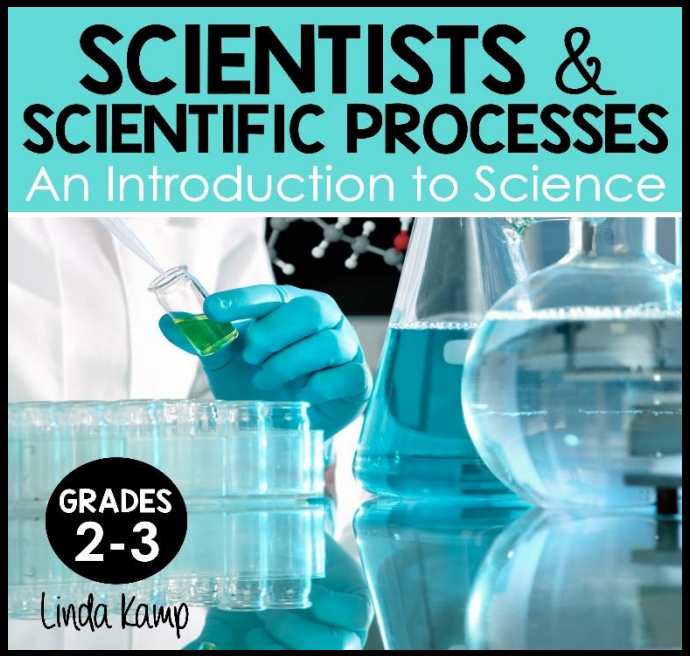
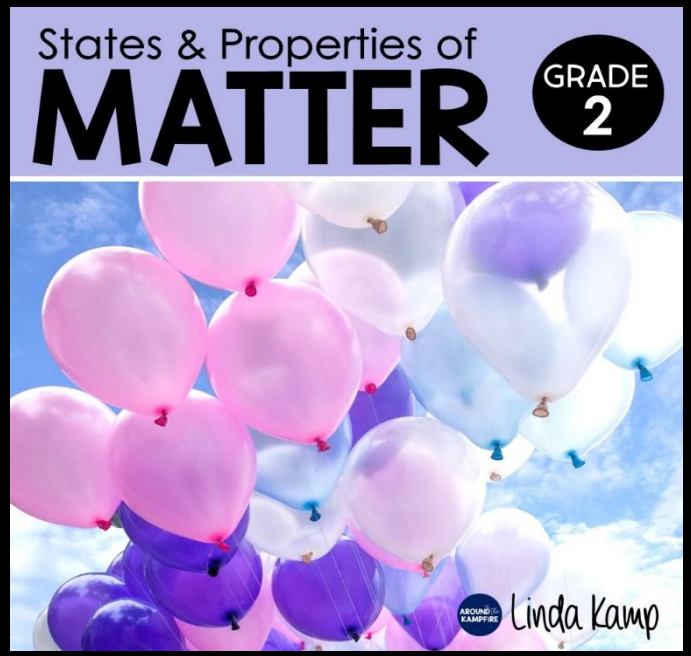
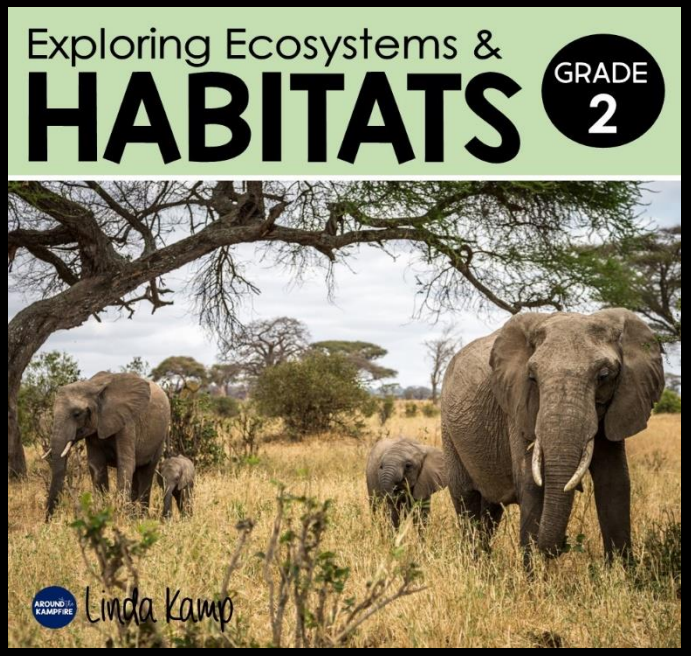
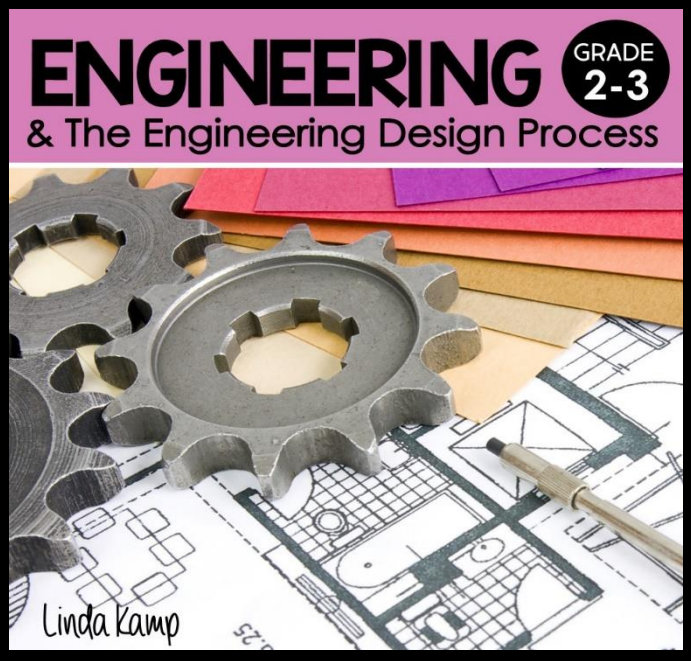
SECOND GRADE SCIENCE CURRICULUM

