

# Amplify Science

## Wondering About Noises in Trees Unit Deep Dive

Grade TK/UTK/ETK/TK-Kinder Combos

LAUSD

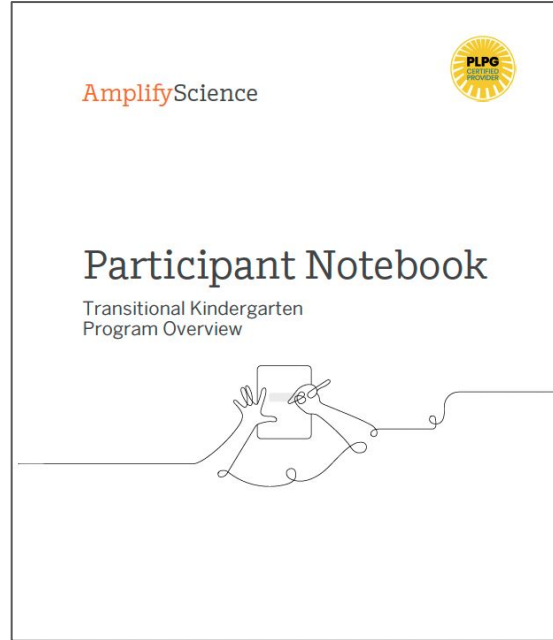
Date: September, 2023

Presented by \_\_\_\_\_

Amplify Professional Learning Specialist



# Participant Notebook



Hardcopy and digital

<https://bit.ly/3Piwvs2>

# Opening Reflection

What are your goals for student outcomes as a result of attending this professional workshop?

Participant Notebook

## Reflection

Use the provided spaces as a place for reflection throughout the session.

### Session goals and student outcomes

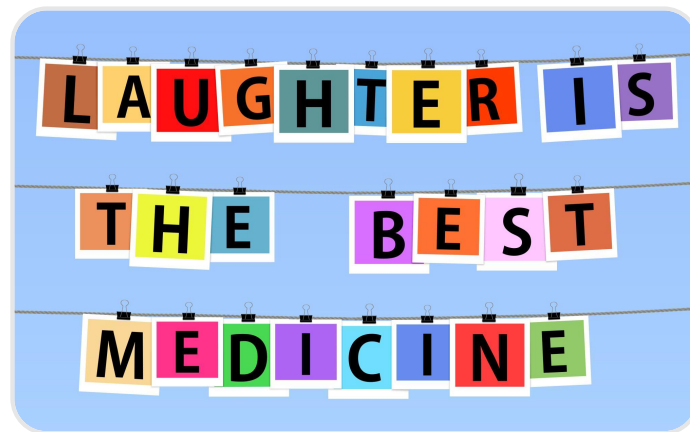
What Connect the workshop goal(s) to an outcome you envision for your students.	Why Reflect on why you want this outcome for your students.	How How will your students achieve the outcome? Reflect on what you learned during the workshop that will impact student outcomes.

# Welcome

02:24

**Make a name tent with cardstock.**

- Write your name and school site on the front
- On the back write:
  - Number of years you've been teaching TK or Kinder
  - What is something that has made you laugh this school year?





# LAUSD SUMMER/FALL INSTITUTE 2023

## Session 1 Unit 1 Deep Dive





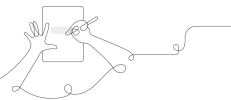
# Plan for the Day



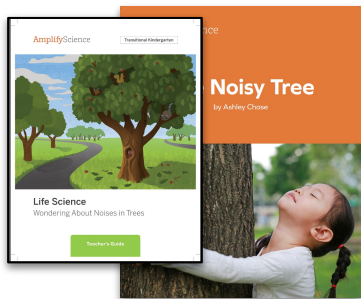
- Introduction & Framing the day

## Participant Notebook

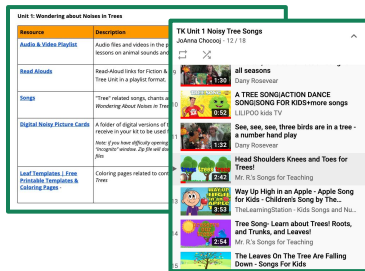
TK, Wondering About Buildings  
Guided Unit Internalization Workshop



- Navigation & Planning Explorations



- New Curriculum & TK Instructional Approach



- Planning to Teach- Additional Program Resources



- Internalization & Navigation Unit 1



- Closing



# Welcome!

*What science materials or equipment can you & your students not live without?*

## Intro: JoAnna Chocooj

- 30+ year veteran teacher in SF Bay Area = small Urban district in Vallejo, CA
- Grew up in tiny desert town of Trona, CA, just south of Death Valley
- **FUN FACT:** Extended family lived in LA - so presenting to my LA area teachers always feels like family!



