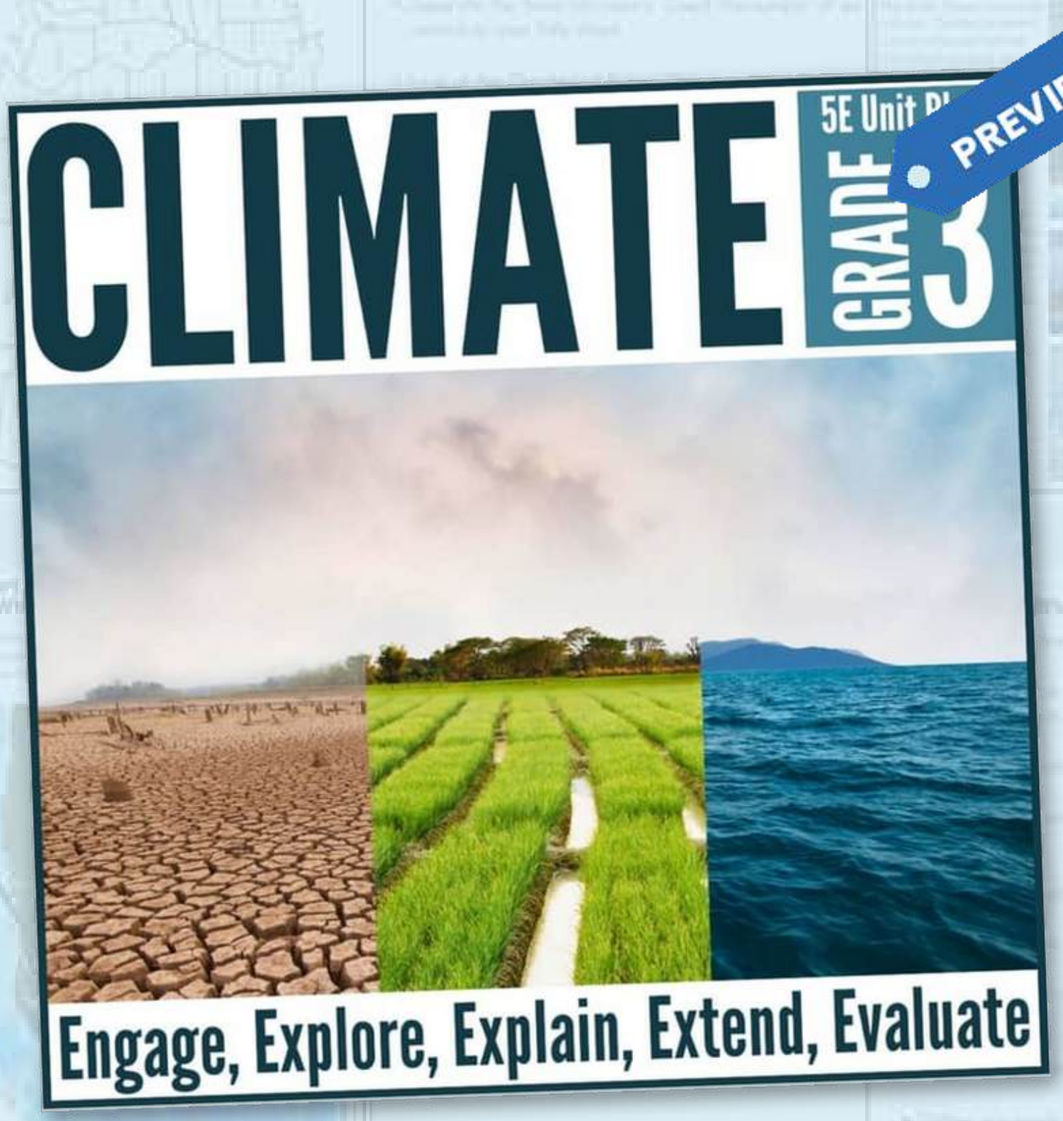


3RD GRADE

A Complete 5E Science Unit with Lesson Plans

CLIMATE

ZONES

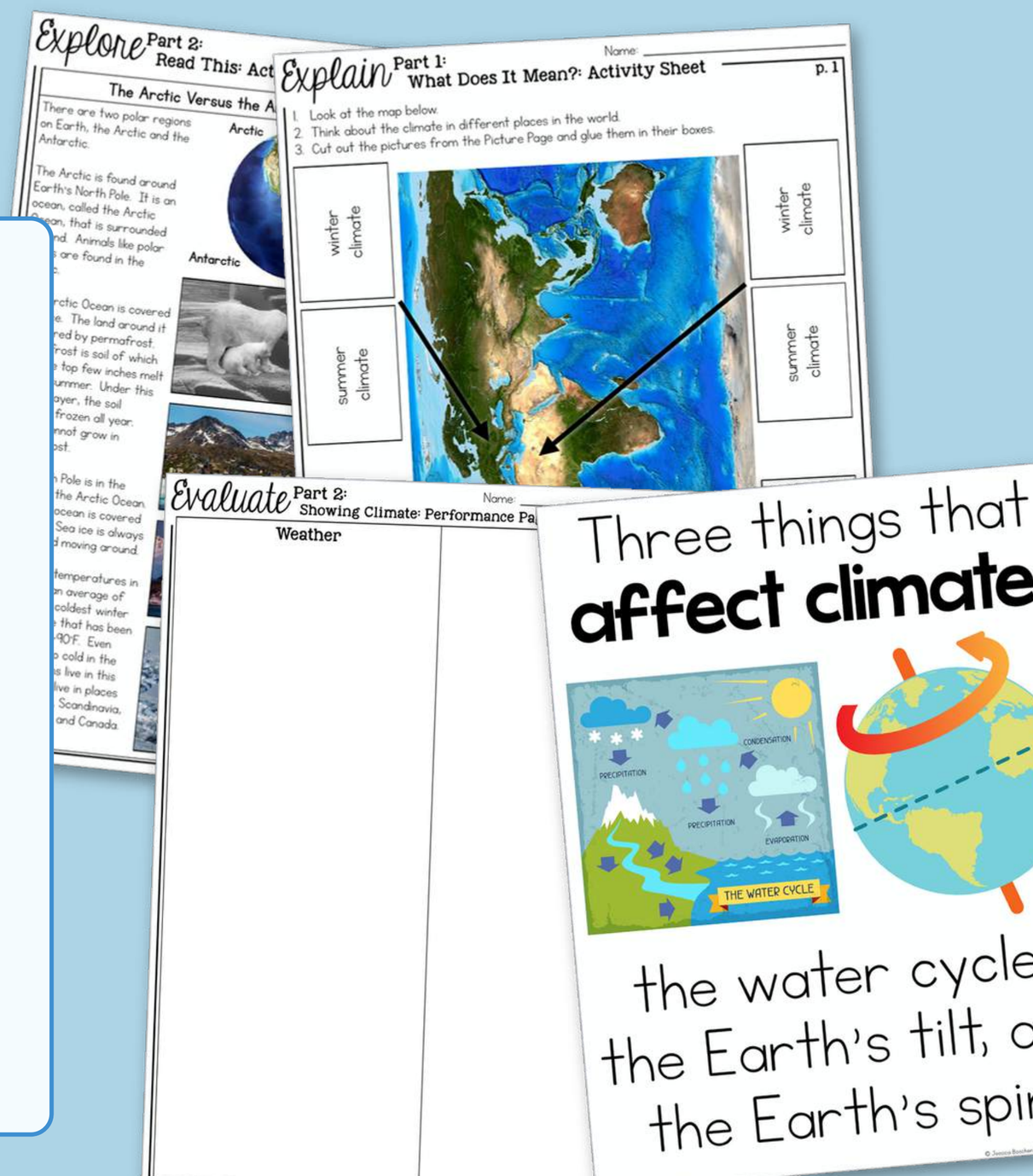
Engage, Explore, Explain, Extend, Evaluate
NGSS 3-ESS2-2

KEEP SCROLLING TO SEE WHAT'S INSIDE!