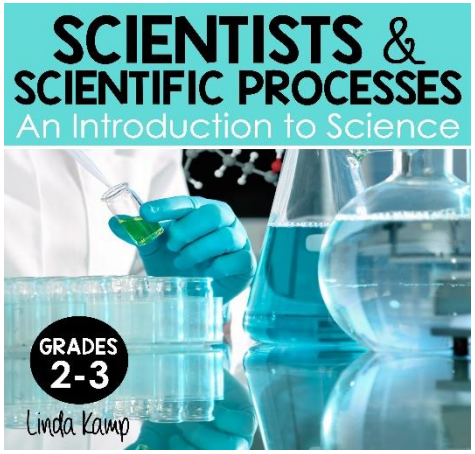


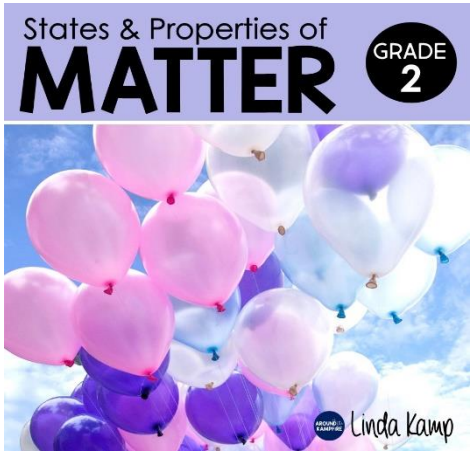


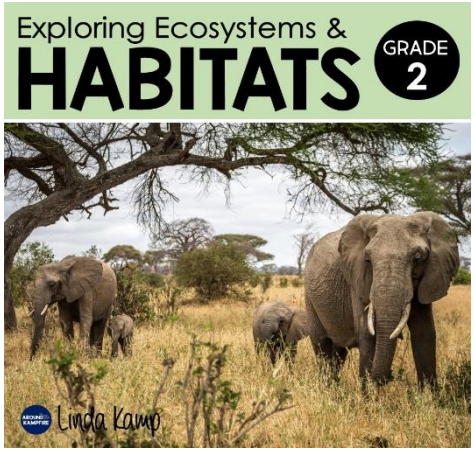


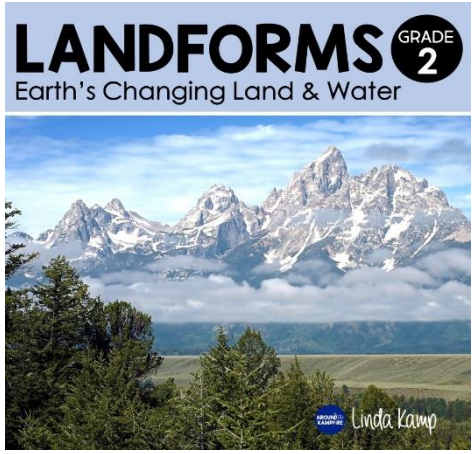


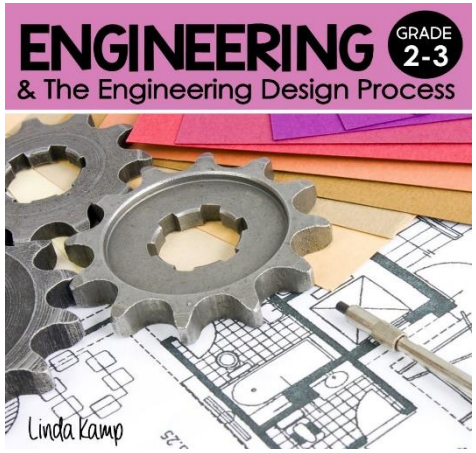
NGSS ALIGNED BUNDLE INCLUDES:









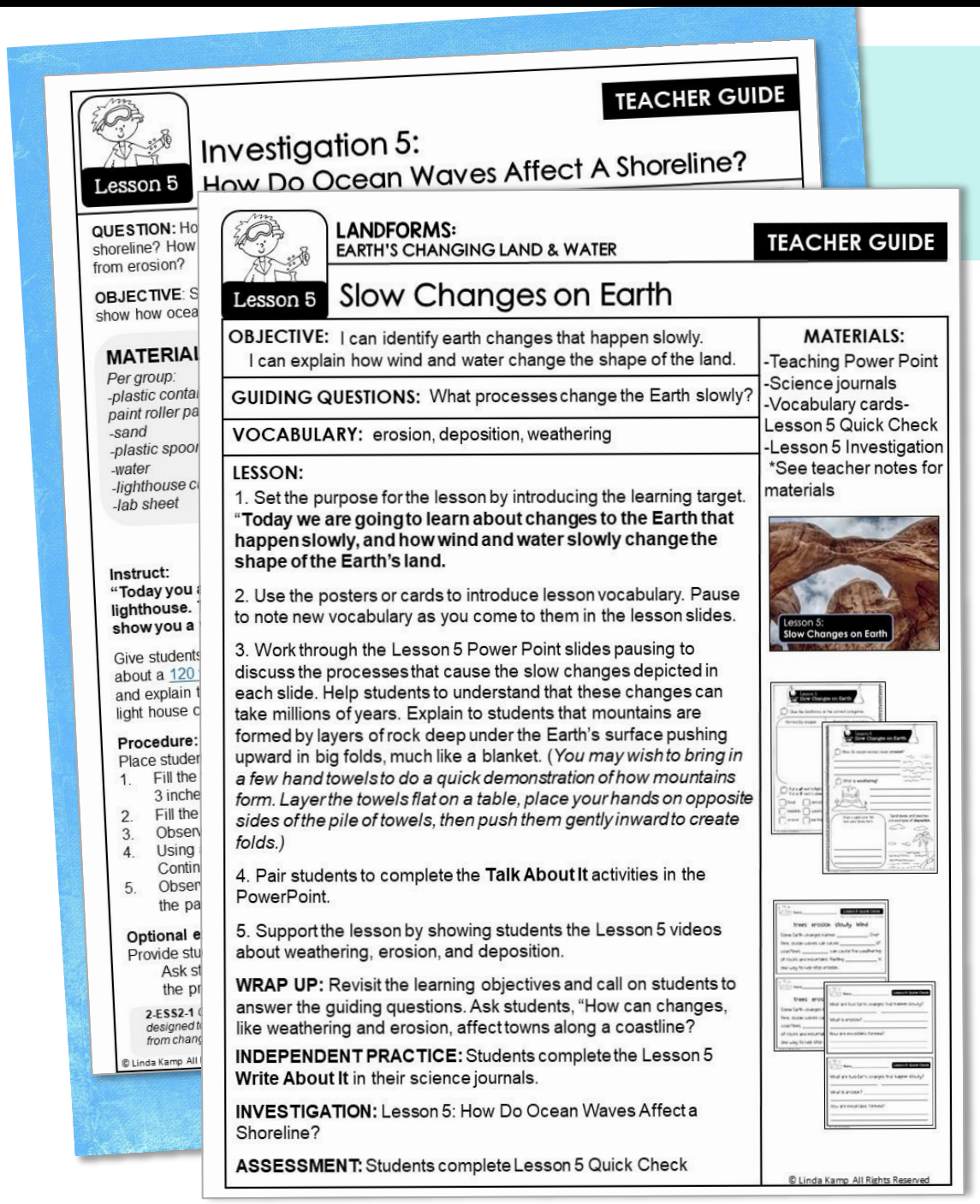


6 COMPLETE SCIENCE UNITS

18 WEEKS OF IN-DEPTH SCIENCE LESSONS

- Scientists & Science Processes
- Properties of Matter
- Landforms & Earth Changes
- Habitats & Ecosystems
- Plant & Animal Life Cycles
- Engineering Design

