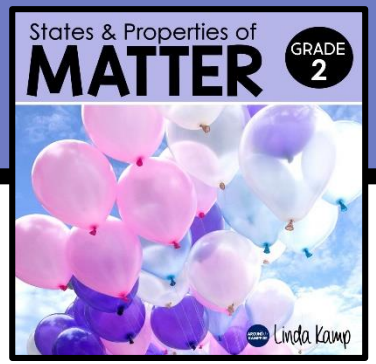


UNIT OVERVIEW

Designed to excite curiosity and connect prior knowledge, students are engaged in 8 high interest lessons that include a teaching PowerPoint with vivid, real world photographs. Students identify and explore three states of matter: solid, liquid, and gas. They learn that an object's properties determine the job it can do and discover that some objects and their specific properties can serve a purpose better than others.

As students learn about matter and its properties, they explore ways that matter can change. They explain whether a change caused by heating or cooling is reversible or irreversible.

Students are introduced to science practices, such as making observations, constructing explanations, using evidence to support a claim, and designing solutions to problems.

During each lesson students are presented with engineering connections that enable them to understand how solids, liquids, and gases are used for building and designing solutions to problems. Students learn and explore through investigations that man-made objects are often inspired by patterns found in nature.

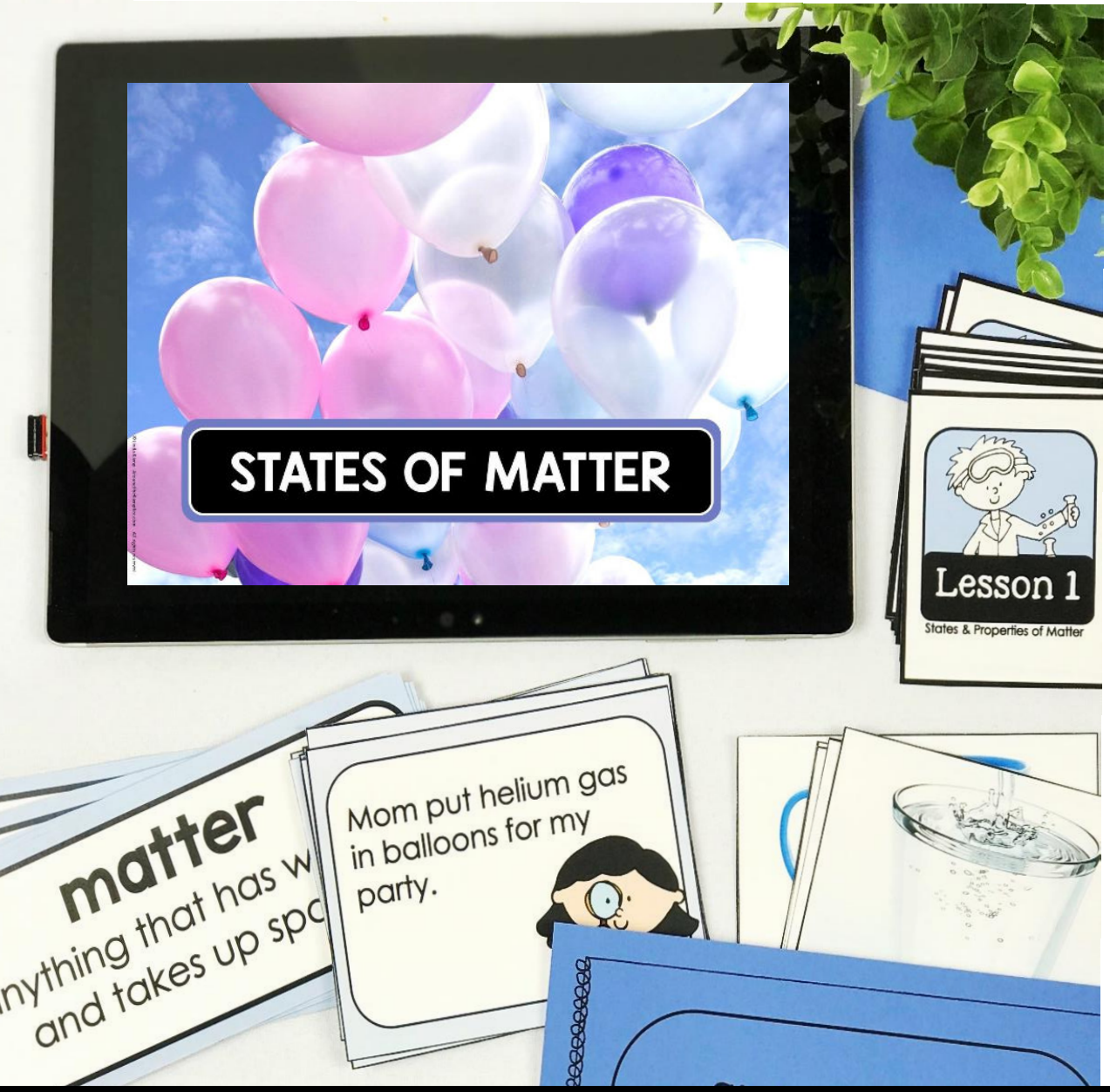
As the unit progresses students plan and carry out investigations, respond in science journals, and view videos on the topics of each lesson. Students engage in **Talk About It** partner discussions after each lesson and complete **Write About It** activities in their science journals.

