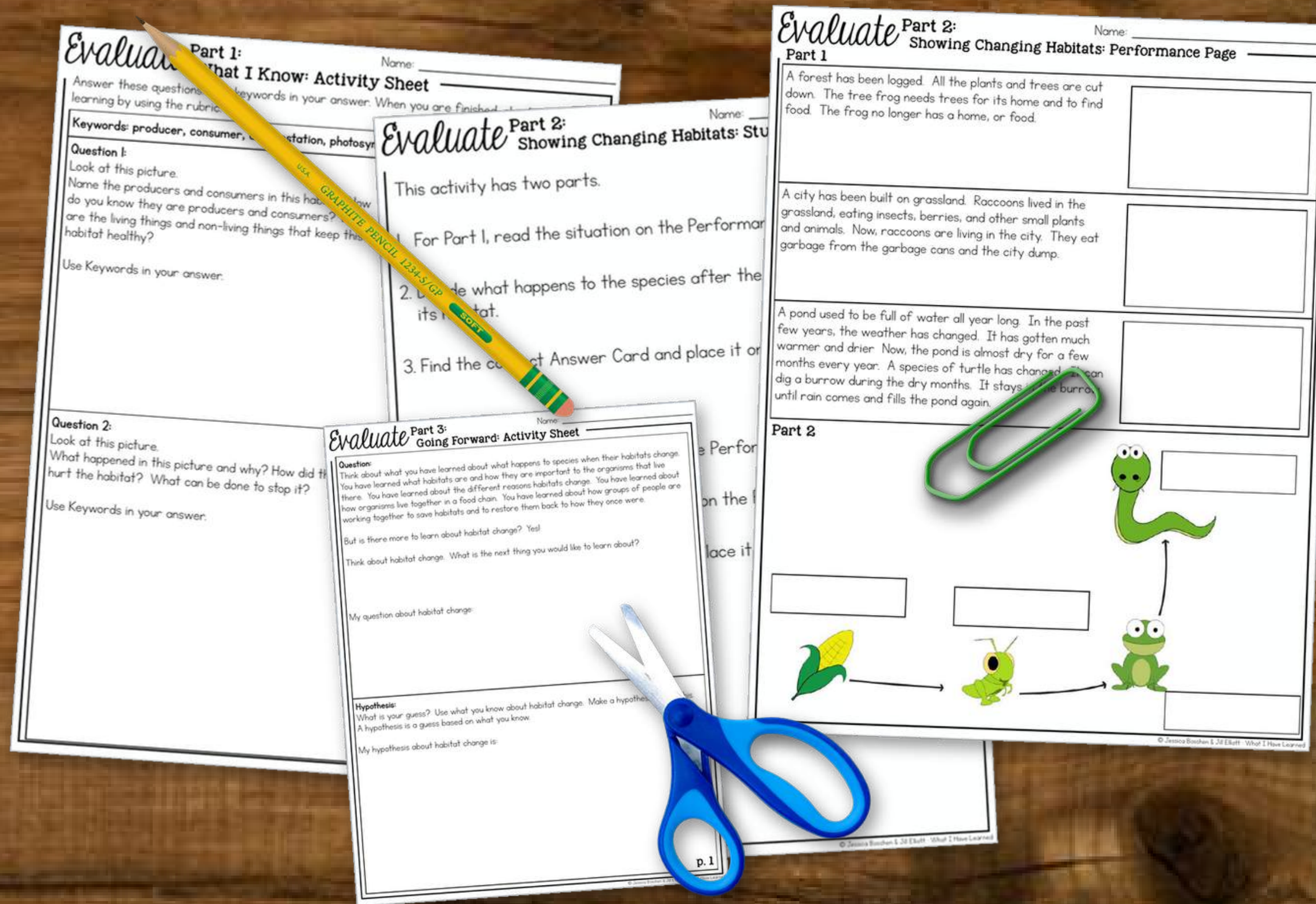
Showing Changing Habitats

Students decide what happens to each species after its habitat changes.