DETAILED, SCRIPTED LESSON PLANS

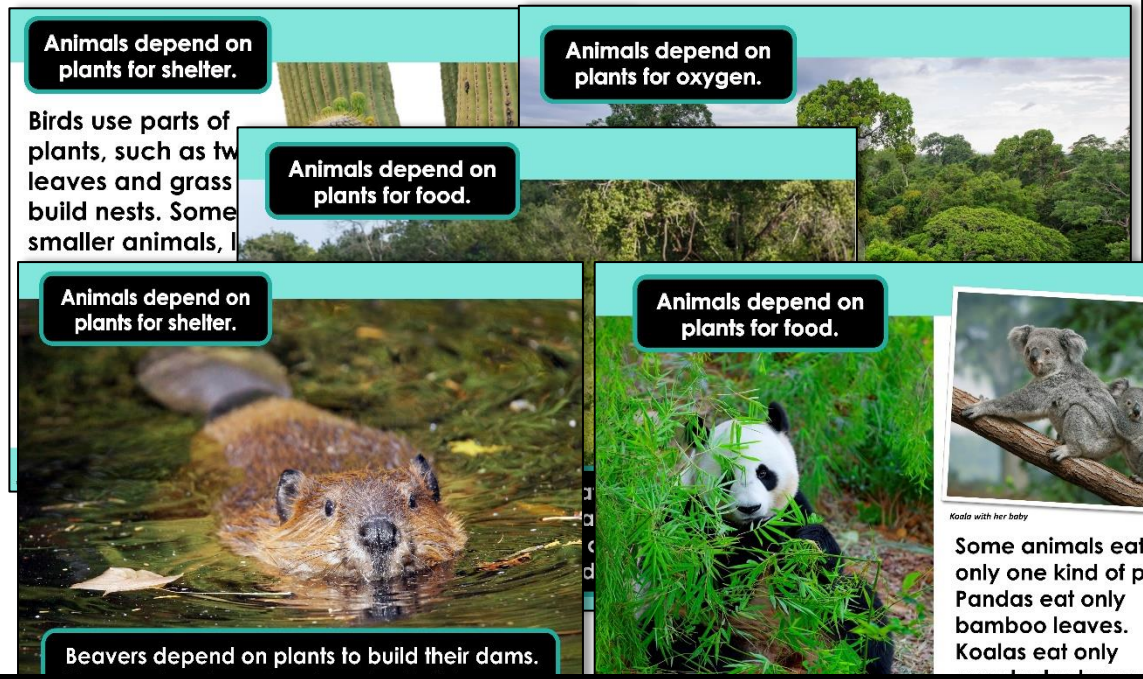


EACH LESSON PLAN FEATURES:

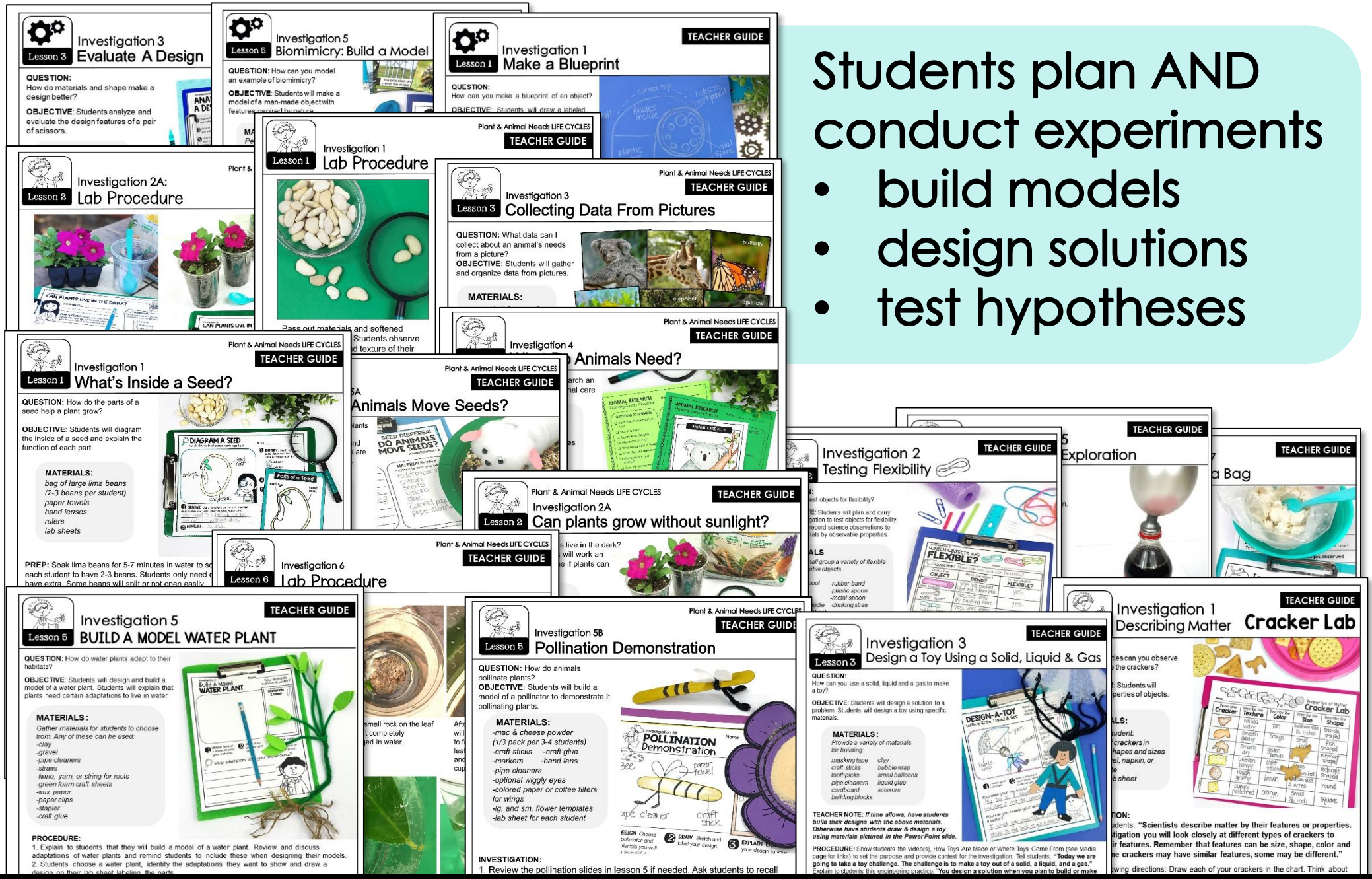
- Lesson objectives
- Guiding questions
- Materials list
- Lesson vocabulary
- Scripted procedures & closing questions
- Partner talk
- Journal activity
- Assessment options
- Investigation
- Lesson video links
- NGSS alignment