Key science vocabulary is introduced in each lesson and defined in context. Students also use the science content to practice literacy skills. Students work with cause & effect, comparing/contrasting, classifying, and sequencing during science center extension activities.

Students are assessed after each lesson with Quick Check exit tickets in a choice of 2 formats. A final assessment is given upon completion of the unit.

Display resources including posters, learning target cards, and picture cards, offer lesson support and visual references for students throughout the unit.

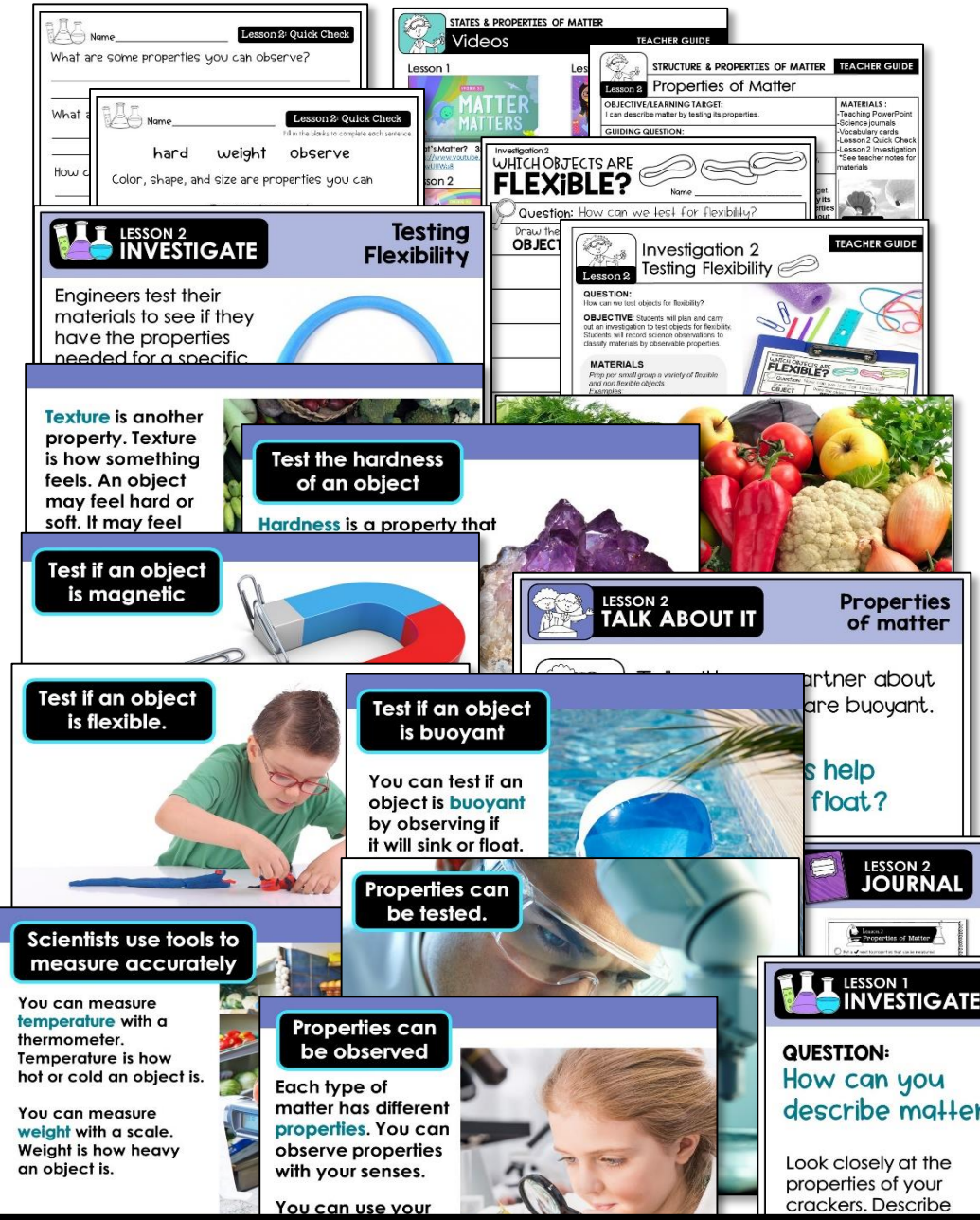
TEACHING POWERPOINT