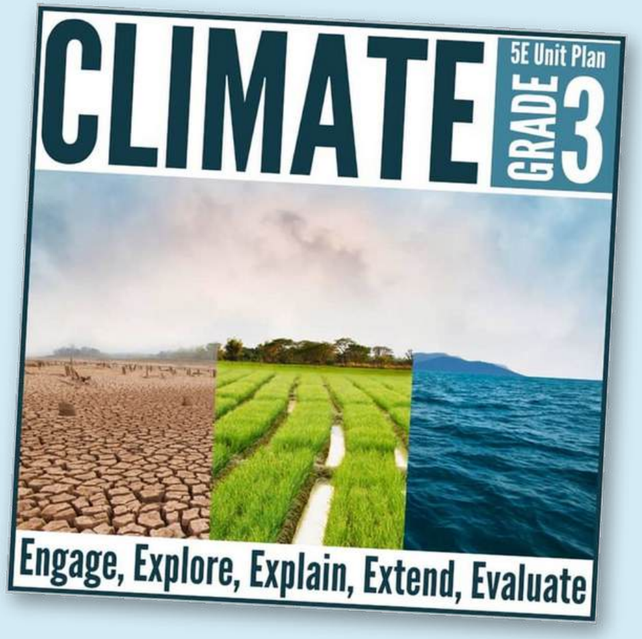
WHAT'S INCLUDED

5E CLIMATE UNIT

- 220+ Page 5E Unit Plan
- Lesson Plans for All 5 Phases
- Teacher Notes and Misconceptions
- Materials Checklist and 4 Timelines
- Hands-On Climate Investigations
- Reading Passages on Climate
- 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 color a climate map, chart a city's weather, and test the greenhouse effect.
- Teacher background, lesson plans, and student pages in every phase.
- Aligned to NGSS 3-ESS2-2.

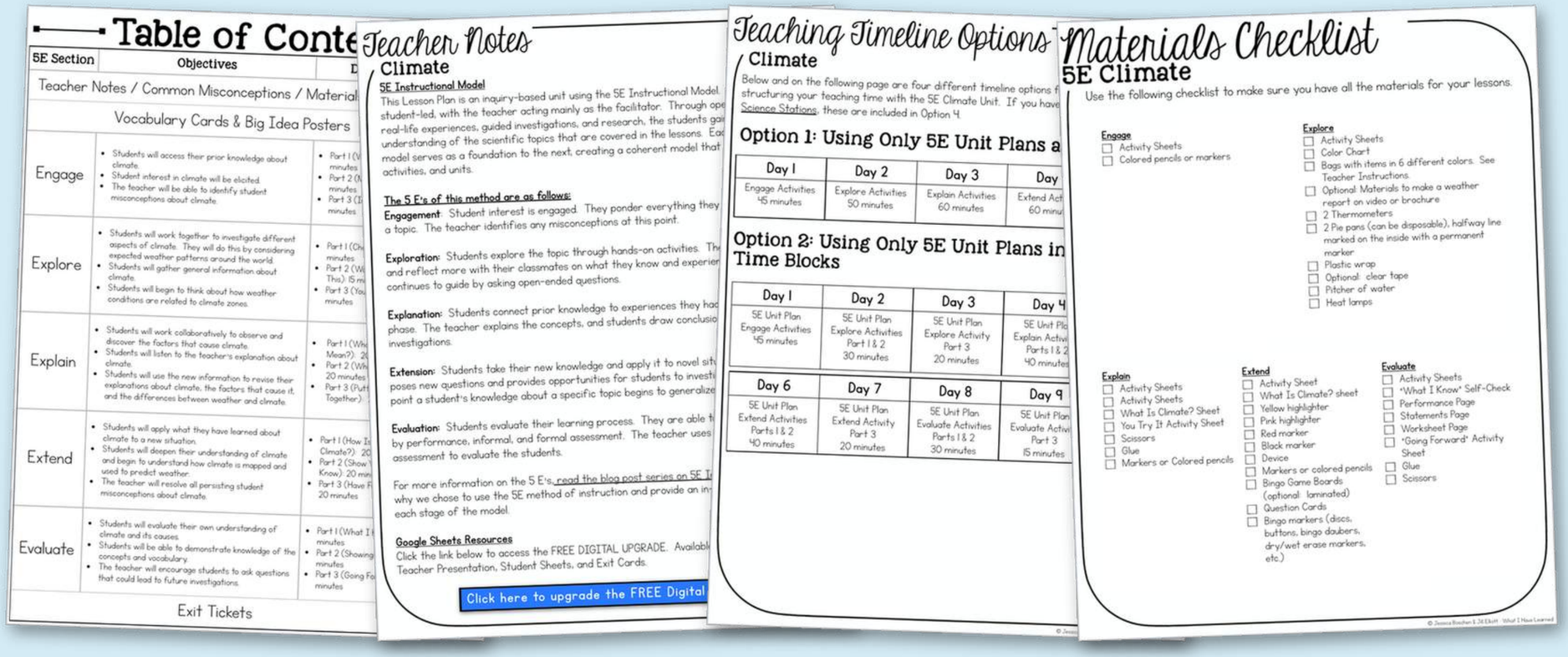
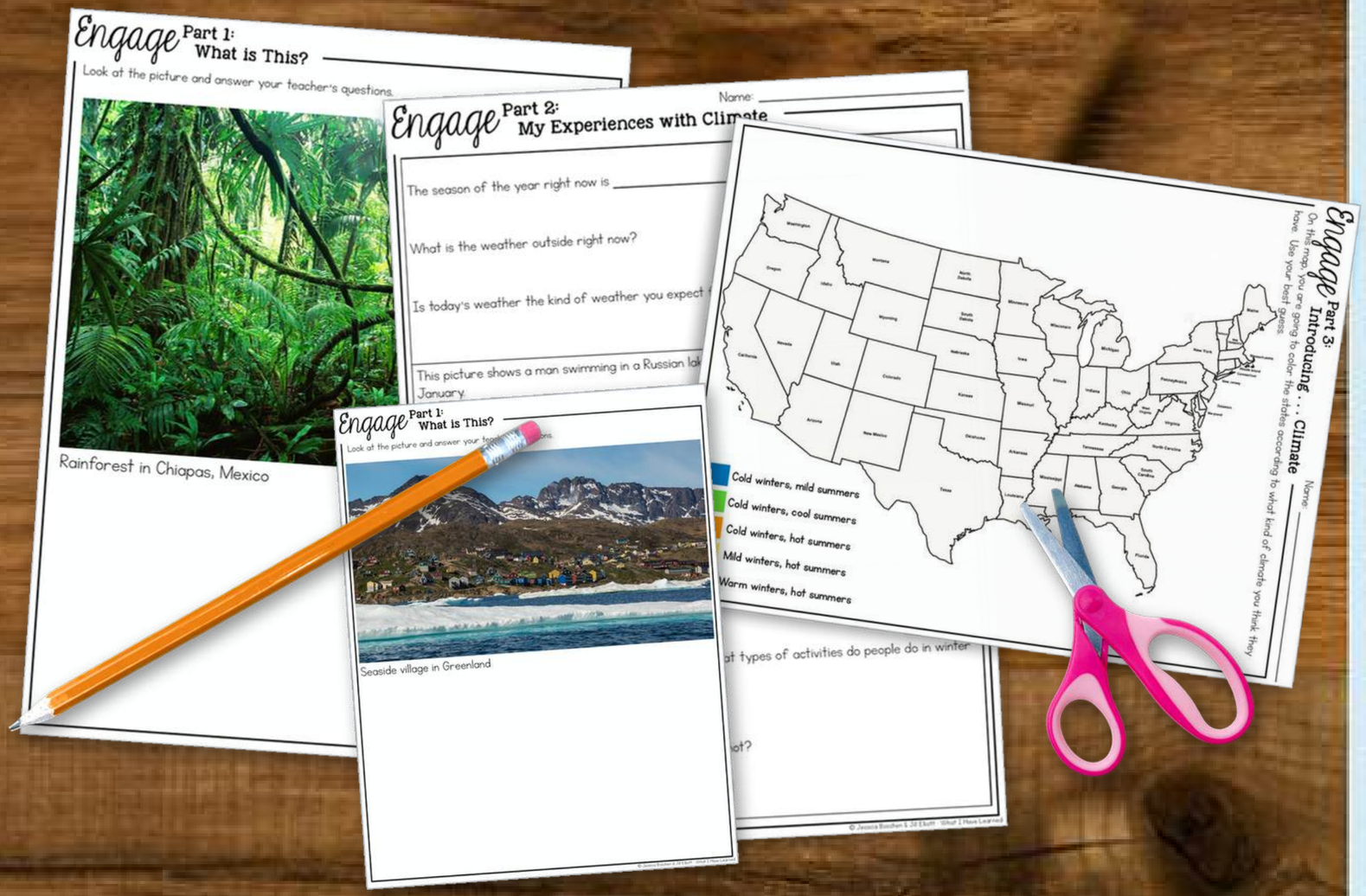