6 TEACHING POWERPOINTS

Over 90 engaging lessons with multiple components



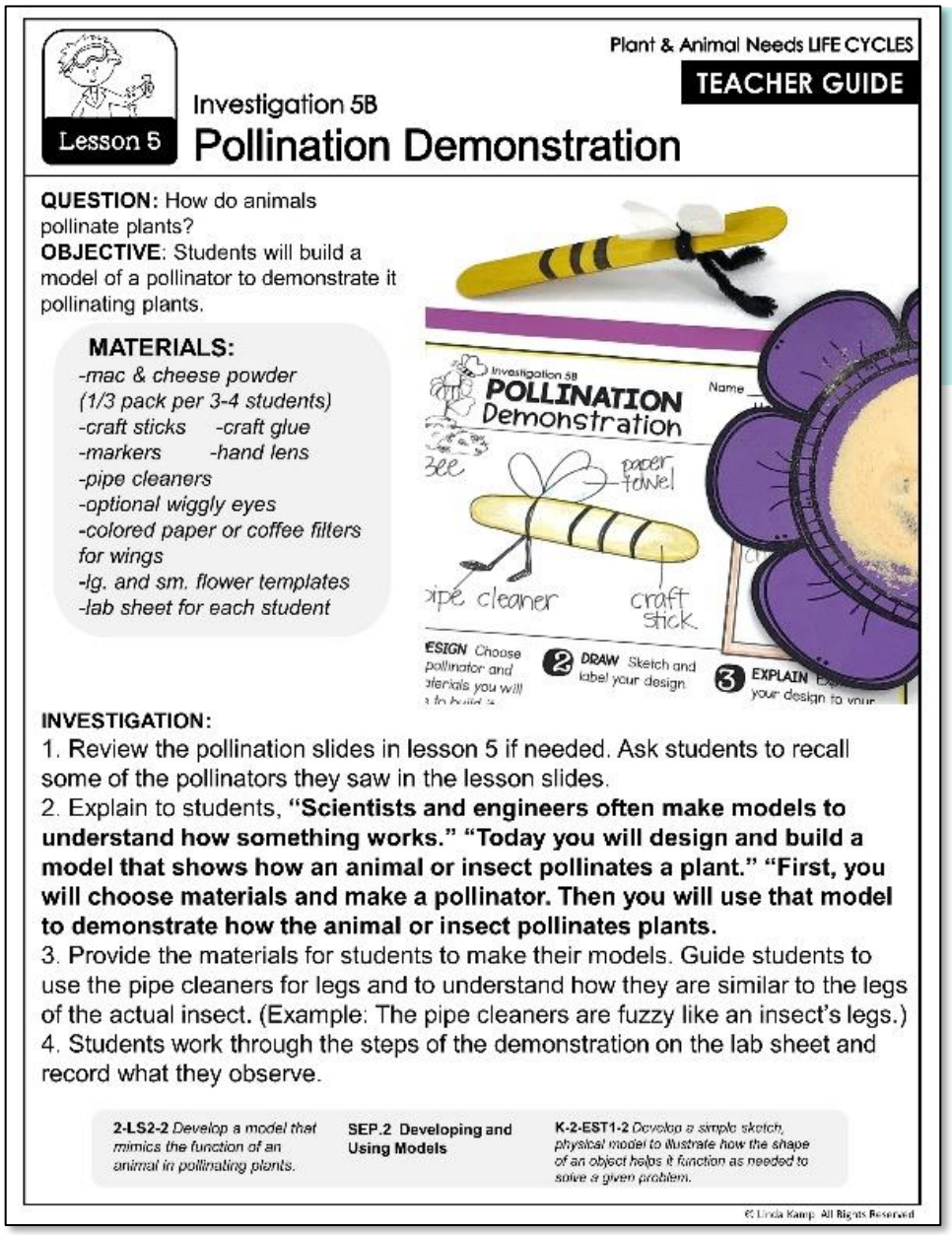
36 HANDS-ON EXPERIMENTS & STEM LABS



Students plan AND conduct experiments

- build models
- design solutions
- test hypotheses

INTRO SLIDES FOR EACH LAB



Plant & Animal Needs LIFE CYCLES

TEACHER GUIDE

Lesson 5

Investigation 5B

Pollination Demonstration

QUESTION: How do animals pollinate plants?

OBJECTIVE: Students will build a model of a pollinator to demonstrate it pollinating plants.

MATERIALS:

-mac & cheese powder (1/3 pack per 3-4 students)
-craft sticks -craft glue
-markers -hand lens
-pipe cleaners
-optional wiggly eyes
-colored paper or coffee filters for wings
-lg. and sm. flower templates
-lab sheet for each student

INVESTIGATION:

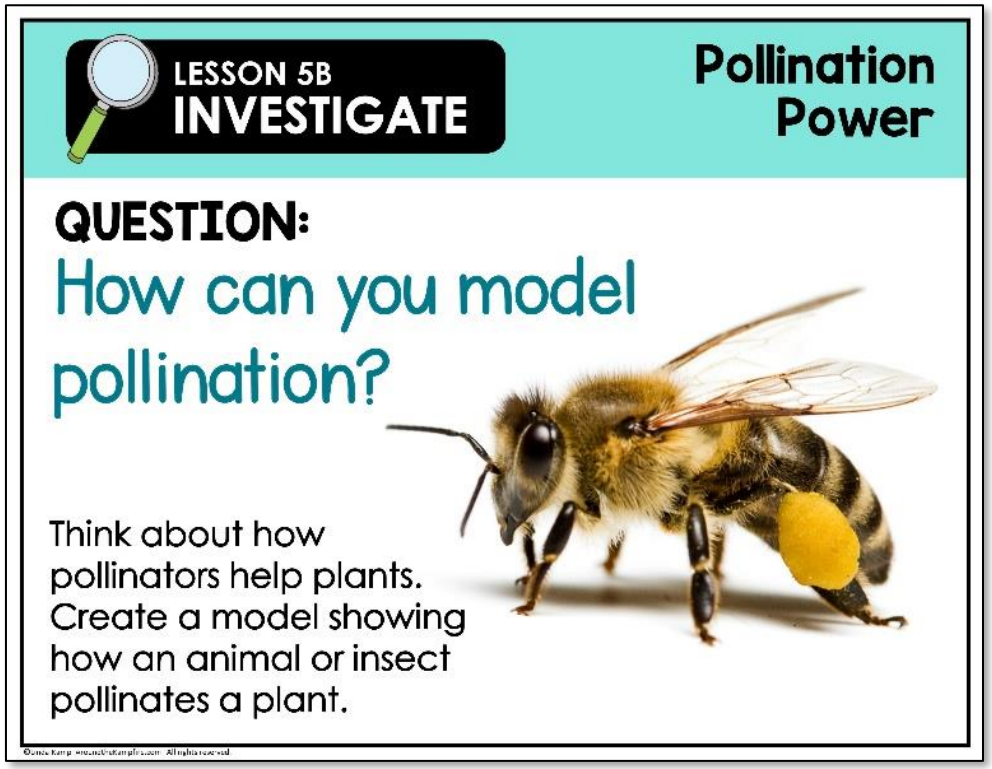
1. Review the pollination slides in lesson 5 if needed. Ask students to recall some of the pollinators they saw in the lesson slides.
2. Explain to students, **"Scientists and engineers often make models to understand how something works." "Today you will design and build a model that shows how an animal or insect pollinates a plant." "First, you will choose materials and make a pollinator. Then you will use that model to demonstrate how the animal or insect pollinates plants.**
3. Provide the materials for students to make their models. Guide students to use the pipe cleaners for legs and to understand how they are similar to the legs of the actual insect. (Example: The pipe cleaners are fuzzy like an insect's legs.)
4. Students work through the steps of the demonstration on the lab sheet and record what they observe.