8 ENGAGING, CONTENT-RICH LESSONS:

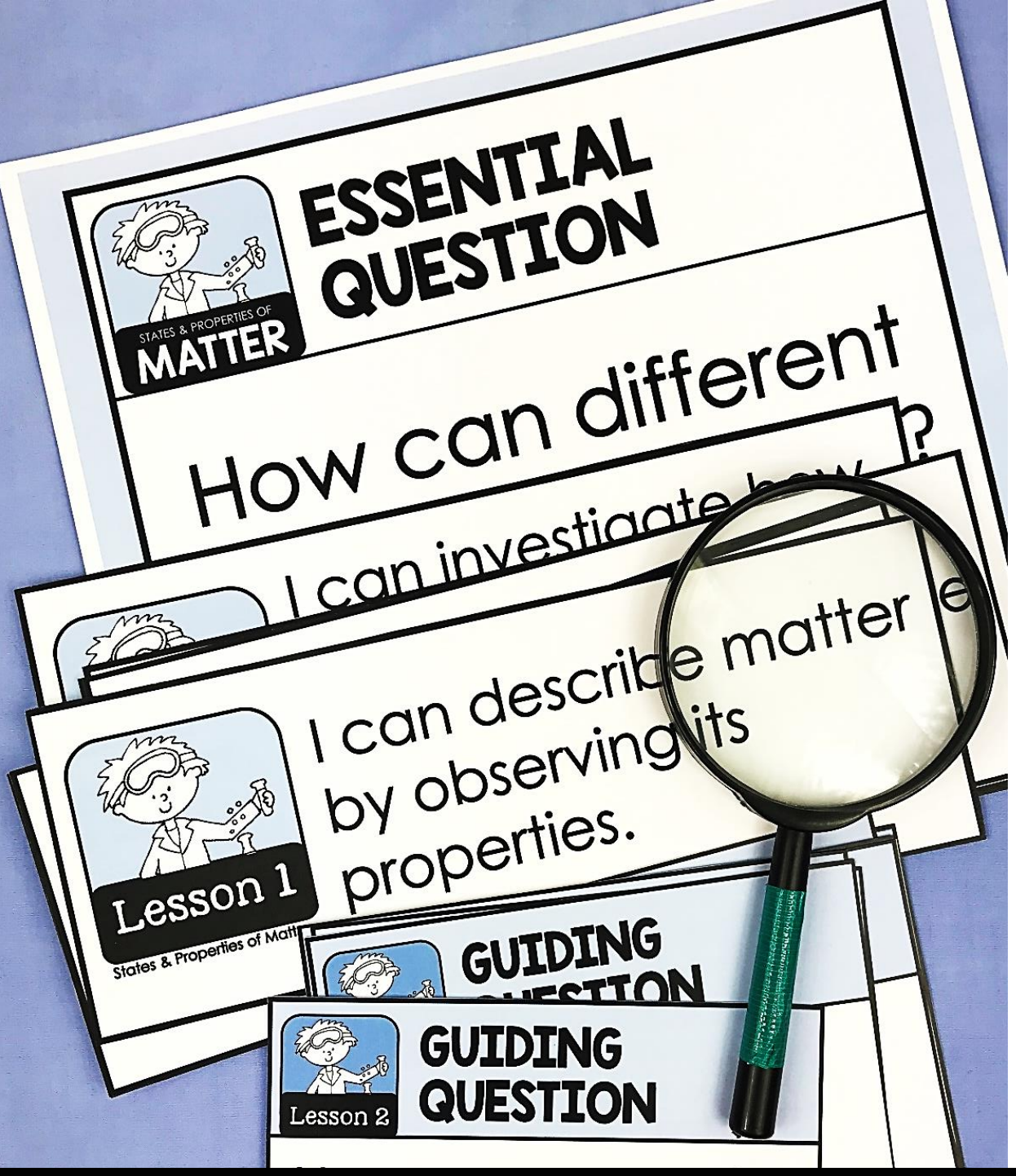
Describing Matter
Properties of Matter
Understanding Solids
Understanding Liquids
Understanding Gases
Changing Matter
Temperature & Matter
Matter Within Objects

EACH LESSON INCLUDES:



- Detailed, scripted lesson plan
- PowerPoint lesson
- Science journal activity
- Related investigation
- Exit tickets in 2 formats
- Vocabulary posters
- Objectives display cards
- Turn & talk partner questions
- Read aloud & video links
- Science center activity

SAMPLE LESSON



Aligned to

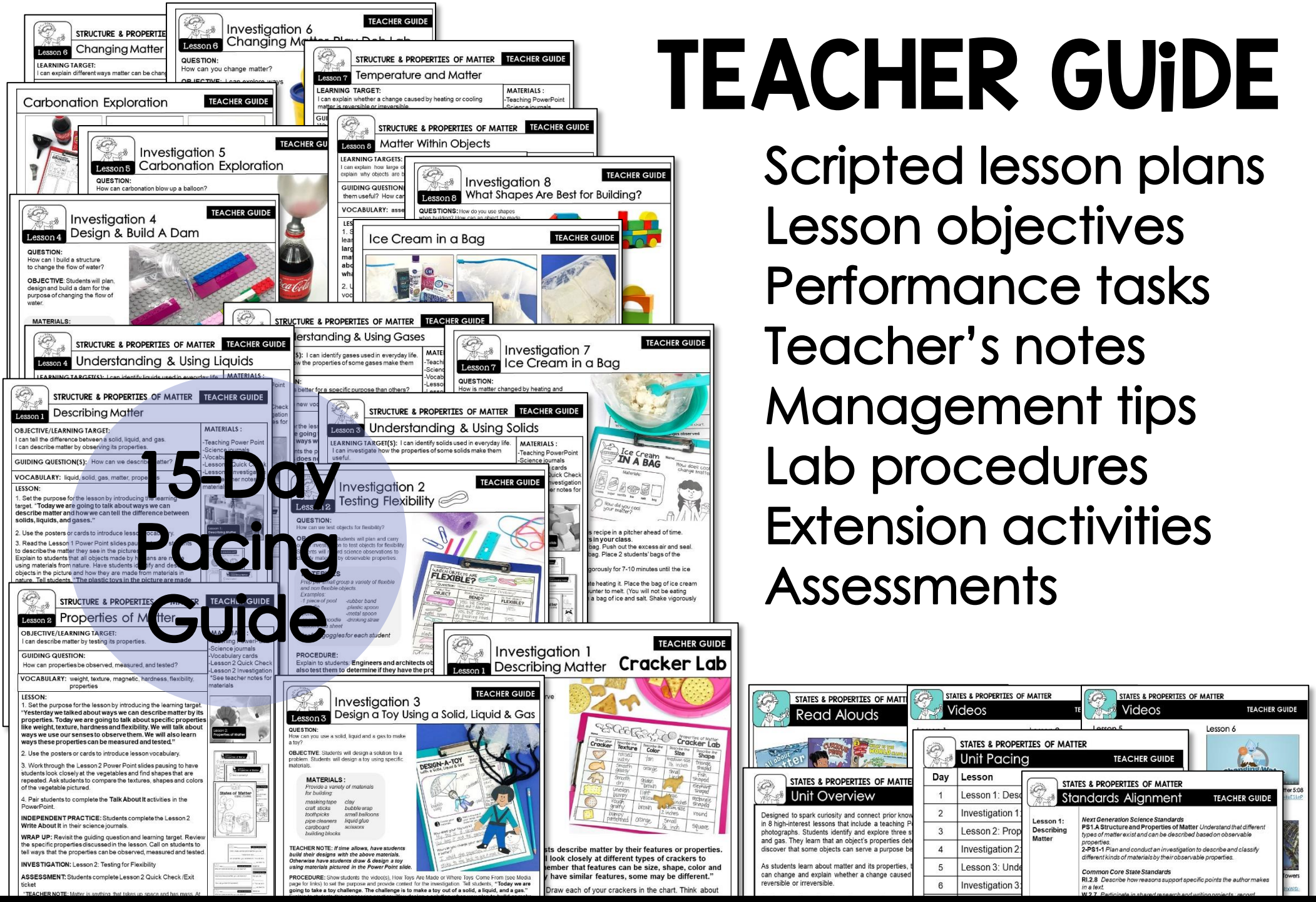
Next Generation Science Standards, TEKS,