3

Going Forward

Students write a new question and hypothesis about habitat change.



Teacher background, lesson plans, student pages, and answer key

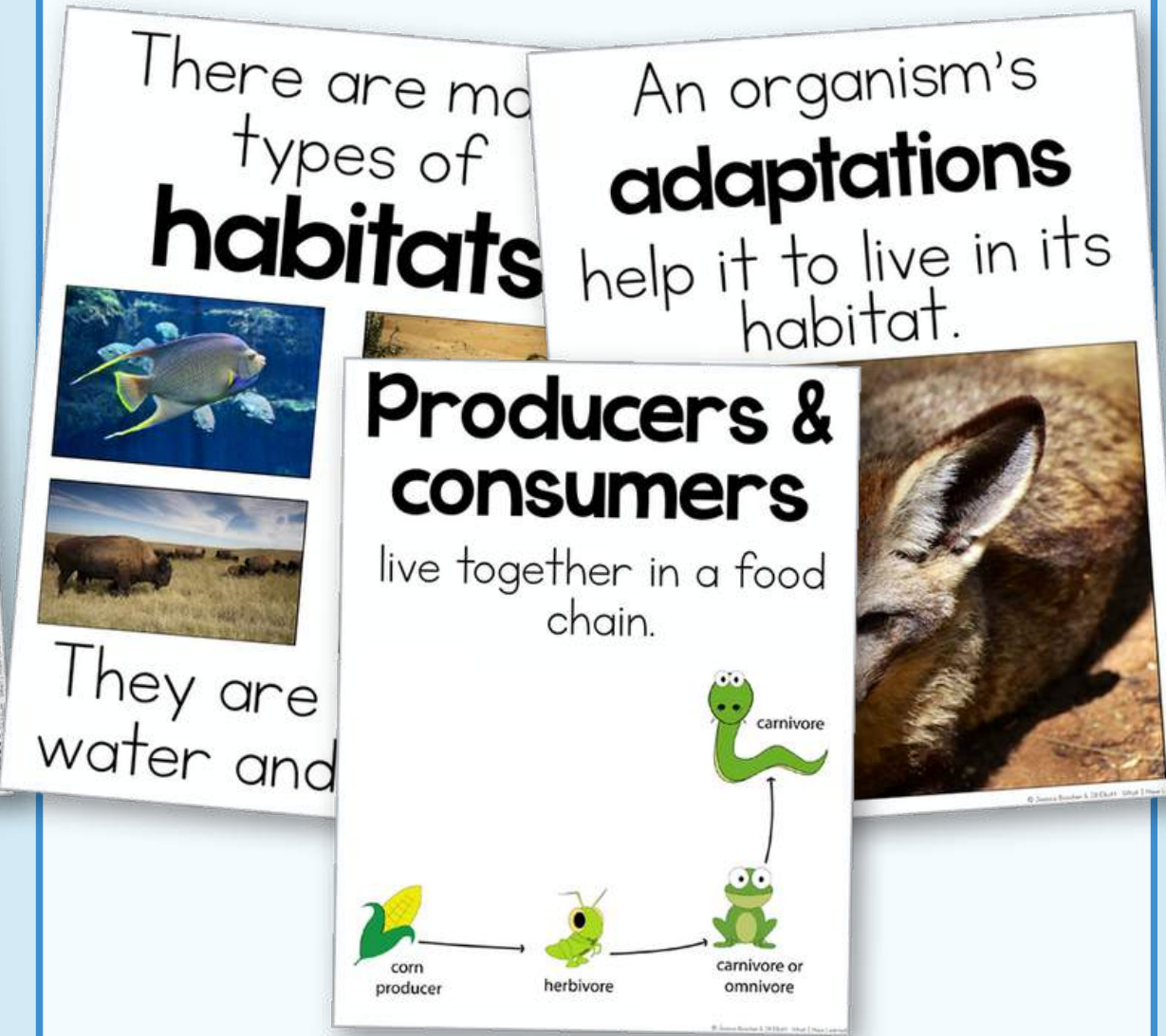