Table of Contents **Teacher Notes** **Timeline Options** **Materials Checklist**

ENGAGE



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

E E E E E

Spark curiosity with places around the world

1 What Is This?

Students look at places like a rainforest in Mexico and answer questions about the weather there.

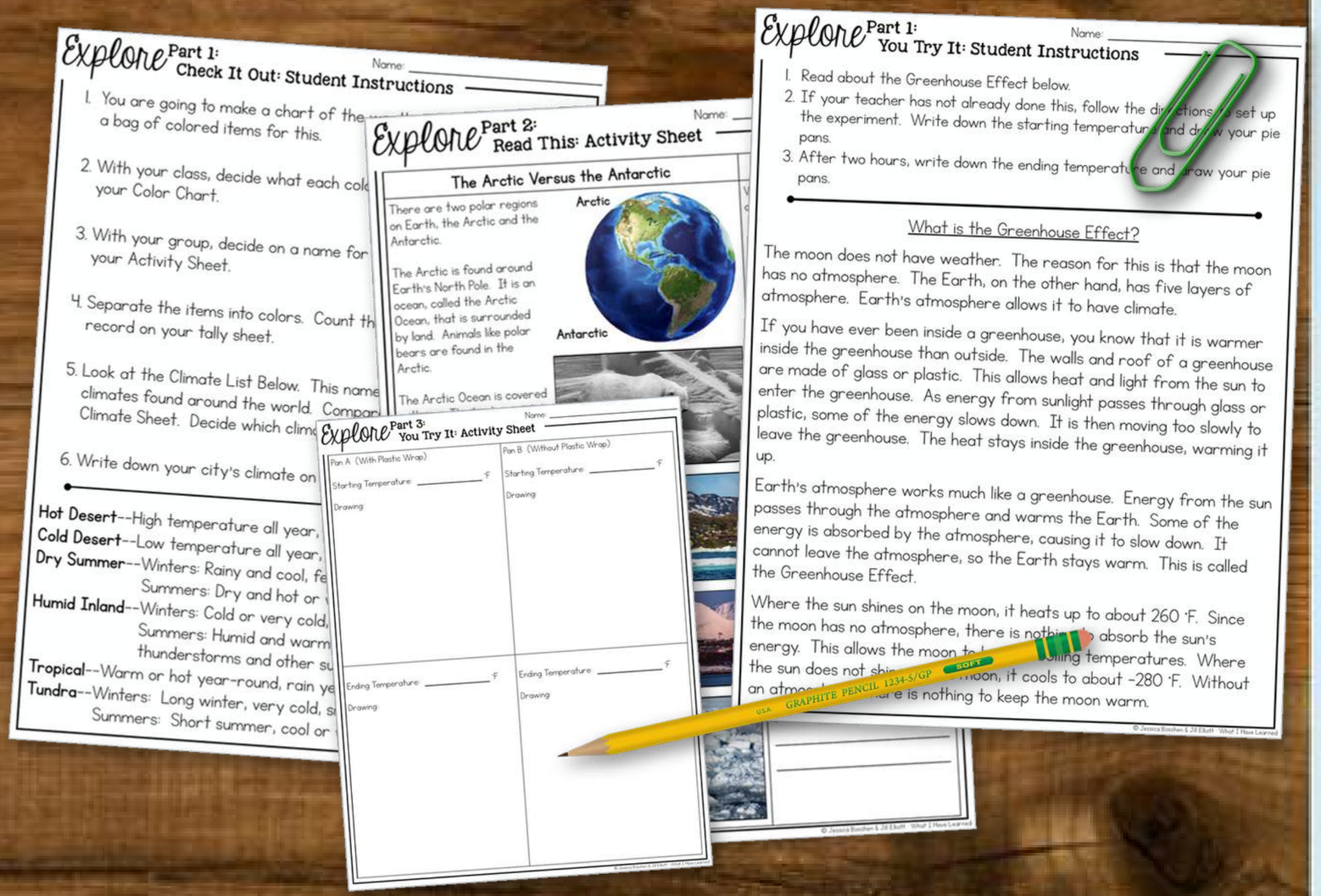
2 My Experiences

Students tell if today's weather matches their season and think about a January swim in Russia.

3 Introducing Climate

Students color a map of the United States by the climate they think each state has.

EXPLORE



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

E E E E E

Investigate climate patterns

1 Check It Out

Students make a weather chart for a city with colored items and match it to a climate type.