and

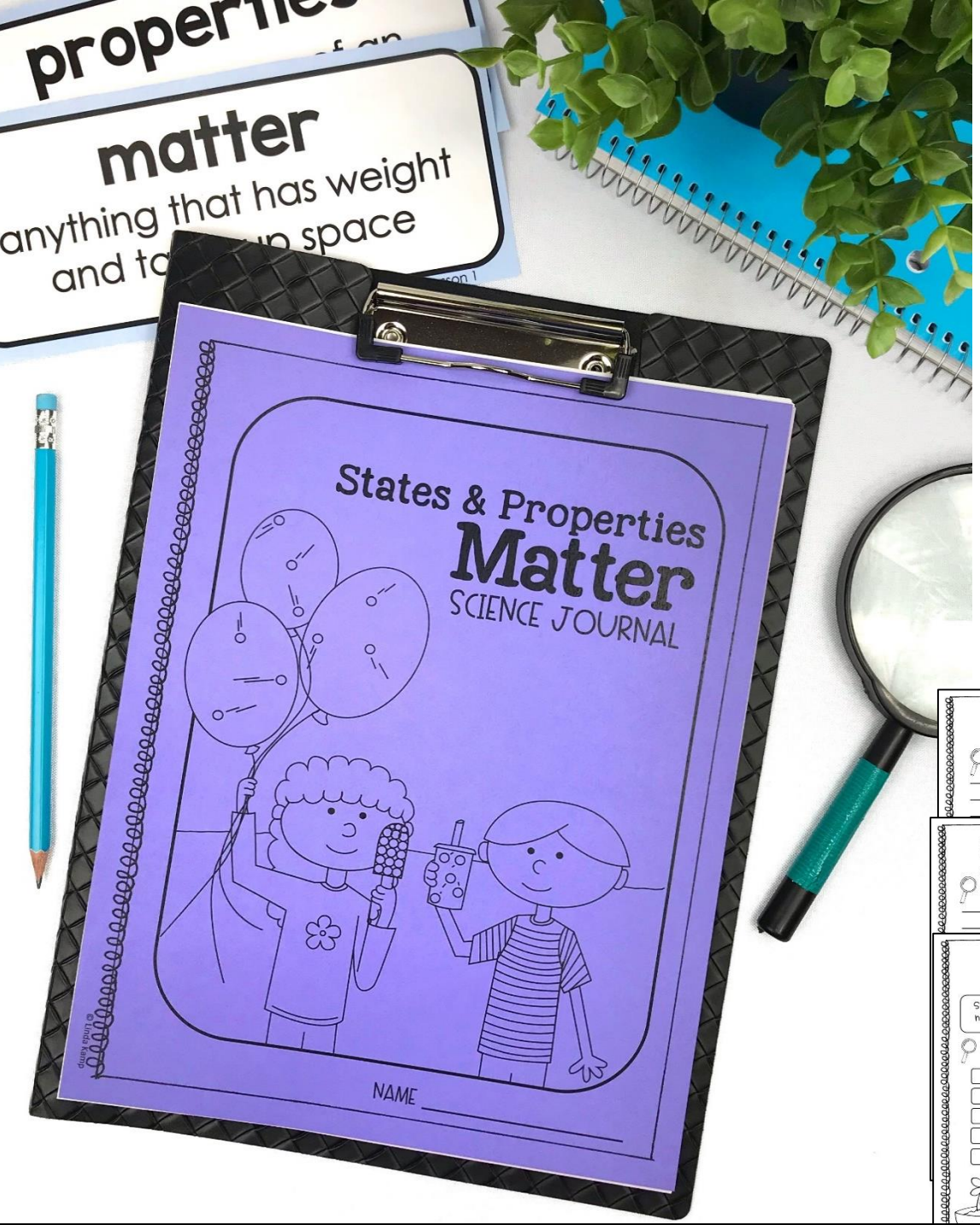
Common Core State Standards

for 2nd Grade

STANDARDS BASED