- I got this wonderful water/sand sensory table for my classroom from Lakeshore - we use in all 3 Amplify Science TK Units!

# Amplify's Purpose Statement



# Norms: Establishing a culture of learners



- **Participate actively:** Engage at your comfort level - ask questions, discuss, share!



- **Take care of yourself:** stand up, get water, if you need anything, please let us know!



- **Manage your tech;** make sure you have a note-catcher present: we're here to help you access all the resources!



- **What is learned here, leaves here:** let's get ready to teach!!

# Today's Logistics



- Lunch break from 11:30 - 12:30
- UCKL Center X Presentation 12:30 - 2:00
- Unit planning 2:00 - 3:00
- Please be sure to sign in!
- Bathrooms
- Parking lot for questions or concerns





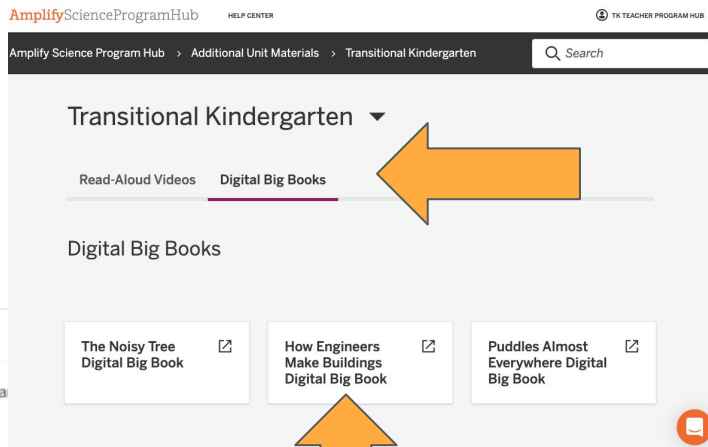
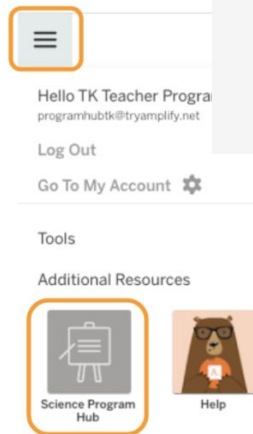
# Amplify Science TK Program Hub Resources

## Amplify Science TK Resources

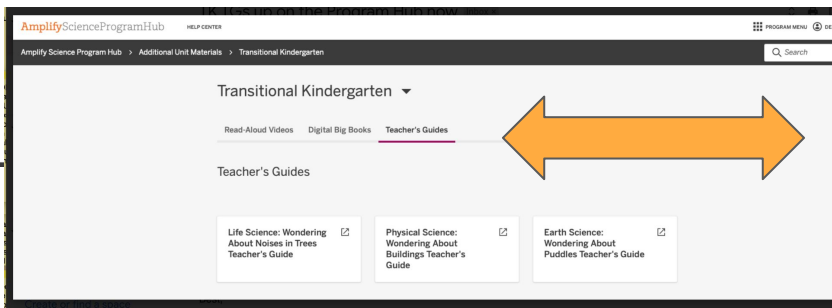
### Accessing Digital Books and Read Alouds

1. Go to [learning.amplify.com](https://learning.amplify.com)
2. Click "Log in with Amplify"
  - a. Username:  
programhubTK@tryamplify.net
  - b. Password: Amplify Number1
3. Use the Global Navigation Bar to open the Science Program Hub
4. From the Program Hub> Open Additional Unit Resources
5. Click on Transitional Kindergarten
6. Explore the Read- Aloud videos and Digital Big Books

Welcome to Amplify.



Digital PAGE-TURNER PDFs of unit big books that can be projected for lesson focus on images, vocabulary, etc.



PDFs of ALL 3 Unit TGs and Copymasters!!