VOCABULARY, POSTERS & EXIT TICKETS

VOCABULARY CARDS



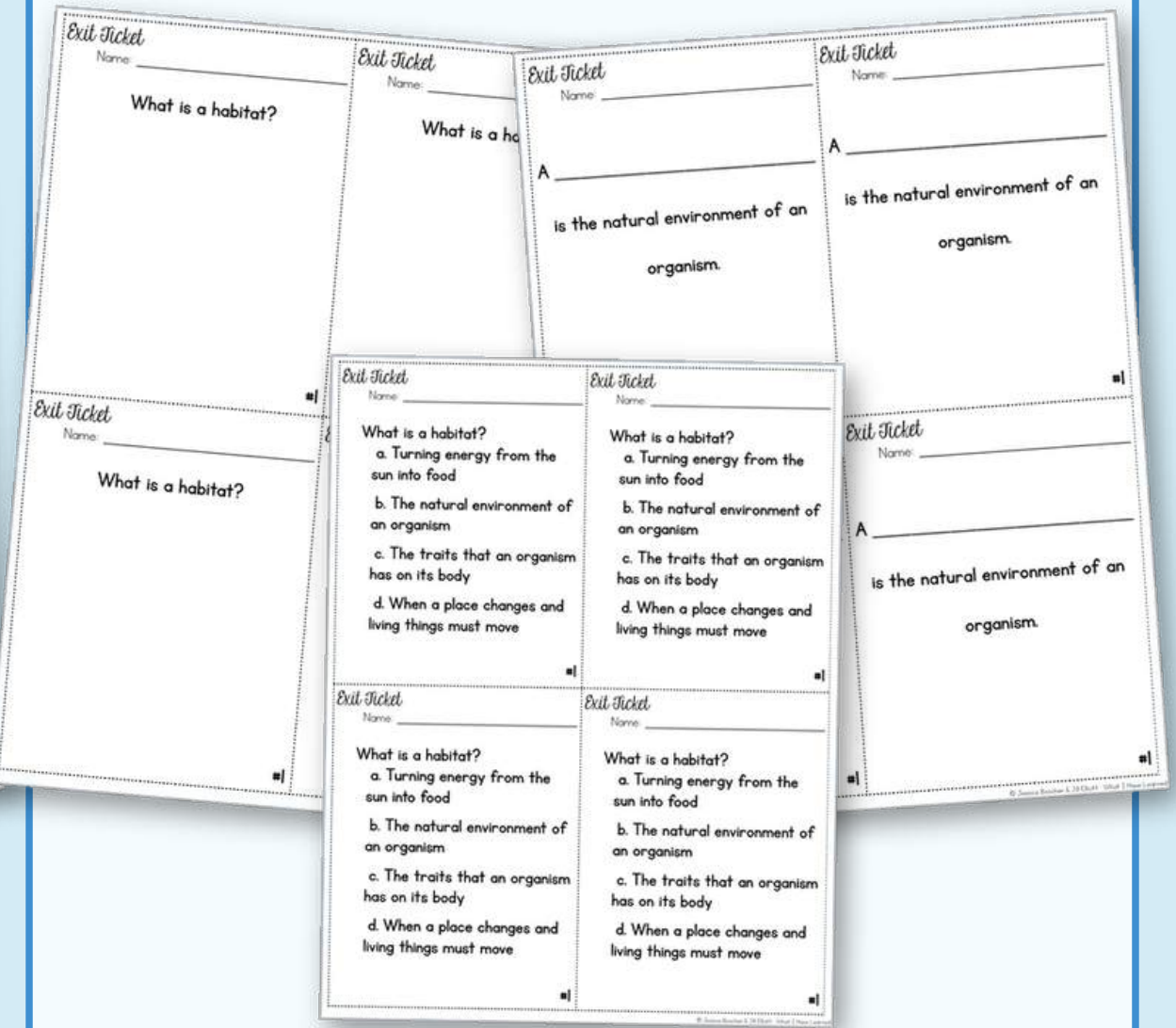
Picture cards and word cards for carnivore, deforestation, conservation, food chain, and more.