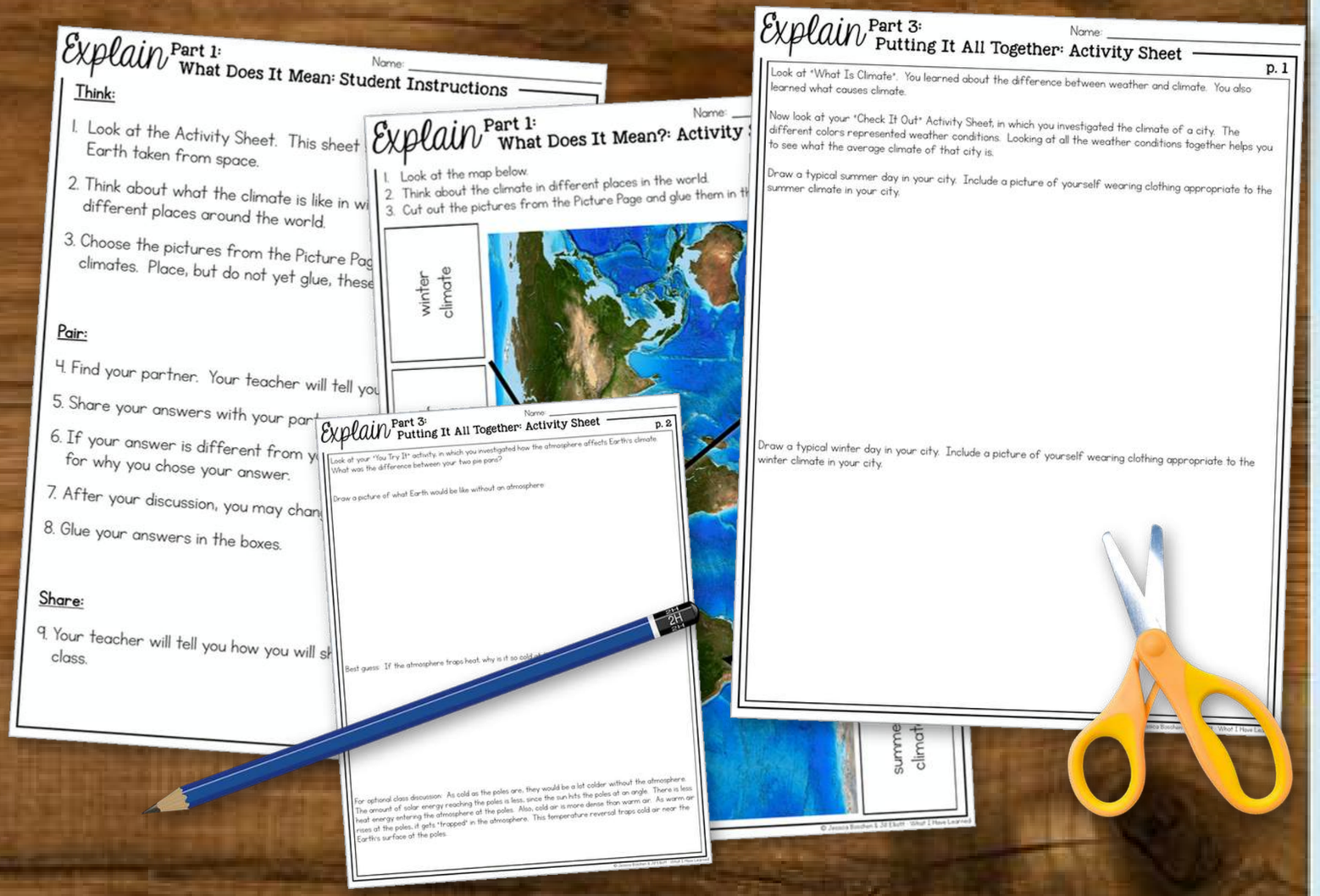
2 Watch and Read This

Students read about the Arctic versus the Antarctic.

3 You Try It

Students test the greenhouse effect with pie pans, plastic wrap, and thermometers.