# Join Amplify Science Schoology Group

To join Amplify Science Schoology  
ES Group: W4PK-W466-63F5B

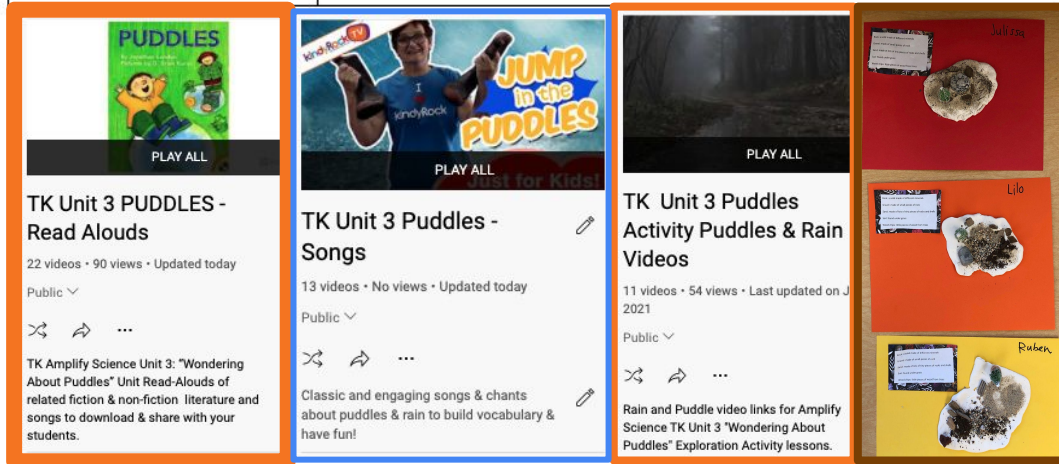


# Collaborative Resources

Through working with real Amplify Science TK teachers, JoAnna, our TK expert, has put together some collaborative resources that connect to each of our TK units!

If you find new books, songs or videos to use with the unit, please email suggestions to [jchocooj@amplify.com](mailto:jchocooj@amplify.com) so she can add them to our collaborative playlists.

Resource	Description
<a href="#">Read Alouds</a>	Read-Aloud links for Fiction & Non-Fiction related literature to the <i>Wondering about Puddles</i> Unit.
<a href="#">Songs</a>	A playlist of songs that have connections to the themes in <i>Wondering about Puddles</i> .
<a href="#">Puddle Activity Videos</a> <a href="#">Water Activity Video</a>	A playlist of videos involving activities in and around puddles. Video activity that connects to Exploration 1, Activity 4.
<a href="#">Art Project Examples</a>	Ideas for related art projects.





# Getting to know you...



- **Have you taught Amplify Science TK?**
  - **If so, what successes have you had teaching?**
  - **& what challenge have you faced teaching Amplify Science TK?**
- **If not, what challenges have you faced teaching science?**
- **What will be most helpful to you during our time together today?**
  - **What goals do you have for student outcomes after our workshop time together?**

# Navigation Temperature Check

**Rate yourself on your comfort level accessing Amplify Science TK materials and navigating the lessons.**

**1 = Extremely Uncomfortable**

**2 = Uncomfortable**

**3 = Mild**

**4 = Comfortable**

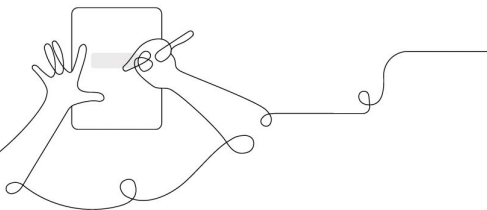
**5 = Extremely Comfortable**



Public - Jan  
2023 PN TK, Unit  
1.pdf

# Participant Notebook

TK, Wondering About Noises in Trees  
Unit Internalization



## Exploration Note Catcher

Unit Name:  
Flexible Implementation Structure:

FOCUS AREAS	Introductory Activity	Exploration #1	Exploration #2	Exploration #3	Culminating Activity
Science Question					
What will students learn? (objectives)					
Key Vocabulary					
Multiple Modalities (Do, Talk, Read, Write, Visualize)					
Assessments and/or Differentiation Opportunities					

TK Planning Resources  
Notecatcher

TK Unit Notecatcher

TK Activities  
NoteCatcher

## Amplify Science TK ACTIVITY Center Notes

UNIT: #1 #2 #3 NAME: EXPLORATION: #1 #2 #3

Use this organizer to record notes on how to structure the Activities in your classroom for each Exploration. Decide where/how you will set up the stations (part of LA or Math, or general Learning Centers? Part of Free Choice Centers?), ideas for visual arts & music, extension & home opportunities

Station one:

Station Two:

Station Three:

Station Four:

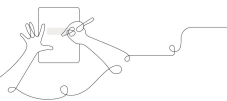


# Plan for the Day

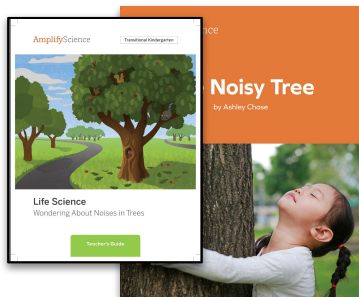
- Introduction & Framing the day

## Participant Notebook

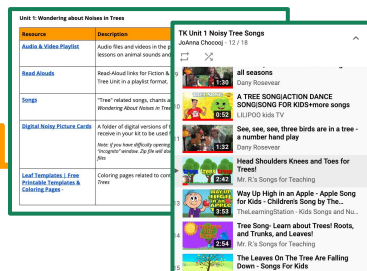
TK, Wondering About Buildings  
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- Internalization & Navigation Unit 1



- Closing



# Overarching Goals



- **Navigate the Amplify Science TK curriculum to understand the structure and resources at the Unit, Exploration and Activity levels.**
- **Experience how all the multimodal activities & instructional routines work together to support students' success.**
- **Become familiar with planning resources to prepare to teach Amplify Science TK to my students..**



# TK Scope and Sequence



## **Life Science:**

Wondering About Noises  
in Trees

**Student Role: Biologist**



## **Physical Science:**

Wondering About  
Buildings

**Student Role: Building Engineer**



## **Earth Science:**

Wondering About  
Puddles

**Student Role: Hydrologist**

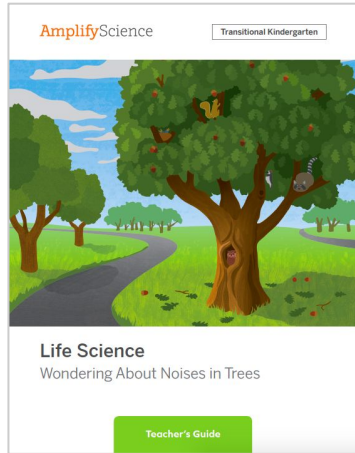
**Number of Lessons:** 20 lessons per unit

**Time:** 15 mins per lesson

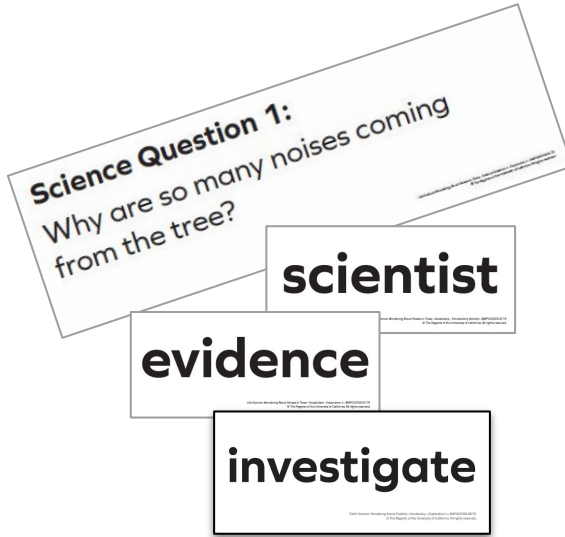
**Instructional Time:** 4 - 6 weeks per unit - **Flexible Implementation**



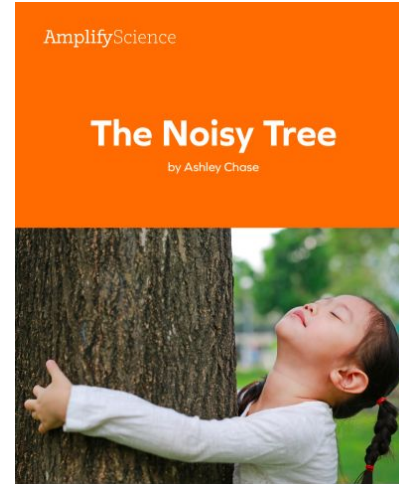
# TK Unit Materials



**Teacher's  
Guide -  
Paper & PDF**



**Classroom  
Wall  
Materials**



**Big Book -  
Paper &  
Digital**



**Card Sets -  
Paper &  
Projection**



# TK Curriculum Materials

- Language Frames & Student CopyMasters
- Home Connections Copymasters
- Scientist Cards
- Extension Opportunities
- Playlists of Exploration Audio & Video Lesson Links; Songs & related Literature (refer to district for guidance on use)

## Amplify Science ScientistProfile Cards

### Shared Listening



1.  
**Partner A** shares.  
**Partner B** listens.