BIG IDEA POSTERS



Five posters on habitats, adaptations, and food chains.

EXIT TICKETS



15 exit tickets, each in short answer, fill-in-the-blank, and multiple choice formats.

WAYS TO USE IN YOUR CLASSROOM

1 Whole-Class 5E Unit

Teach one phase a day over 5 days as written, with 45 to 60 minutes per phase.

2 Shorter Science Blocks

Spread the unit across 9 days in shorter time blocks when science minutes are limited.

3 Alongside Science Stations

Add the Ecosystems and Biodiversity Science Stations for a 9-day plan.

4 Formative Checks

Use the exit tickets throughout the unit to see who needs reteaching before the performance activity.

Teaching Timeline Options
Changing Habitats

Below and on the following page are four different timeline options for how you might consider structuring your teaching time with the 5E Changing Habitats Unit. If you have the Ecosystems & Biodiversity Science Stations, these are included in Option 4.

Option 1: Using Only 5E Unit Plans as Written

Day 1	Day 2	Day 3	Day 4	Day 5
Engage Activities 45 minutes	Explore Activities 55 minutes	Explain Activities 60		

Option 2: Using Only 5E Unit Plans as Written in Time Blocks

Day 1	Day 2	Day 3	Day 4	Day 5
5E Unit Plan Engage Activities 45 minutes	5E Unit Plan Explore Activities Part 1 & 2 35 minutes	5E Unit Plan Explore Activity Part 3 20 minutes		
5E Unit Plan Extend Activities Parts 1 & 2 40 minutes	5E Unit Plan Extend Activity Part 3 20 minutes	5E Unit Plan Evaluate Activities Parts 1 & 2 30 minutes		

Option 3: Using only 5E Unit Plans Abbreviated

Day 1	Day 2	Day 3	Day 4	Day 5
Engage Activity Part 3 15 minutes	Explore Activity Part 3 20 minutes	Explain Activity Part 2 20 minutes	Extend Activity Part 2 20 minutes	Evaluate Activity Part 1 15 minutes

Option 4: Supplementing 5E Unit Plans with the Ecosystems & Biodiversity Science Stations as Whole Group Lessons

Day 1	Day 2	Day 3	Day 4	Day 5
5E Unit Plan Engage Activities 45 minutes	5E Unit Plan Explore Activities Parts 1 & 2 35 minutes	5E Unit Plan Explore Activity Part 3 15 minutes <u>Watch: Food Chains</u> (questions optional) 5 to 20 minutes	5E Unit Plan Explain Activities Parts 1 & 2 40 minutes	5E Unit Plan Explain Activity Part 3 15 minutes <u>Play: Habitats and Food Chains</u> (questions optional) 5 to 20 minutes
5E Unit Plan Extend Activities Parts 1 & 2 40 minutes	5E Unit Plan Extend Activity Part 3 20 minutes <u>Explore: Invasive Species OR Read: Leave It to Beavers</u> 20 minutes	5E Unit Plan Evaluate Activities Parts 1 & 2 30 minutes	5E Unit Plan Evaluate Activity Part 3 15 minutes <u>Diagram: You Offer Eat</u> 20 minutes	