2-LS2-2 *Develop a model that mimics the function of an animal in pollinating plants.*

SEP.2 Developing and Using Models

K-2-ETS1-2 *Develop a simple sketch, physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.*

Science & engineering practices embedded in each lesson



LESSON 5B
INVESTIGATE

Pollination Power

QUESTION:

How can you model pollination?

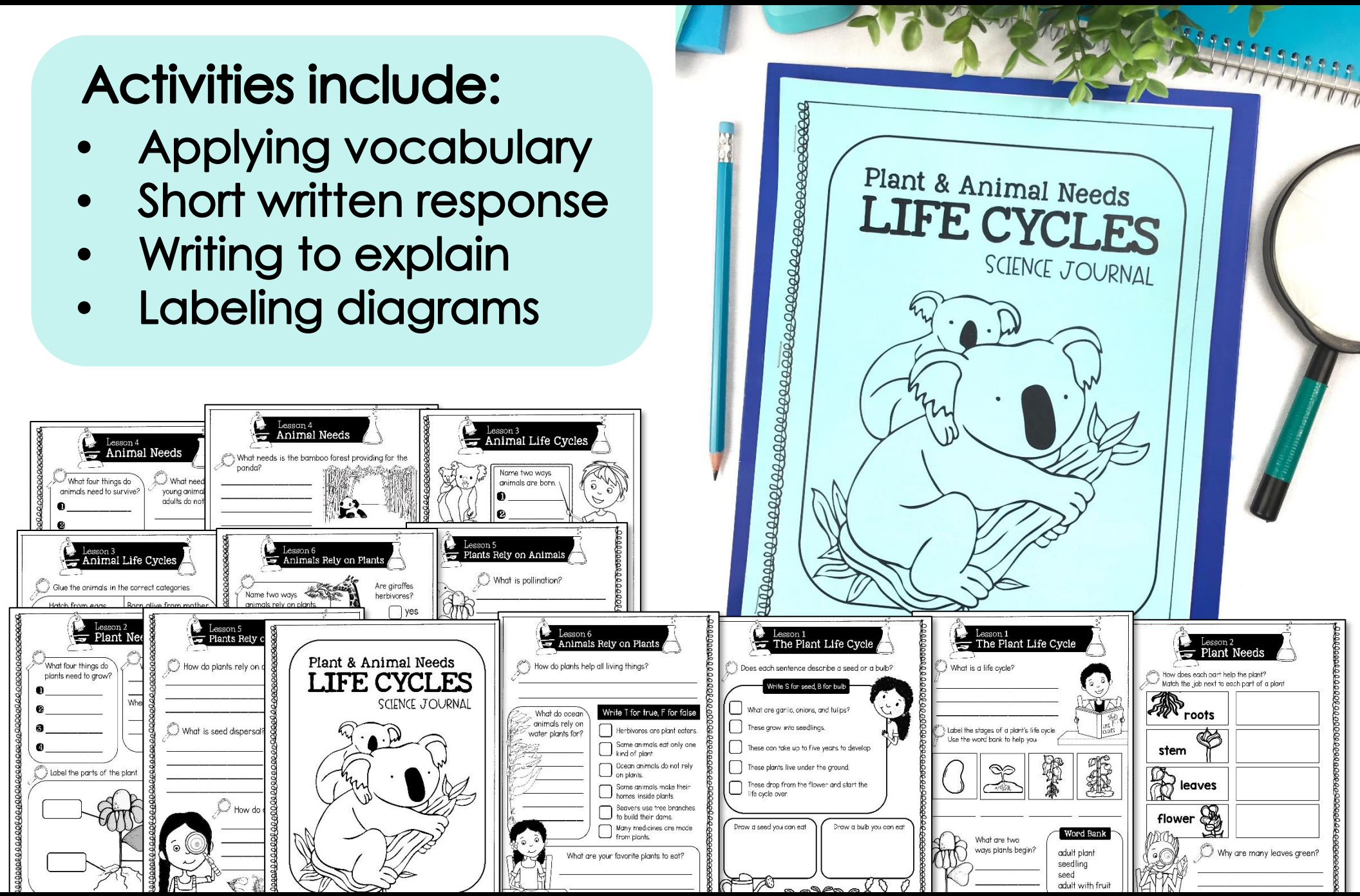
Think about how pollinators help plants. Create a model showing how an animal or insect pollinates a plant.

See more details of all labs in the unit previews

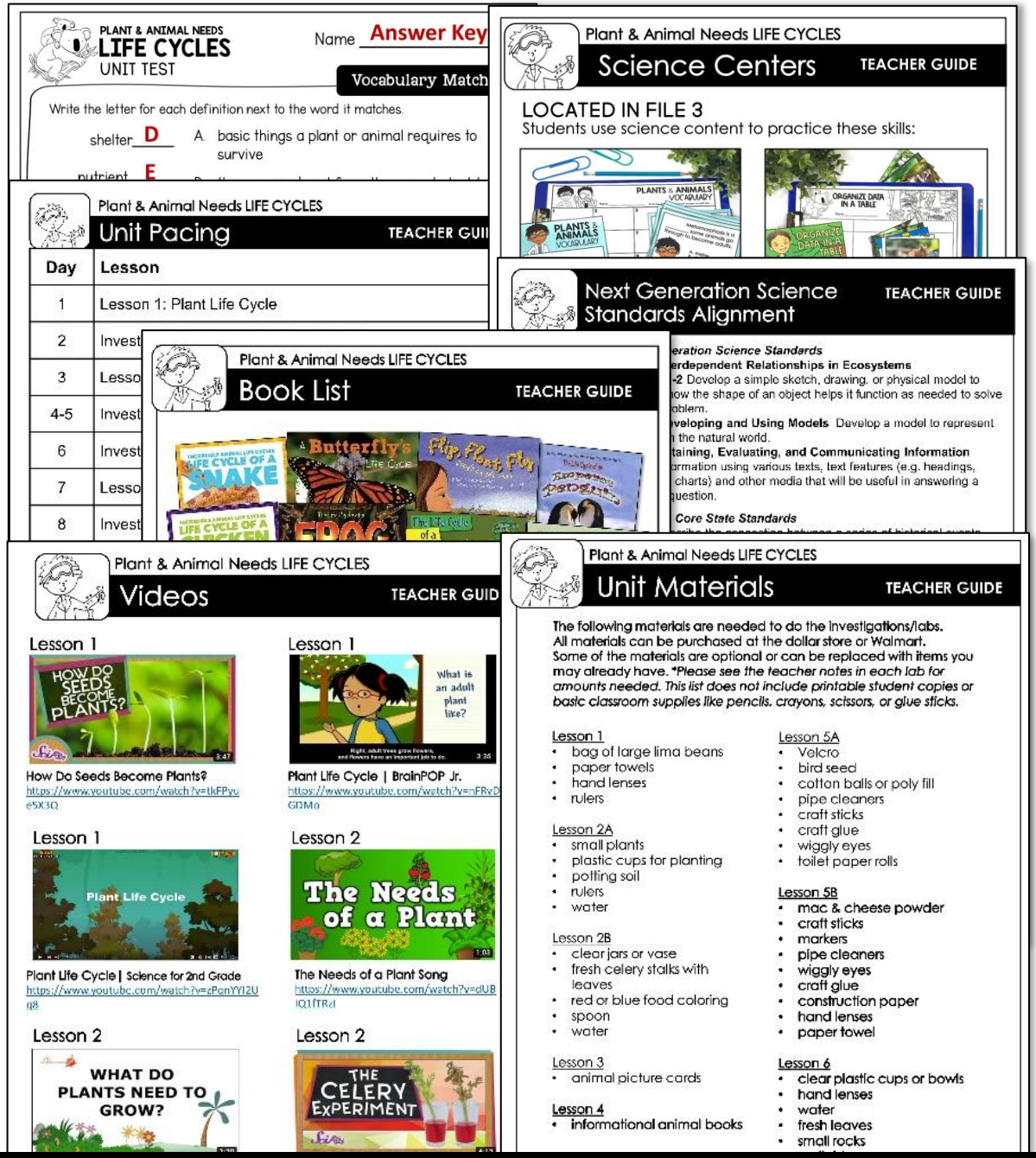
STUDENT WORKBOOKS & JOURNAL

Activities include:

- Applying vocabulary
- Short written response
- Writing to explain
- Labeling diagrams



DETAILED TEACHER GUIDES



- Lesson plans
- Teacher notes
- Management & prep tips
- Lab directions with photos
- Materials list
- Related book lists
- Clickable video guide
- Pacing guides
- Standard alignment pages
- Answer keys

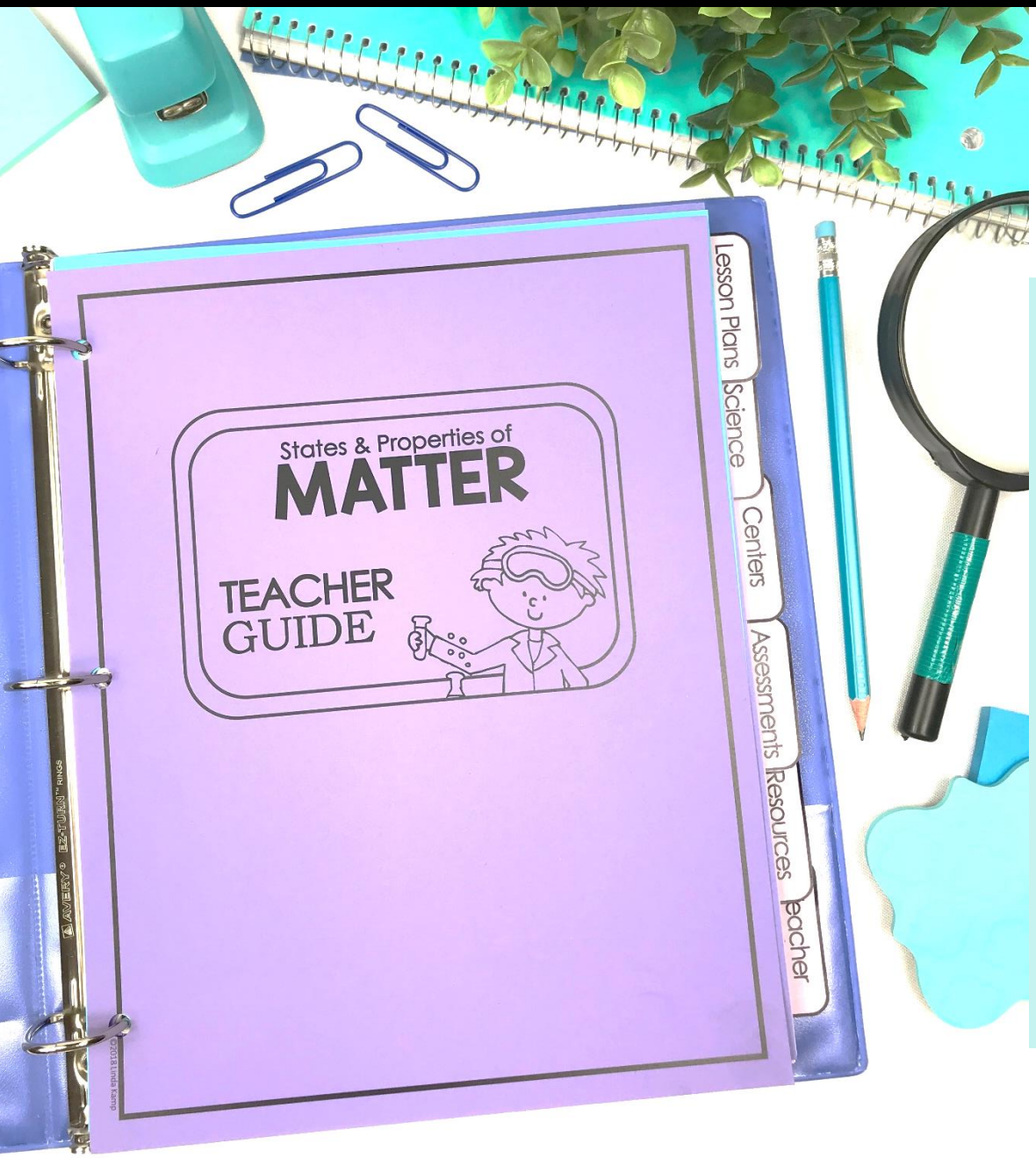
STANDARDS-BASED FOCUS WALLS

FOCUS WALLS INCLUDE:

- Big Idea posters
- Guiding questions cards
- Objectives cards
- Vocabulary display cards

Each lesson closely aligns to the Next Generation Science Standards for Second Grade