2.  
**Partner B** repeats.  
*I heard you say...*



3.  
**Partners switch.**



### Teacher Support

#### Instructional Suggestion

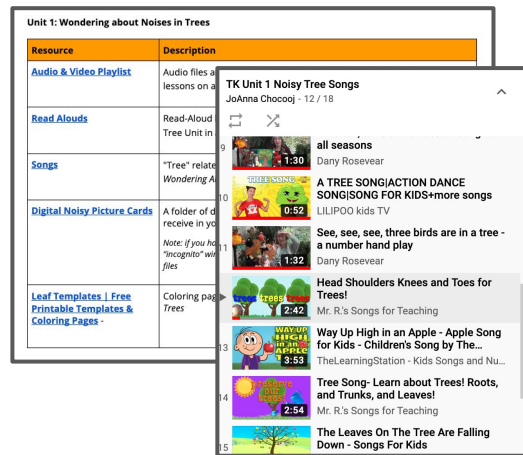
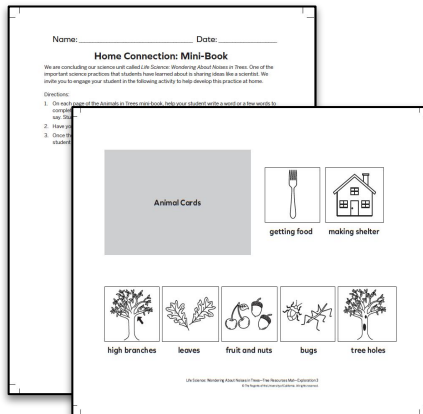
##### Providing More Experience: Class Nature Walk

You can extend the Introductory Activity by taking a class nature walk if you have access to a natural or semi-natural area with trees. This area can be a part of the schoolyard, a small local park, or a larger protected area. Let students know that they will look and listen to figure out more about what is in, on, and around the trees. Guide students on a walk, pausing frequently to model looking and listening closely to the trees. For example, you can say, "I look closely at this tree, and I see leaves." "I look closely at these leaves, and I see that they have lines on them." "I listen closely to this tree, and I hear chirping." During the class nature walk, invite students to share any observations they make.

#### Instructional Suggestion

##### Providing More Experience: Home Connection

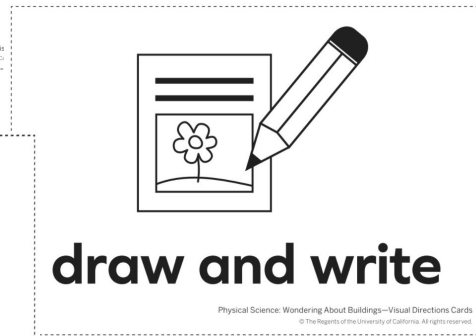
The Introductory Activity includes an optional Home Connection that introduces families to one of the science practices students will learn in this unit. Home Connections can encourage interaction and discussion between students and their families around science concepts, which is beneficial for student learning. The Home Connection: Observing Trees invites students and an adult to observe sights and sounds near a tree or several trees. Make one copy of the Home Connection: Observing Trees copymaster for each student to take home.



# Flexibility

## Visual Directions Cards

- Support independent interaction in centers in all 3 TK Units
- Provided after Activities in Exploration 1
- Suggestions within Exploration level





As you watch this video, listen carefully to how you know Emma is engaged in phenomena based learning?

What words or phrases does she repeat to let you know?

Use the chat feature to share your thoughts.

**Kevin Butters**  
@chickensrevenge

Follow

My daughter is having awesome conversations with me about what she is learning in science! @AmplifyScience #RiseGI #LincolnShines



**Parent:** “Emma, what are you learning about in Science?”

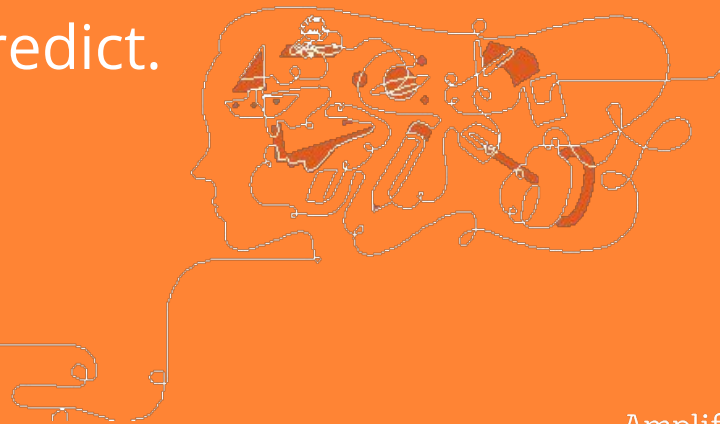
**Emma:** “All plants need water. Sometimes it rains in the desert. And we’re figuring out why does the black one doesn’t grow and the pink one and the white one does grow.”