EXPLAIN



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

E E E E E

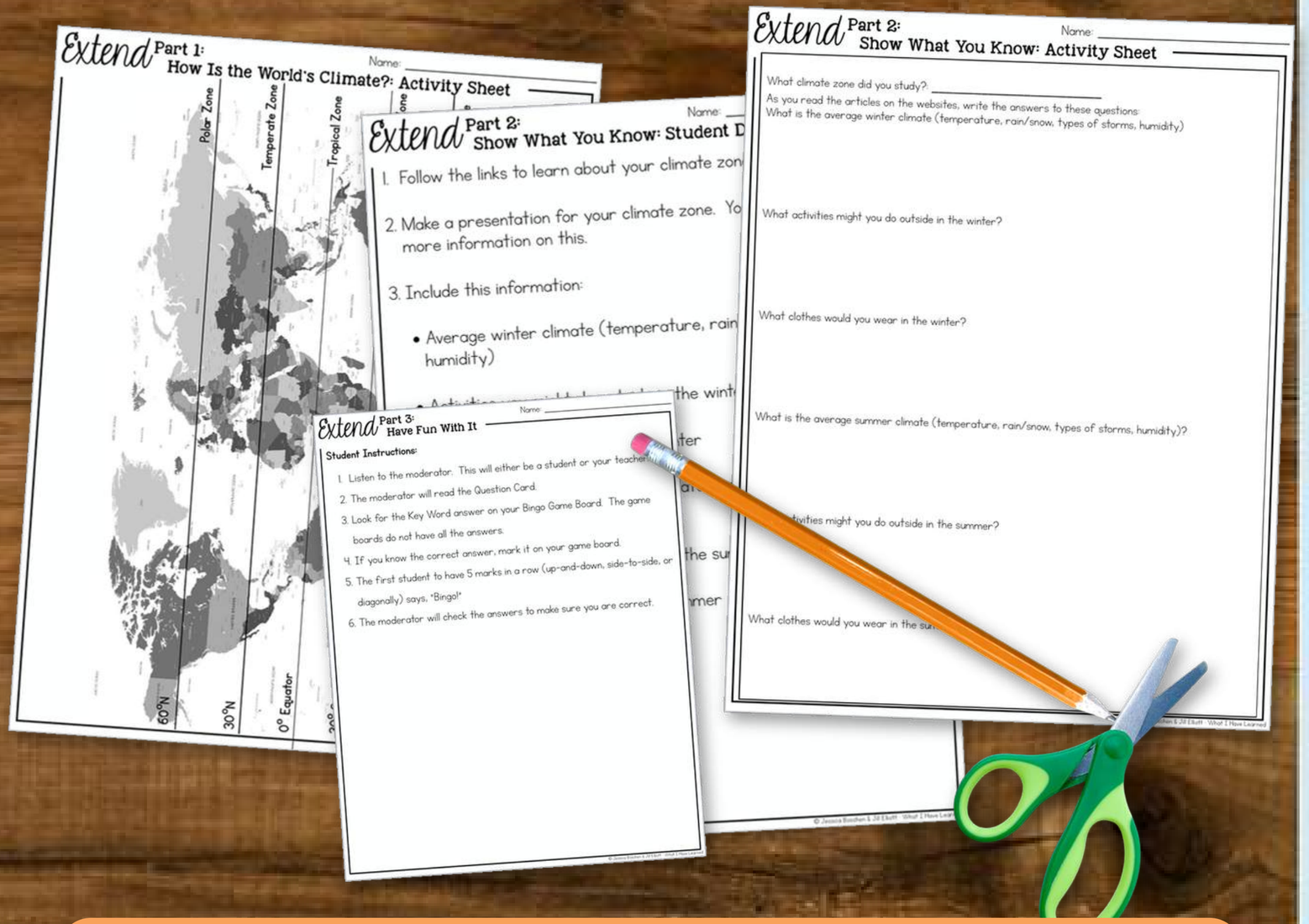
Build explanations from evidence

1 What Does It Mean?
Students glue pictures on a world map to show winter and summer climates.

2 What Is Climate?
Students read how weather and climate differ and what causes climate, then sum it up.

3 Putting It All Together
Students describe their city's climate and draw a typical summer and winter day.

EXTEND



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

E E E E E

Apply climate to the whole world

1

How Is the World's Climate?

Students label the polar, temperate, and tropical zones by latitude.

2

Show What You Know

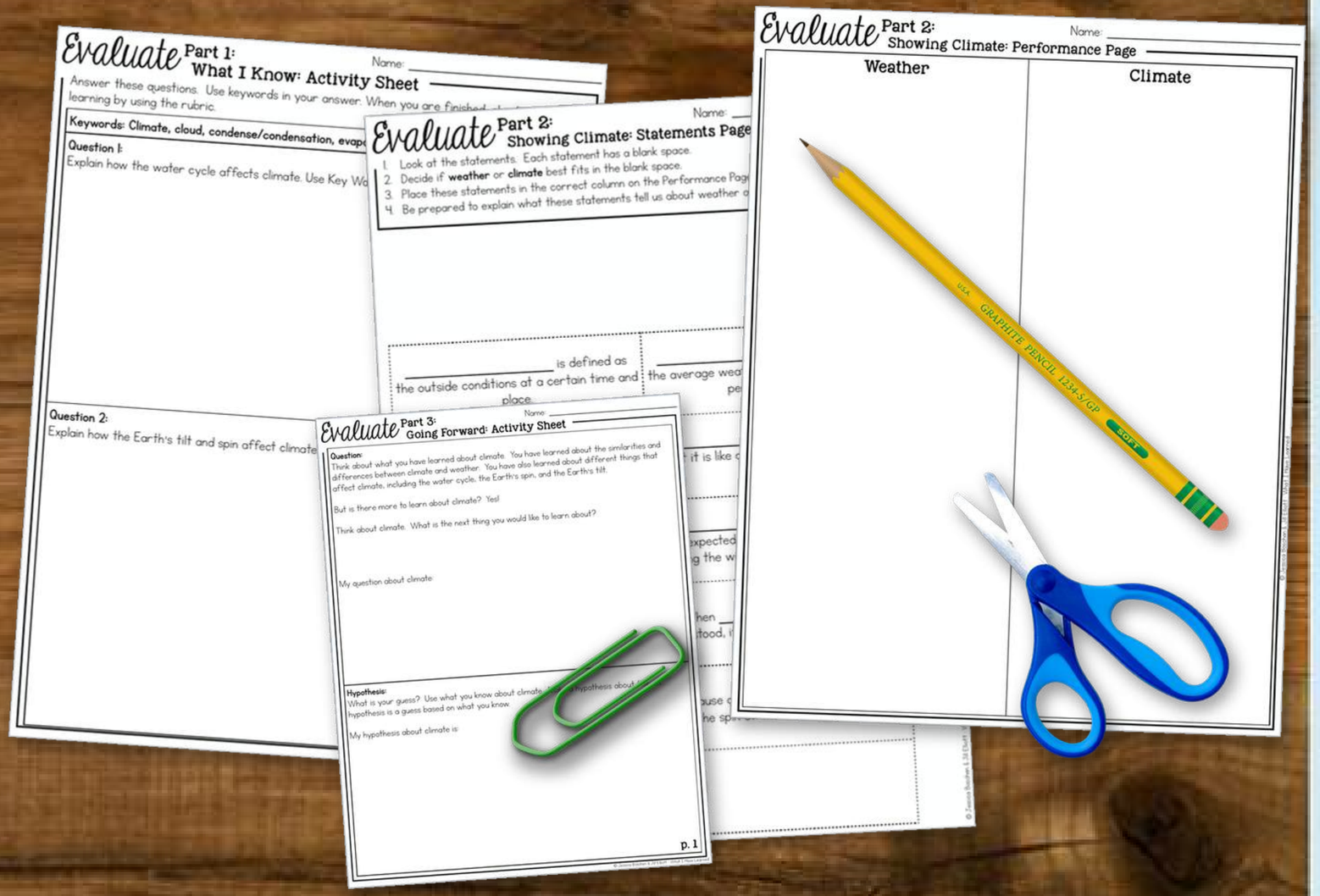
Students research a climate zone and make a presentation.

3

Have Fun With It

Students play bingo with climate and weather questions.

EVALUATE



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

E E E E E

Check understanding with evidence

1 What I Know

Students explain how the water cycle and Earth's tilt affect climate and score themselves with a rubric.

2 Showing Climate

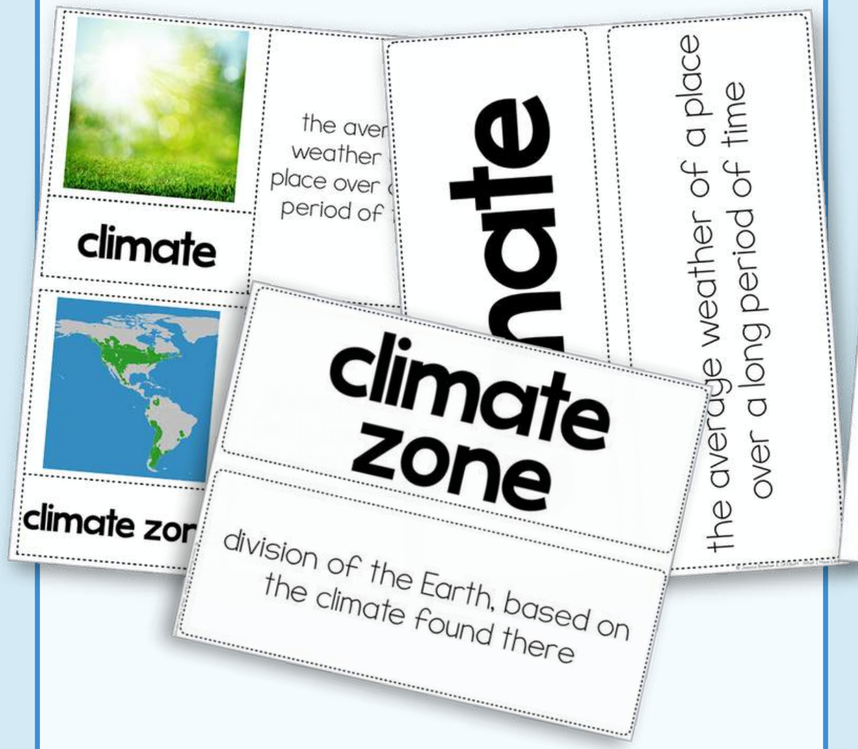
Students sort statements into weather and climate columns.