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TEACHING TIMELINE OPTIONS

Option 1 5 days

As Written

Day 1
Engage

45 min

Day 2
Explore

55 min

Day 3
Explain

60 min

Day 4
Extend

60 min

Day 5
Evaluate

45 min

Option 2 9 days

Shorter Time Blocks

Day 1
Engage

45 min

Day 2
Explore
1-2

35 min

Day 3
Explore
3

20 min

Day 4
Explain
1-2

40 min

Day 5
Explain
3

20 min

Day 6
Extend
1-2

40 min

Day 7
Extend
3

20 min

Day 8
Evaluate
1-2

30 min

Day 9
Evaluate
3

15 min

Option 3 5 days

Abbreviated

Day 1
Engage
3

15 min

Day 2
Explore
3

20 min

Day 3
Explain
2

20 min

Day 4
Extend
2

20 min

Day 5
Evaluate
1

15 min

Option 4 9 days

With Science Stations

Day 1
Engage

45 min

Day 2
Explore
1-2

35 min

Day 3
Explore
3

15 min

+20 station

Day 4
Explain
1-2

40 min

Day 5
Explain
3

15 min

+20 station

Day 6
Extend
1-2

40 min

Day 7
Extend
3

20 min

+20 station

Day 8
Evaluate
1-2

30 min

Day 9
Evaluate
3

15 min

+20 station

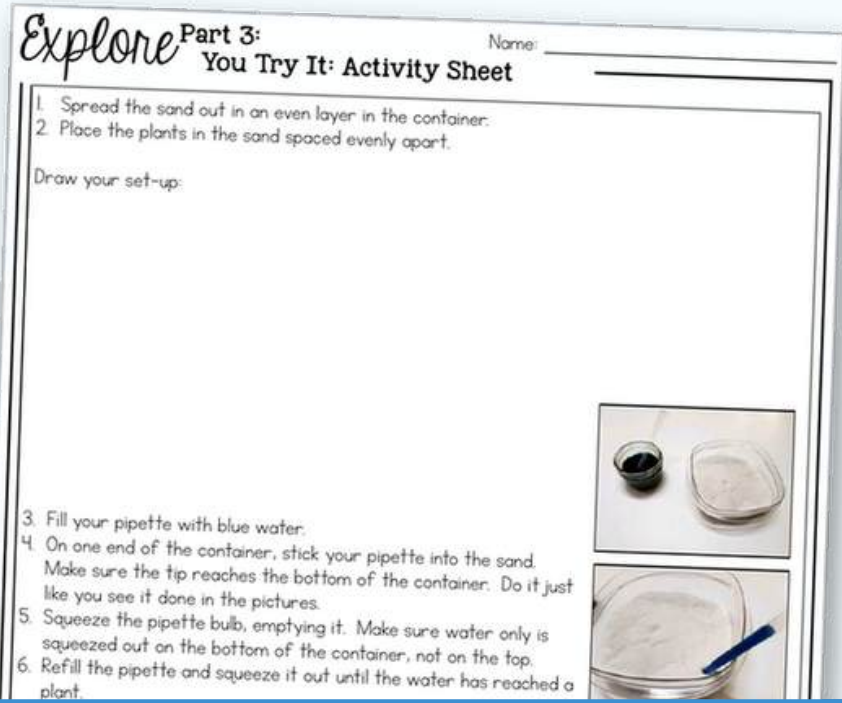
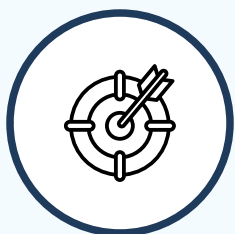
Orange days are Science Station lessons. Magenta notes are extra station activities you can add that day.