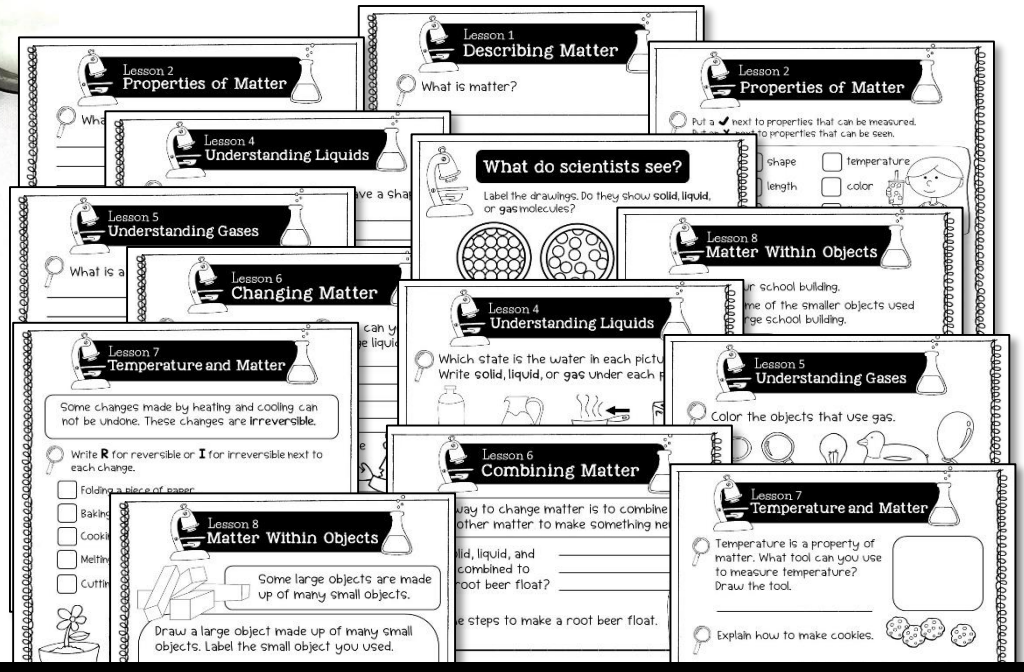


DETAILED LESSON PLANS



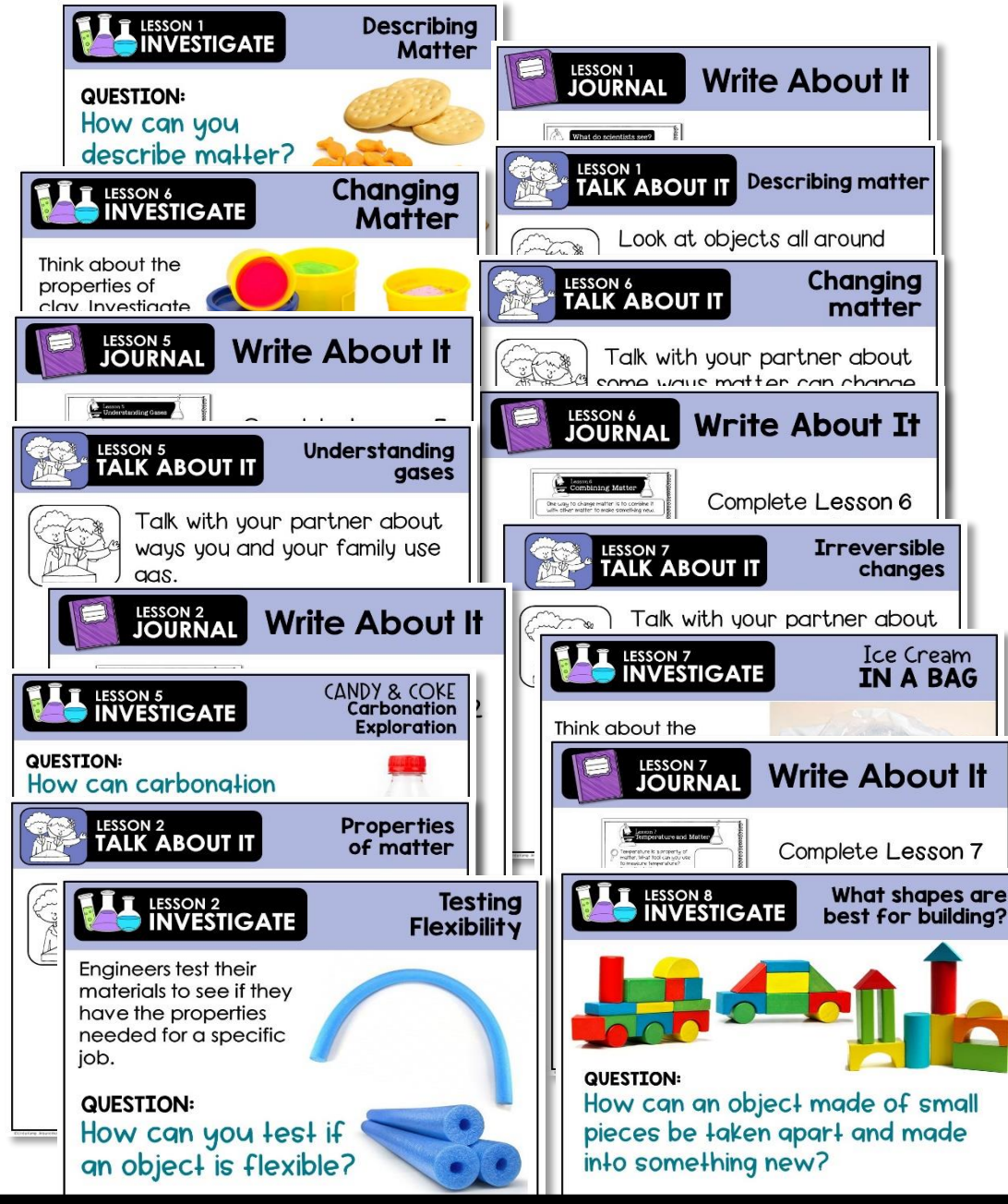
RESPONSE JOURNAL ACTIVITIES INCLUDE:

Short written response
Writing to explain
Sequencing
Categorizing
Applying vocabulary

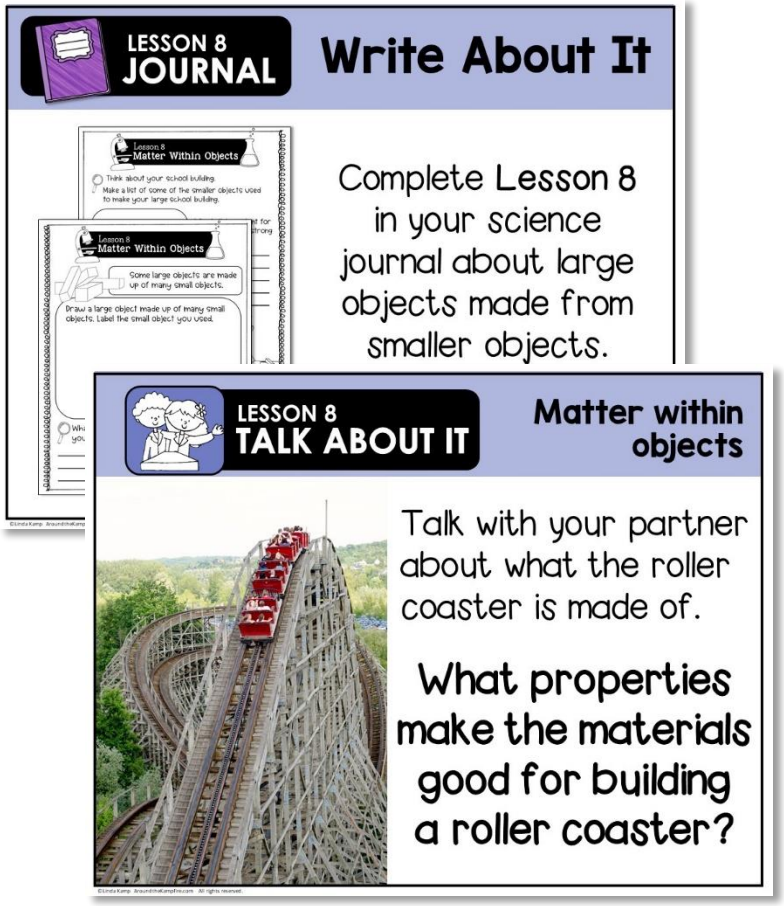


LESSON RESPONSE JOURNAL

8 HIGH-ENGAGEMENT LESSONS



During each lesson students discuss, write, and question.



8 HANDS-ON, HIGH INTEREST LABS

After each lesson students explore:

- Uses for solids, liquids & gases
- Comparing properties
- Testing materials
- Reversible/irreversible changes
- Cause and effect
- Designing solutions
- Building models
- Planning investigations