3 Going Forward

Students write a new question and hypothesis about climate.

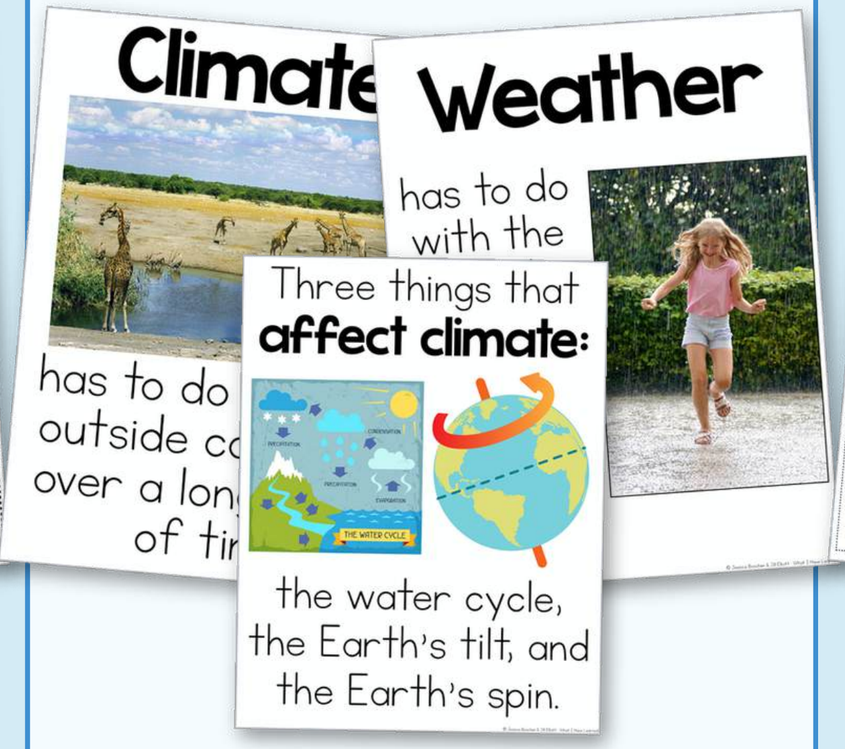
VOCABULARY, POSTERS & EXIT TICKETS

VOCABULARY CARDS



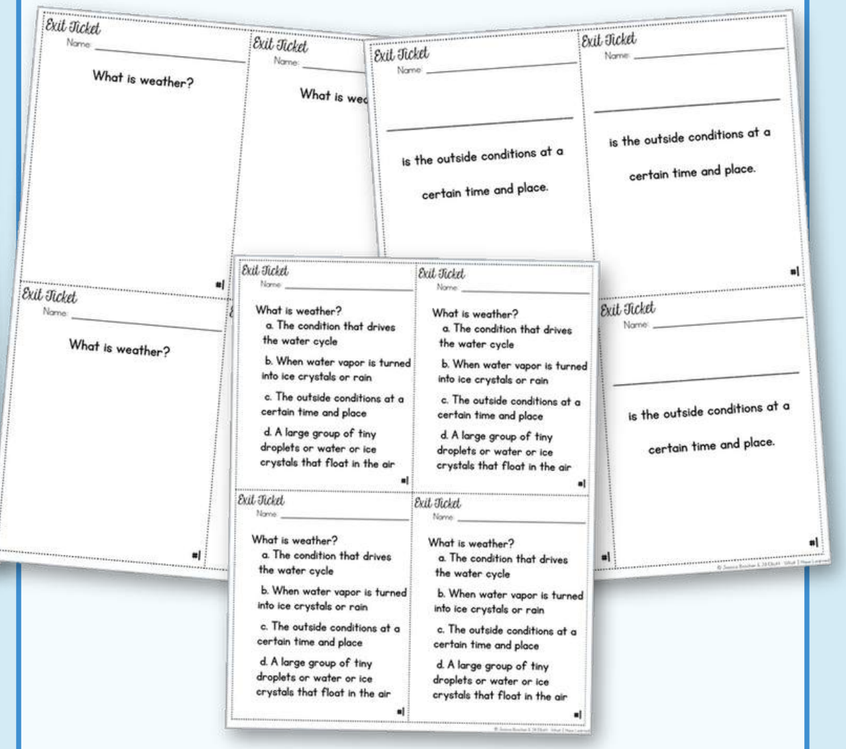
Picture cards and word cards for climate, climate zone, cloud, water cycle, and more.

BIG IDEA POSTERS



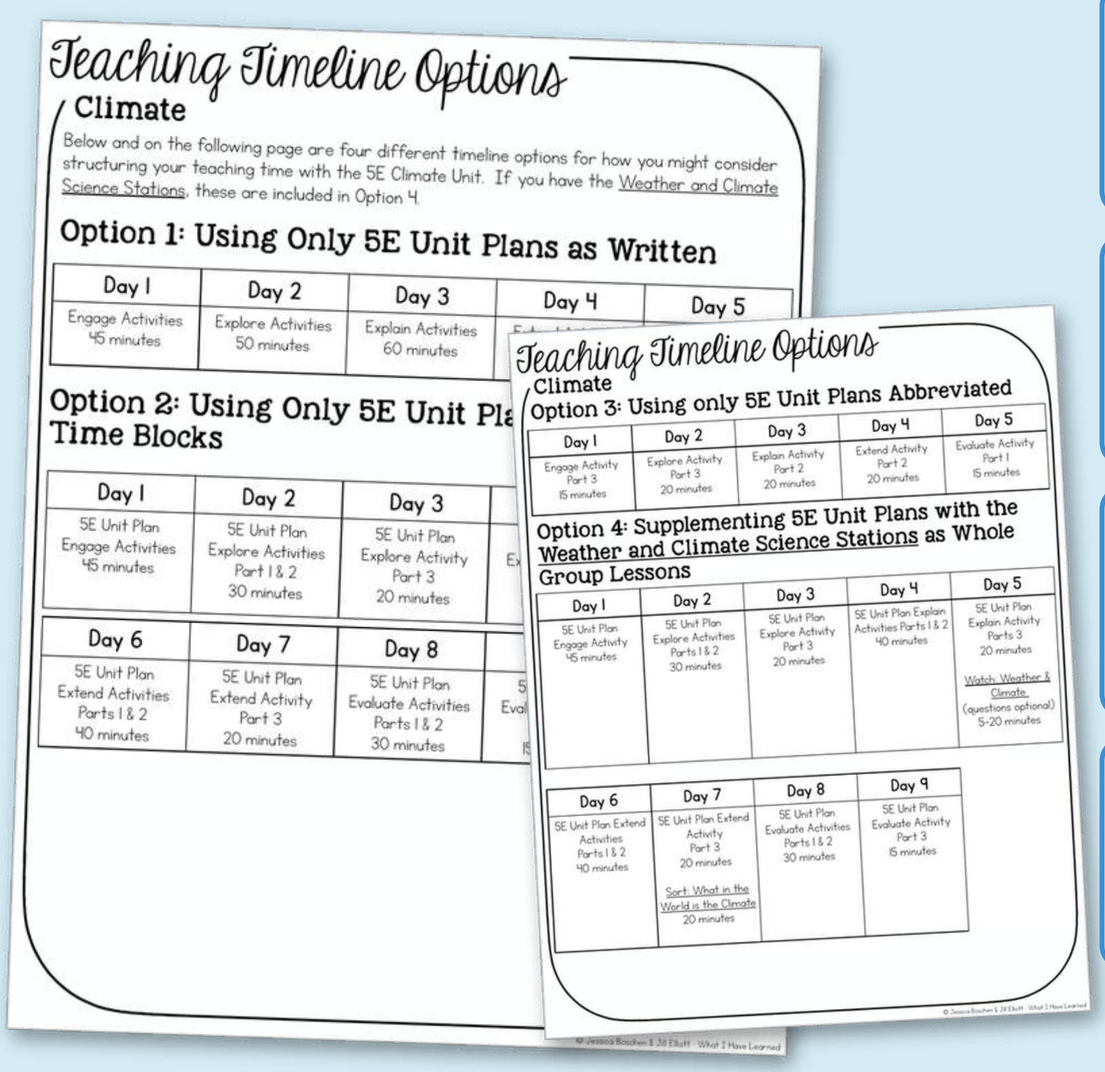
Four posters on climate, weather, and what affects climate.