UNIT PLANNING BINDERS

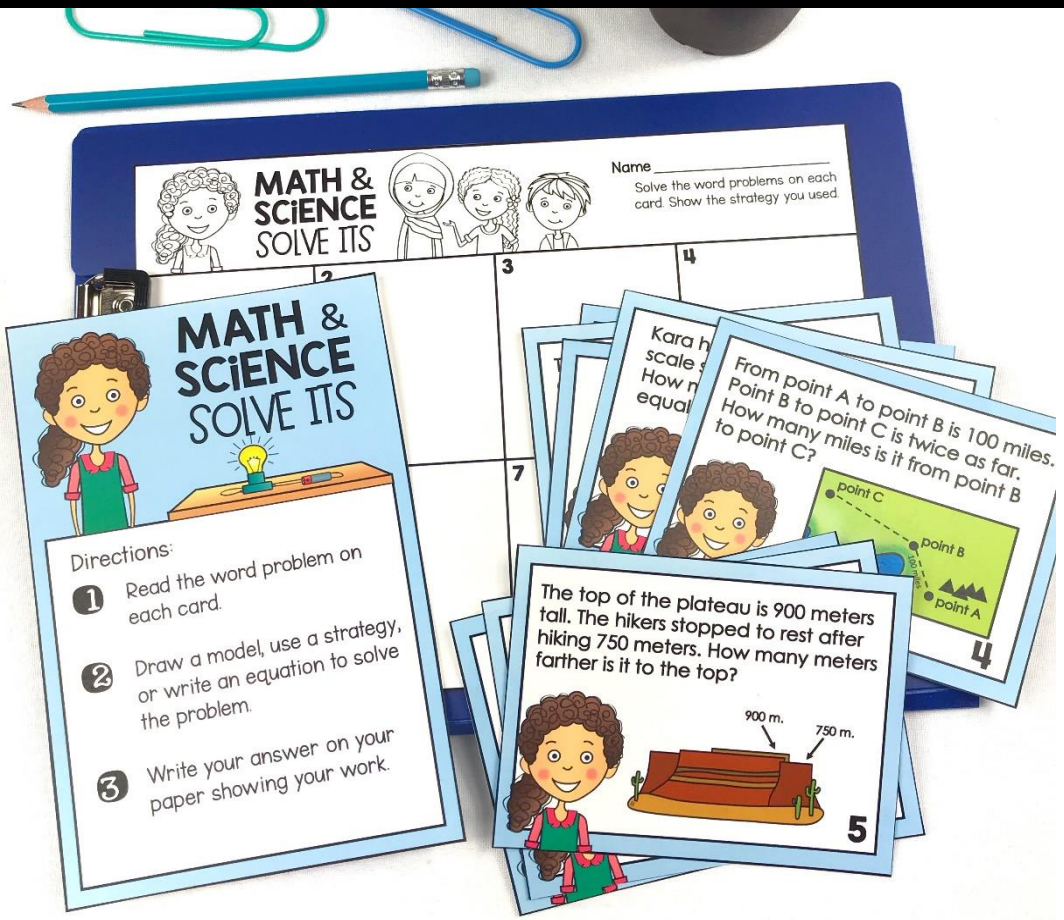


UNIT BINDERS INCLUDE:

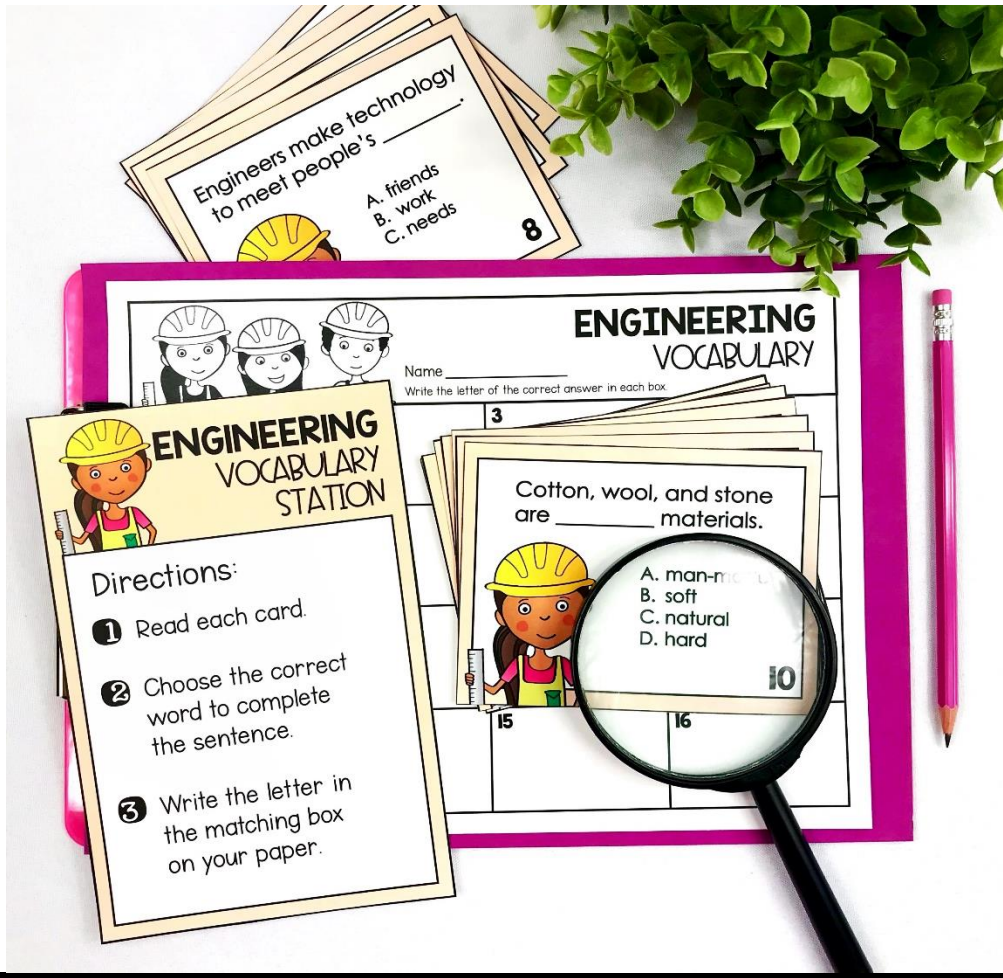
- Binder cover
- Spine label
- Divider tabs
- Section pages