**Parent:** “But you don’t...”

**Emma:** “And we ummm we figured out the one who had the ummm caterpillars. We already figured that one out cause no caterpillars were there. OK? The End!”

# Phenomenon-based learning & teaching:

A scientific phenomenon is an **observable event** that occurs in the universe that we can use science ideas to explain or predict.



# Phenomenon-based learning and teaching

## Next Generation Science Standards & CA PLFFs

*A scientific phenomenon is an **observable event** that occurs in the universe that we can use science ideas to explain or predict.*

SCIENTIFIC INQUIRY STRAND		CA NGSS SCIENCE & ENGINEERING PRACTICES
At around 48 months of age	At around 60 months of age	
<b>1.2 Observe objects and events in the environment and describe them.</b>	<b>1.2 Observe objects and events in the environment and describe them in greater detail.</b>	
		<p>an evidence-based account for natural phenomena.</p> <p><b>SEP-8 Obtaining, evaluating, and communicating information</b></p> <ul style="list-style-type: none"> <li>Describe how specific images (e.g., a diagram showing how a machine works) support a scientific or engineering idea.</li> <li>Use information from observations to construct an evidence-based account.</li> <li>Communicate information in oral form using models and drawings that provide detail.</li> </ul>

# Topic-based vs. Phenomenon-based

*What's the difference?*

Topic-based	Phenomenon-based
Animals in trees	Why are there noises coming from the tree in the park?
All about buildings	How can we make a play city with stable buildings?
Rocks and water	Why are there puddles in some places on the ground, but not in other places?



Amplify Science

We are biomimicry engineers.



Amplify Science

I'm a pinball engineer.



Amplify Science

I'm a weather scientist.



Amplify Science

We are aquarium scientists.



Amplify Science

I'm a light and sound engineer.



Amplify Science

We are ecologists.



Amplify Science

I'm a meteorologist.



Amplify Science

I'm a sky scientist.



Amplify Science

**DRAMATIC PLAY** will  
never be the same.  
We are now officially:  
**TK Scientists!**

Amplify Science

We are geologists.



Amplify Science

We are systems engineers.



Amplify Science

I'm a conservation biologist.



Amplify Science

We are mathematicians.



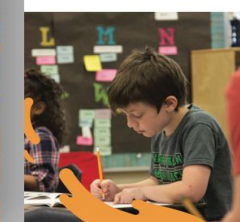
Amplify Science

I'm a food scientist.



Amplify Science

I'm an astronomer.



Amplify Science

I'm a water resource engineer.