STEP-BY-STEP GUIDES

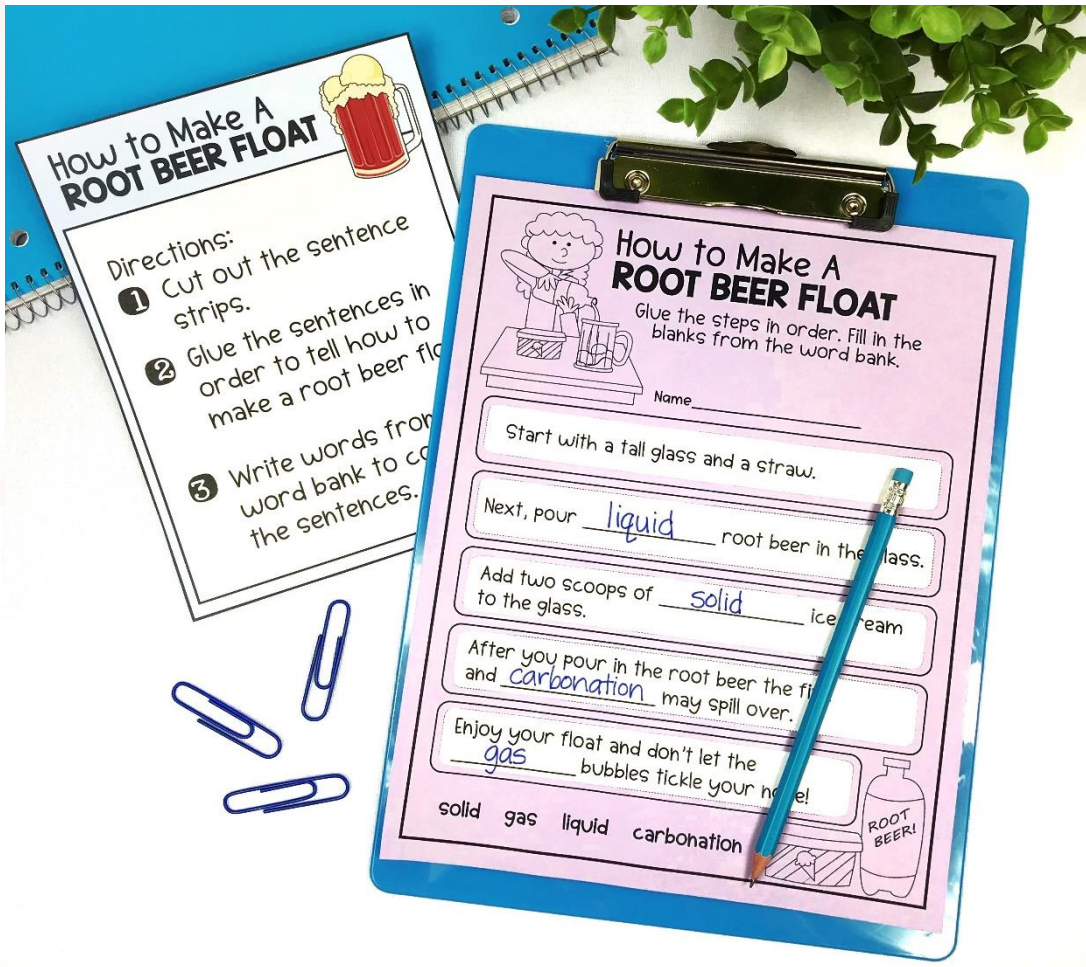
With teacher tips, procedures, & pictures