  -lesson plans
  -student journal
  -science centers
  -assessments

MATH & LITERACY-BASED EXTENSIONS

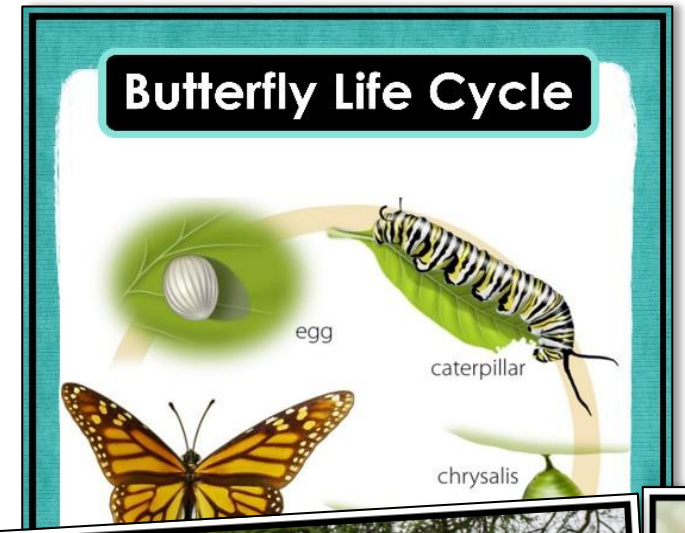


All units include four extension centers

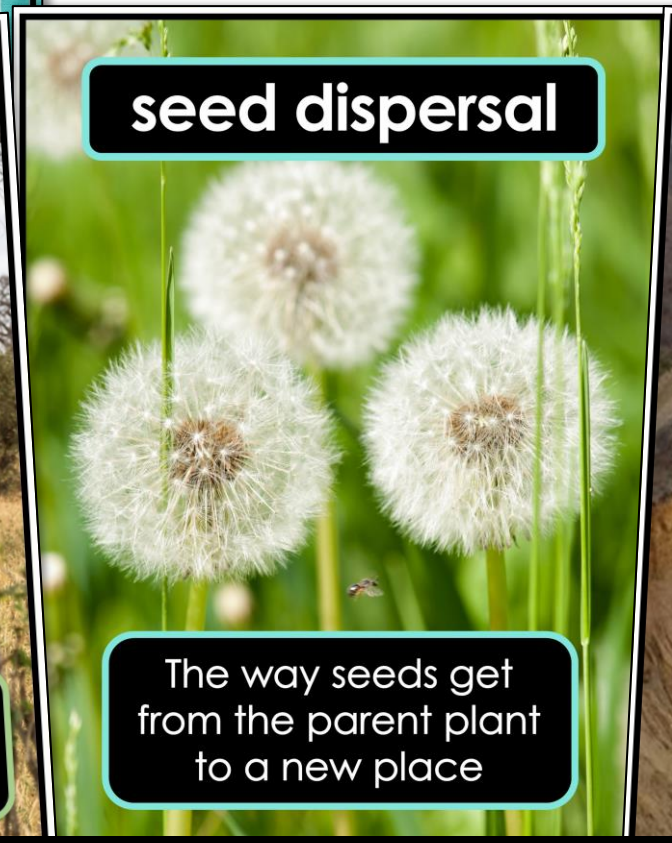


Reinforce science content & practice math and reading skills

VOCABULARY POSTERS & DIAGRAMS



Each unit includes full-page vocabulary posters and diagrams



UNIT BULLETIN BOARD DISPLAYS

ASK *Identify the Problem*

- What is the problem?
- What are the rules or requirements?
- How would someor

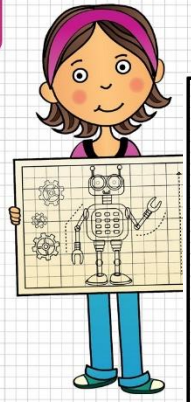
IMAGINE *Brainstorm ideas*

- Brainstorm ideas and solutions.
- Make a list of your

ENGINEERING

PLAN *Draw a design*

- Draw a diagram.
- What materials will you need?
- Write down the steps you will take.



CREATE *Follow your plan*

- Follow your plan to build your design.
- Test your design.
- Does it work the way you intended?

IMPROVE *Make it better*

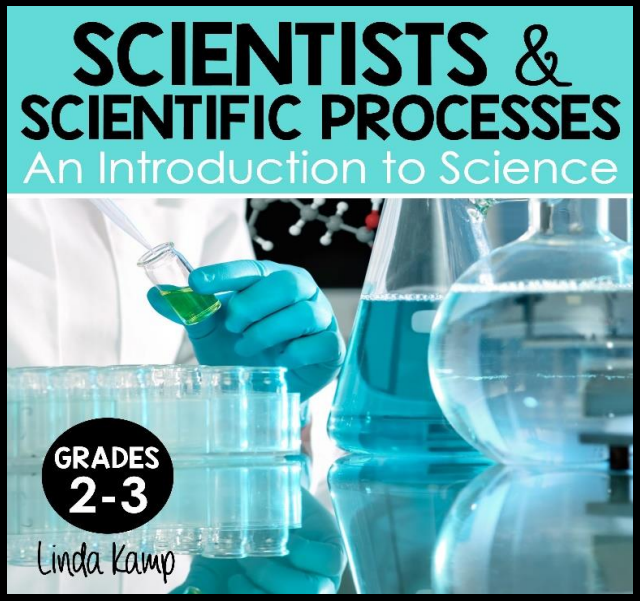
- What works in your
- t work?
- our
- tter?

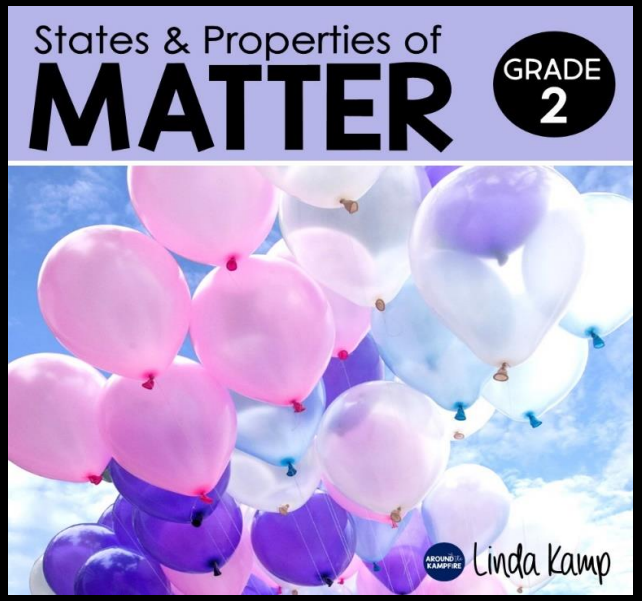
PRESENT *Show others*

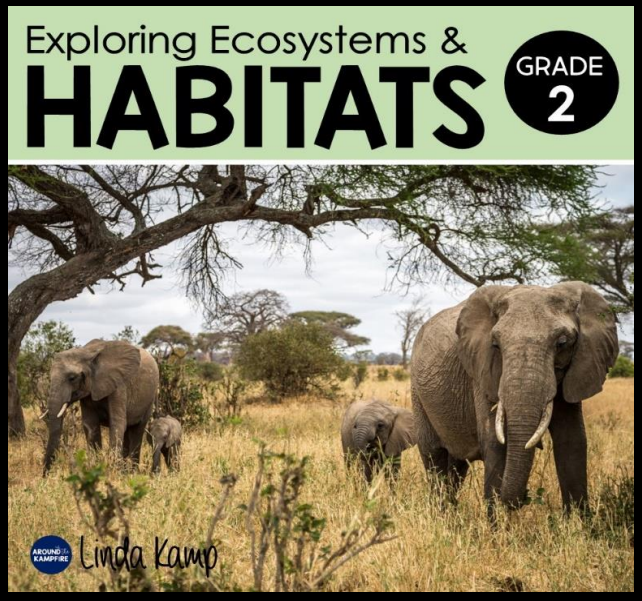
- Share your design with others.
- Explain its parts.
- Share how it solves a problem.

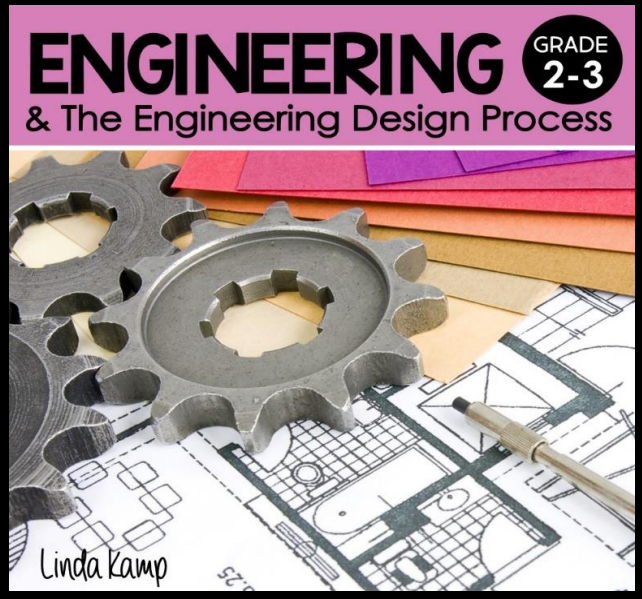
Title letters & unit themed elements

Build a science foundation!









YEARLONG SCIENCE CURRICULUM