YOU WILL LOVE THIS BECAUSE



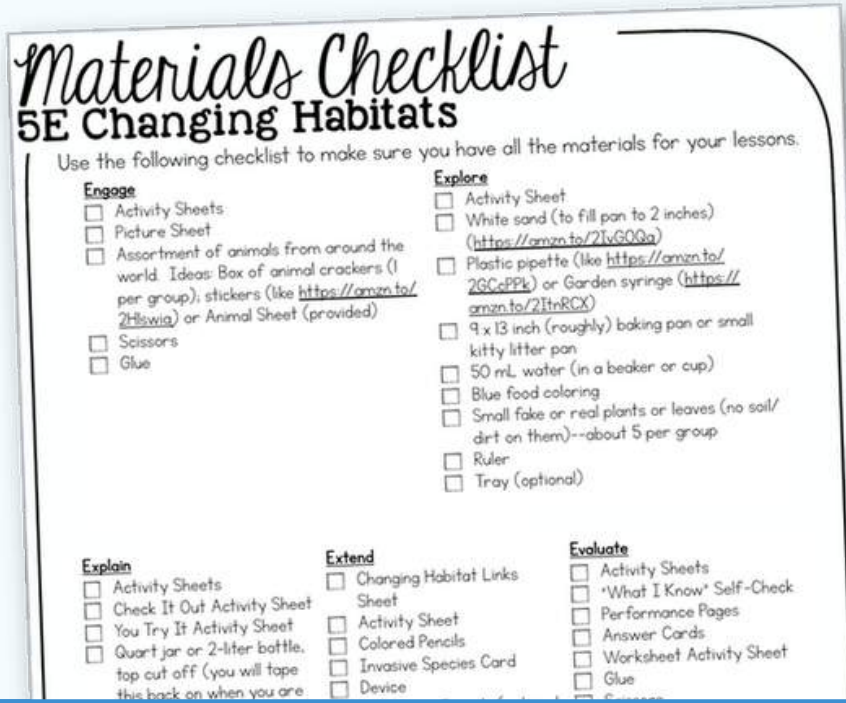
Hands-On From Day One

Students sort animals, model a flood, and build a terrarium, so habitat change makes sense.



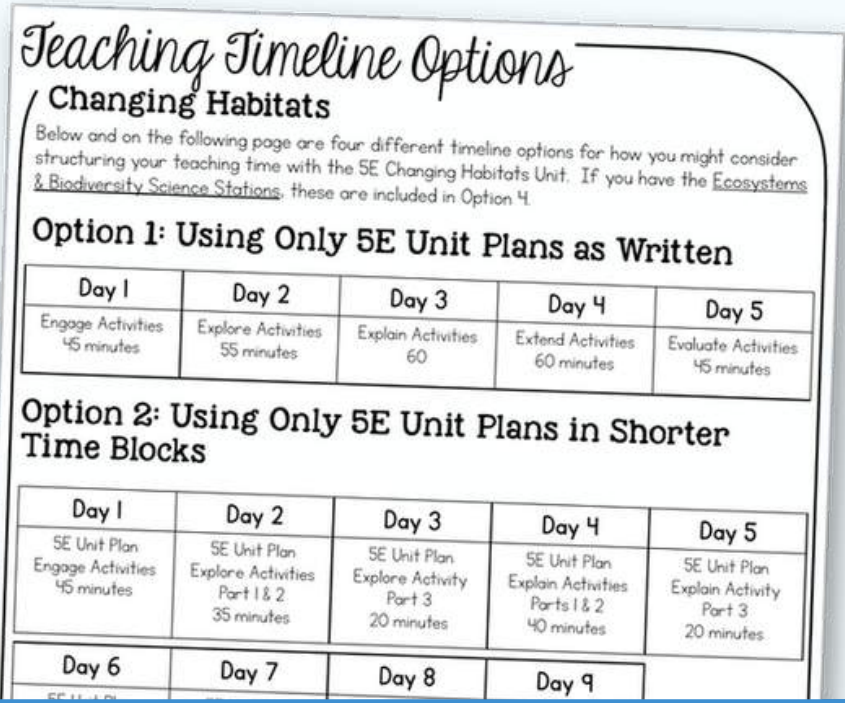
Planned and Ready to Teach

Teacher notes, a misconceptions guide, a materials checklist, and answer keys are done for you.



Fits Your Schedule

Choose from 4 timeline options, and use the Google Slides and Google Forms versions for a print or digital classroom.



TEACHERS LOVE IT!



Resource is great for a science lesson, well crafted and easy to use.

Angela S.



Awesome resource! Kids were engaged and LOVED using this resource!

Haleigh W.