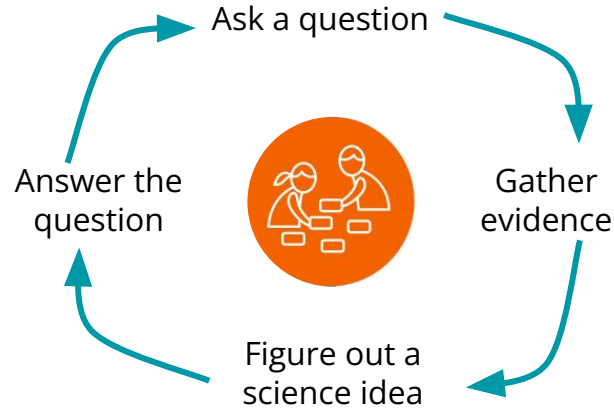




# Amplify Science TK Instructional Approach



**Find out about  
a Mystery, a  
Phenomenon**  
**NGSS focus**



**Gather evidence  
to figure out  
science ideas**  
**California PLFF's &  
NGSS 3D Learning**



**Explain the  
Mystery, the  
Phenomenon**  
**California PLFF  
Application  
to NGSS !**

# Phenomena-based Instruction

**Inquire** like a scientist.

**Think** like a scientist.

**Quantify** like a scientist.

**Read** like a scientist.

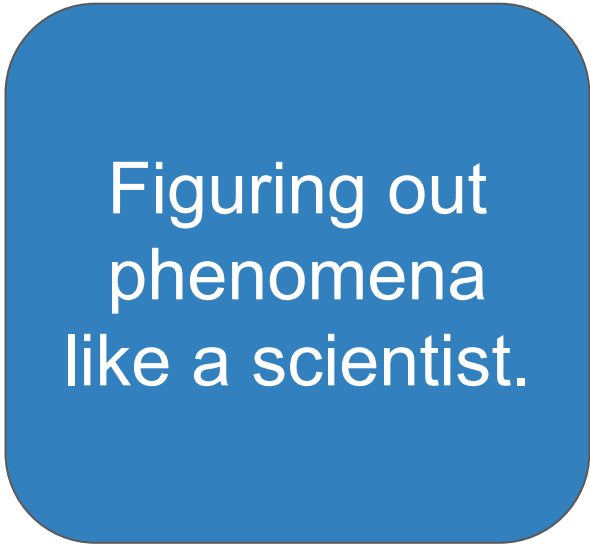
**Talk** like a scientist.

**Draw** like a scientist.

**Write** like a scientist.

**Critique** like a scientist.

**Argue** like a scientist.



Figuring out  
phenomena  
like a scientist.

# Figure out, not learn about...

How might the role of a student change when they engage in figuring it out instead of learning about?

it would be ongoing and no definite answer would be right away

**It would become personal for them!**

**Students will take ownership of learning**

They will become more engaged

**They have ownership of the learning.**

They become little scientists! :)

They will be problem solvers

**BRAINSTORM**

**Students be the ones that are in charge of their own learning.**





# Plan for the Day

- Introduction & Framing the day

- New Curriculum & TK Instructional Approach

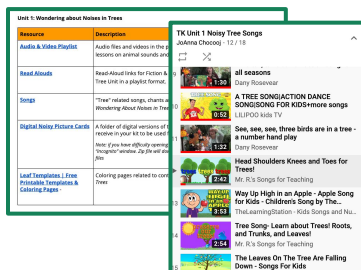
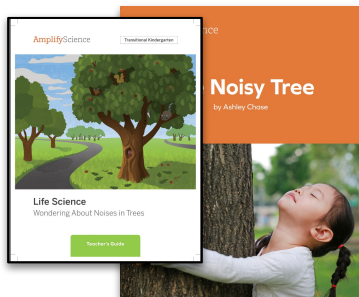
- Internalization & Navigation Unit 1



- Navigation & Planning Explorations

- Planning to Teach- Additional Program Resources

- Closing

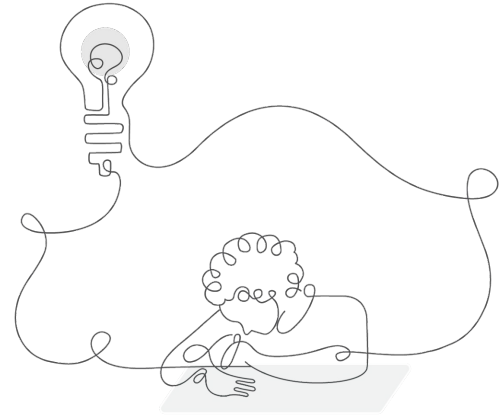


# Previewing the unit

## Introducing the phenomenon

Amplify Science units are designed around complex phenomena that drive student learning through the unit.

Let's look at the phenomenon, or observable event, students will figure out in your unit.



# Unit Experience

**Introductory Activity:** Learning About the Noisy Tree

**Exploration 1:** Why Are So Many Noises Coming from the Tree?

**Kickoff Discussion:**  
Listening to the Tree Noises

**Activity 1:**  
Getting to Know the Tree Model

**Activity 2:**  
Classifying Noises

**Activity 3:**  
Reading *The Noisy Tree*

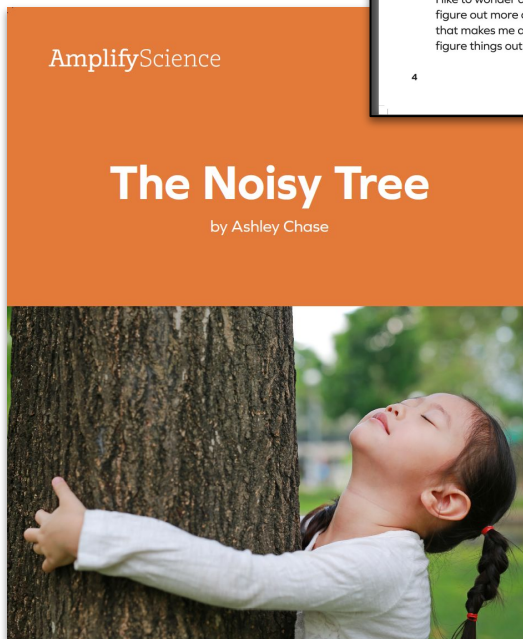
**Activity 4:**  
Gathering Evidence from Pictures