EXIT TICKETS



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

WAYS TO USE IN YOUR CLASSROOM



Teaching Timeline Options

Climate

Below and on the following page are four different timeline options for how you might consider structuring your teaching time with the 5E Climate Unit. If you have the Weather and Climate 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 50 minutes	Explain Activities 60 minutes		

Option 2: Using Only 5E Unit Pla
Time Blocks

Day 1	Day 2	Day 3	
5E Unit Plan Engage Activities 45 minutes	5E Unit Plan Explore Activities Part 1 & 2 30 minutes	5E Unit Plan Explore Activity Part 3 20 minutes	E

Day 6	Day 7	Day 8	
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	Eval

Teaching Timeline Options

Climate

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 Weather and Climate Science Stations as Whole Group Lessons

Day 1	Day 2	Day 3	Day 4	Day 5
5E Unit Plan Engage Activity 45 minutes	5E Unit Plan Explore Activities Parts 1 & 2 30 minutes	5E Unit Plan Explore Activity Part 3 20 minutes	5E Unit Plan Explain Activities Parts 1 & 2 40 minutes	5E Unit Plan Explain Activity Parts 3 20 minutes Watch: Weather & Climate (questions optional) 5-20 minutes

Day 6	Day 7	Day 8	Day 9
5E Unit Plan Extend Activities Parts 1 & 2 40 minutes	5E Unit Plan Extend Activity Part 3 20 minutes Sort: What in the World is the Climate 20 minutes	5E Unit Plan Evaluate Activities Parts 1 & 2 30 minutes	5E Unit Plan Evaluate Activity Part 3 15 minutes

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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 Weather and Climate 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

Option 1 — 5 days
As Written

Day 1	Day 2	Day 3	Day 4	Day 5
Engage	**Explore**	**Explain**	**Extend**	**Evaluate**
45 min	50 min	60 min	60 min	45 min

Option 2 — 9 days
Shorter Time Blocks

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Engage	**Explore 1–2**	**Explore 3**	**Explain 1–2**	**Explain 3**	**Extend 1–2**	**Extend 3**	**Evaluate 1–2**	**Evaluate 3**
45 min	30 min	20 min	40 min	20 min	40 min	20 min	30 min	15 min

Option 3 — 5 days
Abbreviated

Day 1	Day 2	Day 3	Day 4	Day 5
Engage 3	**Explore 3**	**Explain 2**	**Extend 2**	**Evaluate 1**
15 min	20 min	20 min	20 min	15 min

Option 4 — 9 days
With Science Stations

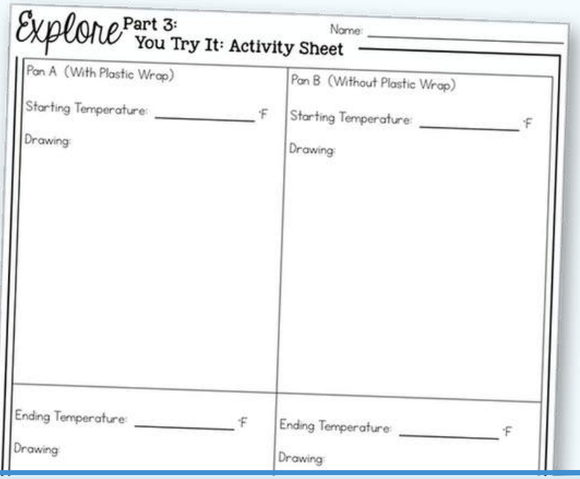
Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Engage	**Explore 1–2**	**Explore 3**	**Explain 1–2**	**Explain 3**	**Extend 1–2**	**Extend 3**	**Evaluate 1–2**	**Evaluate 3**
45 min	30 min	20 min	40 min	20 min +20 station	40 min	20 min +20 station	30 min	15 min

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 color a climate map, chart a city's weather, and test the greenhouse effect, so climate makes sense.


Explore Part 3: You Try It: Activity Sheet

Name: _____

Pan A (With Plastic Wrap)

Starting Temperature: _____ °F

Drawing:

Pan B (Without Plastic Wrap)

Starting Temperature: _____ °F

Drawing:

Ending Temperature: _____ °F

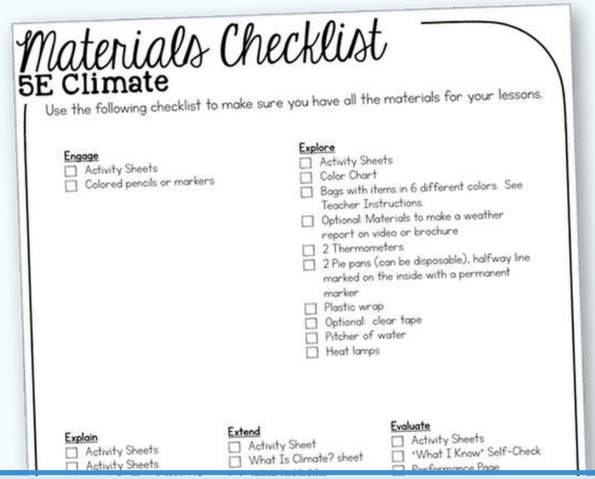
Drawing:

Ending Temperature: _____ °F

Drawing:

Planned and Ready to Teach

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


Materials Checklist

5E Climate

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

Engage
- Activity Sheets
- Colored pencils or markers

Explore
- Activity Sheets
- Color Chart
- Bags with items in 6 different colors. See Teacher Instructions.
- Optional: Materials to make a weather report on video or brochure
- 2 Thermometers
- 2 Pie pans (can be disposable), halfway line marked on the inside with a permanent marker
- Plastic wrap
- Optional: clear tape
- Pitcher of water
- Heat lamps