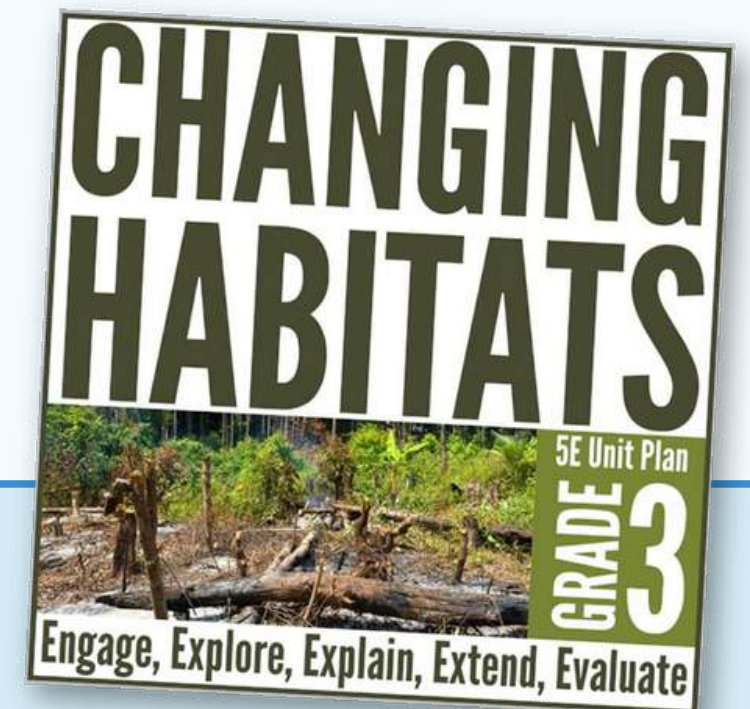
My students and I really enjoyed this resource. The activities were engaging and very easy to understand.

Kirsty M.



READY FOR YOUR CLASSROOM

- ✓ **Instant digital download**
- ✓ **Print and use the activities**
- ✓ **Google Slides and Forms versions**



WANT MORE 3RD GRADE 5E UNITS?

Save with a topic bundle or the full-year bundle.

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BUNDLE

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LIFE CYCLES Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ANIMAL GROUPS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	INHERITANCE OF TRAITS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ENVIRONMENT & TRAITS Hands-on Differentiated Lesson Plans Reading Passages Posters & more
CHANGING HABITATS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ANCIENT LIFE Hands-on Differentiated Lesson Plans Reading Passages Posters & more	NATURAL SELECTION Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ADAPTATIONS Hands-on Differentiated Lesson Plans Reading Passages Posters & more

3rd Grade **5E** Unit Plans

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THIRD GRADE 5E Unit Plans

BALANCED & UNBALANCED FORCES Hands-on Differentiated Lesson Plans Reading Passages Posters & more	PATTERNS IN MOTION Hands-on Differentiated Lesson Plans Reading Passages Posters & more	MAGNETIC FORCES Hands-on Differentiated Lesson Plans Reading Passages Posters & more	STATIC ELECTRICITY Hands-on Differentiated Lesson Plans Reading Passages Posters & more	LIFE CYCLES Hands-on Differentiated Lesson Plans Reading Passages Posters & more
ANIMAL GROUPS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	INHERITANCE OF TRAITS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ENVIRONMENT & TRAITS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	CHANGING HABITATS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ANCIENT LIFE Hands-on Differentiated Lesson Plans Reading Passages Posters & more
NATURAL SELECTION Hands-on Differentiated Lesson Plans Reading Passages Posters & more	ADAPTATIONS Hands-on Differentiated Lesson Plans Reading Passages Posters & more	WEATHER Hands-on Differentiated Lesson Plans Reading Passages Posters & more	CLIMATE Hands-on Differentiated Lesson Plans Reading Passages Posters & more	EXTREME WEATHER Hands-on Differentiated Lesson Plans Reading Passages Posters & more

SEE THE BUNDLE



**BEST
VALUE**



**GOOD
VALUE**

My passion is making learning accessible to all students.
I love scaffolding learning, breaking down the concepts and
building them up so that students can see the connections.
I love figuring out the small components that build up to
the big ideas and helping students see it all.



What I have **LEARNED**