5 SCIENCE CENTERS

Literacy based EXTENSION ACTiViTiES

Integrate science in your reading centers

Reinforce SCiENCE CONTENT



Practice LiTERACY SKiLLS

Centers included in color and black & white

LESSON SUPPORT

Vocabulary cards

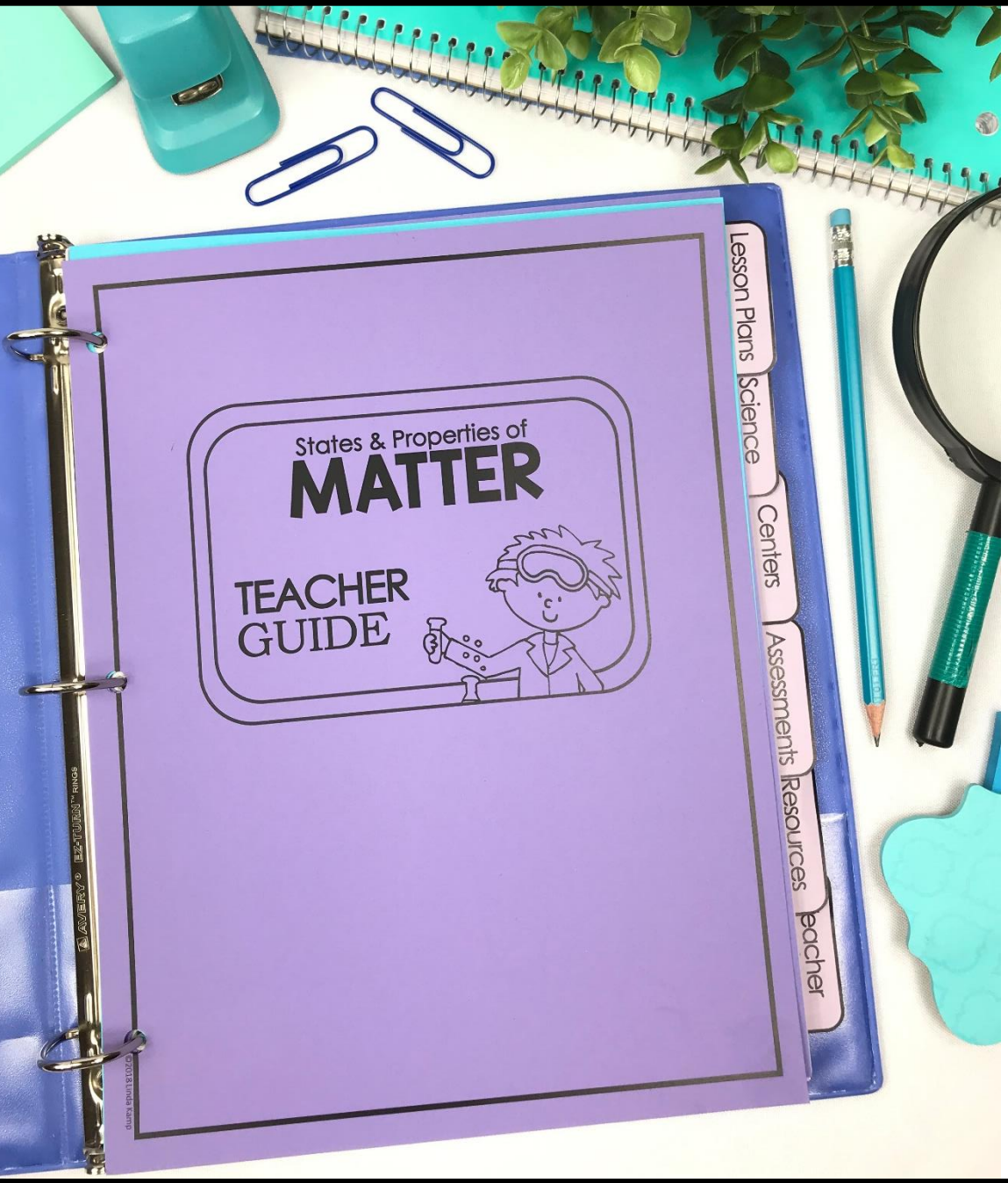
Focus Wall Cards

Objectives Cards

LESSON SUPPORT

Full page Vocabulary posters

UNIT PLANNING BINDER

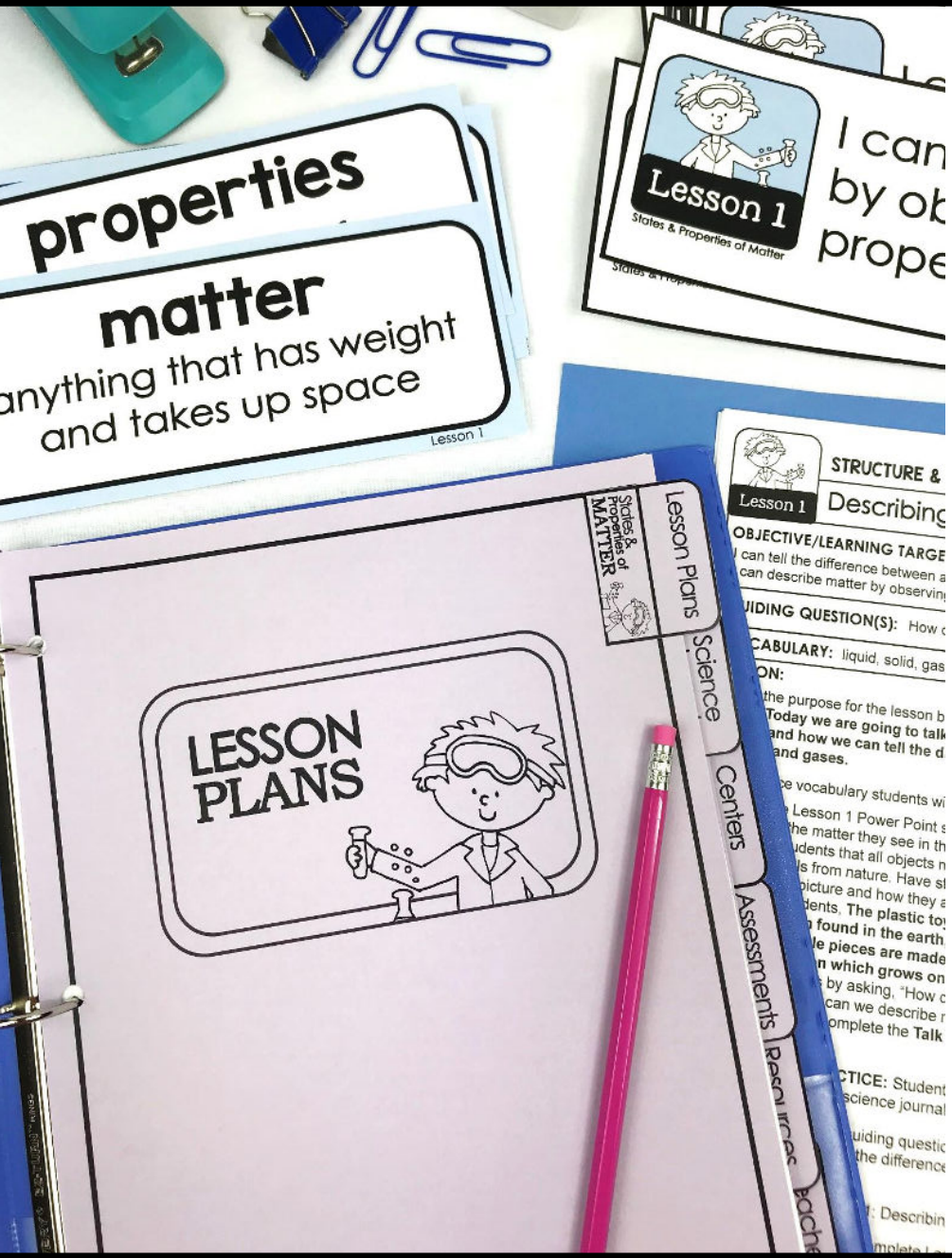


Organize your unit in a handy planning binder

Binder includes:

- binder cover
- binder spines
- section dividers
- divider tabs

UNIT PLANNING BINDER



PLAN - TEACH - ASSESS

an engaging, organized and effective unit

Store posters and centers in page protectors

Science for Second Grade

Build a science foundation

Students gain an understanding of:

- States of matter & its properties
- Reversible & irreversible changes
- Building models
- Testing materials
- Planning & conducting investigations
- Analyzing data
- Science & engineering practices
- Constructing explanations
- Using evidence to support claims
- Designing solutions to problems