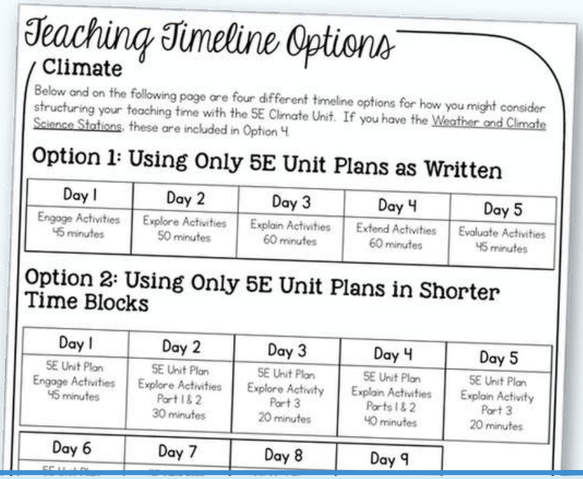
Explain
- Activity Sheets
- Activity Sheets

Extend
- Activity Sheet
- What Is Climate? sheet

Evaluate
- Activity Sheets
- "What I Know" Self-Check
- Performance Page

Fits Your Schedule

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


Teaching Timeline Options

Climate

Below and on the following page are four different timeline options for how you might consider structuring your teaching time with the 5E Climate Unit. If you have the Weather and Climate 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 50 minutes	Explain Activities 60 minutes	Extend Activities 60 minutes	Evaluate Activities 45 minutes

Option 2: Using Only 5E Unit Plans in Shorter 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 30 minutes	5E Unit Plan Explore Activity Part 3 20 minutes	5E Unit Plan Explain Activities Parts 1 & 2 40 minutes	5E Unit Plan Explain Activity Part 3 20 minutes

Day 6	Day 7	Day 8	Day 9

TEACHERS LOVE IT!

★★★★★

Great resource-very organized and engaging.

Siri Latina

★★★★★

My little kids learned a lot about climate.

Maria G.

★★★★★

This was an awesome resource for supplementing materials.

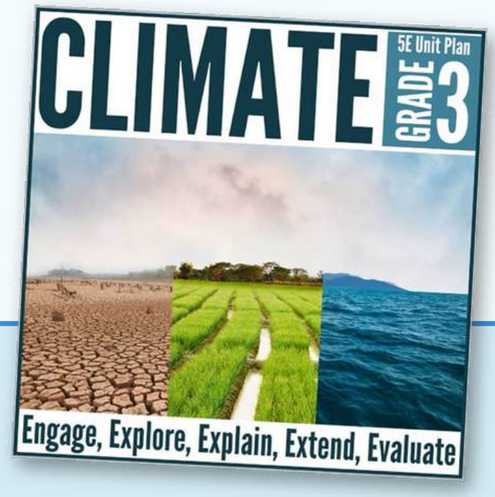
Cassidy Yanez





READY FOR YOUR CLASSROOM

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

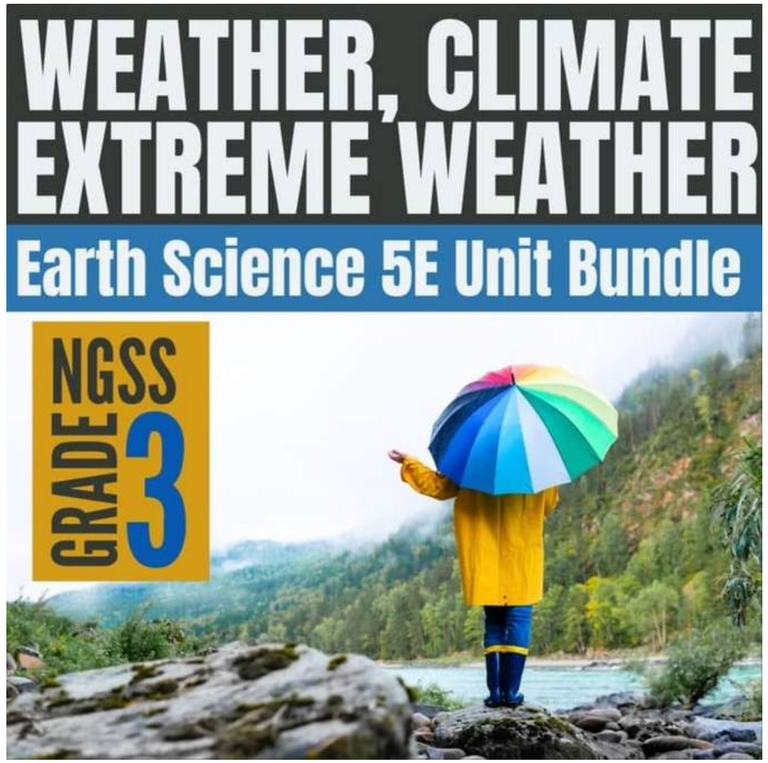


WANT MORE 3RD GRADE 5E UNITS?

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

TOPIC BUNDLE

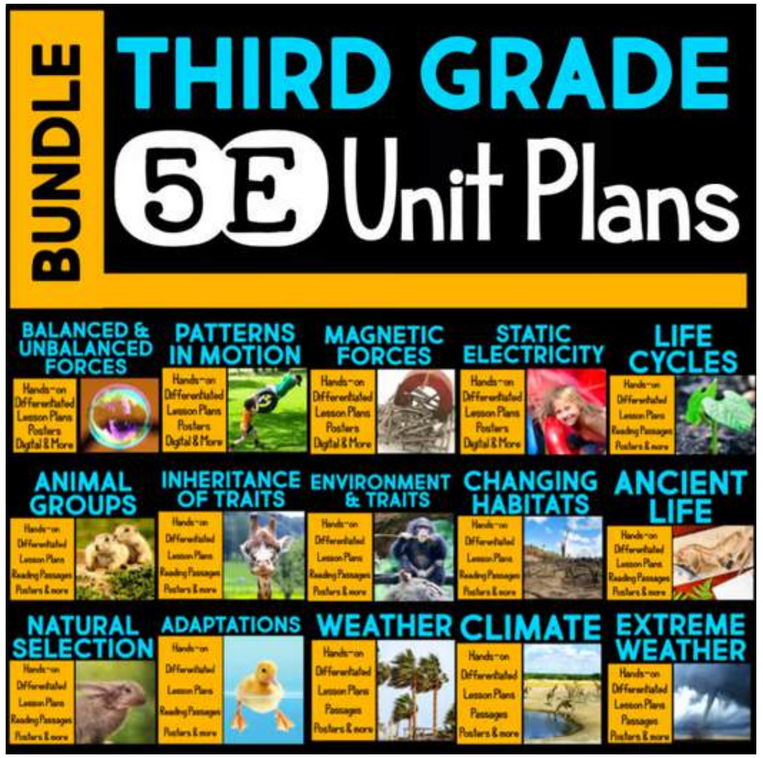
GOOD VALUE



SEE THE BUNDLE

FULL-YEAR BUNDLE

BEST VALUE



SEE THE BUNDLE

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.



teach MATH | teach SCIENCE | teach READING | teach WRITING

What I have LEARNED