**Shared Drawing and Discussion:**  
Animals Making Noises in the Tree

# Introductory Activity:

## Learning About the Noisy Tree

The teacher reads aloud the first few pages of *The Noisy Tree*, which begins the story of a young girl who works like a scientist as she observes a tree in the park. Students are introduced to their role as scientists. They also share their initial ideas about what could be making the noises in the tree. **The purpose of this Introductory Activity is to introduce students to the unit phenomenon and to their role as scientists in order to motivate their learning throughout the unit.**



- **Phenomenon:** noises coming from trees
- **Mystery students solve:** what causes these noises and why.
- **Role:** scientists
- **Vocabulary:** scientist, observe, evidence

( TG: Introductory Activity Page 16-20)

## Vocabulary



**scientist**

**someone who uses their 5 senses to figure things out about the natural world**



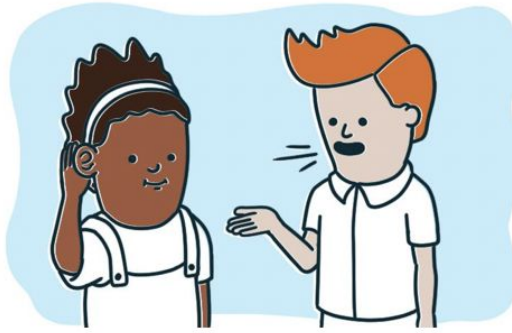
***Share what you think might be making the noises in the tree.***

## Shared Listening



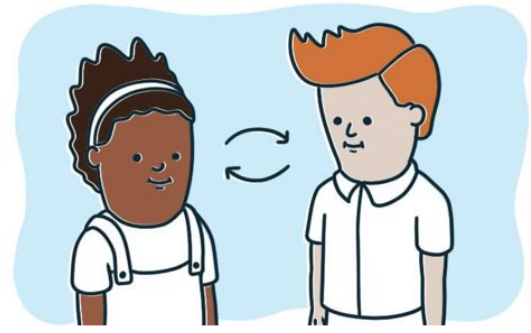
**1.**

**Partner A** shares.  
**Partner B** listens.



**2.**

**Partner B** repeats.  
*I heard you say...*



**3.**

**Partners** switch.

# Amplify Science

## Anchoring phenomenon

- Complex and rich
- Drives learning through a whole unit
- Specific and observable
- Relatable at students' developmental level



# Wondering About Noises in Trees



**Problem:** What is making all those noises in the tree(s)?

**Role:** Biologists (animal & plant scientists)

**What:** Students take on the role of biologists helping answer young girl's questions about what can be making all the noises coming from a tree. They figure out that the noises can be made by animals, & then investigate what they're doing that's so noisy, & why trees are such great places for them.

# Coherent storylines



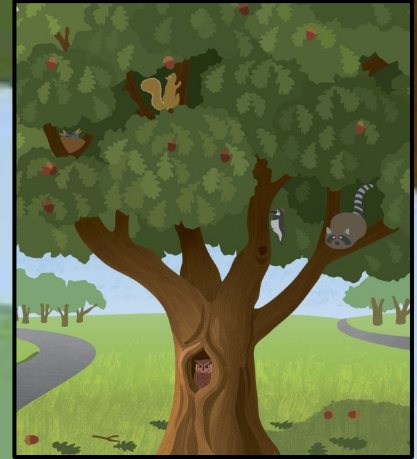
## **Exploration 1:**

*What is making all the noises we hear in the tree?*



## **Exploration 2:**

*What are the animals doing in the tree to make so much noise?*



## **Exploration 3:**

*Why are trees such great places for animals to make shelter & get food?*



# Unit Structure and Timing



**Entire Unit**  
300 minutes  
(5 hours)

**Introductory Activity** (15 minutes)

**Exploration 1** (90 minutes)

**Exploration 2** (90 minutes)

**Exploration 3** (90 minutes)

**Culminating Activity** (15 minutes)

**Science Question 1:**

Why are so many noises coming from the tree?

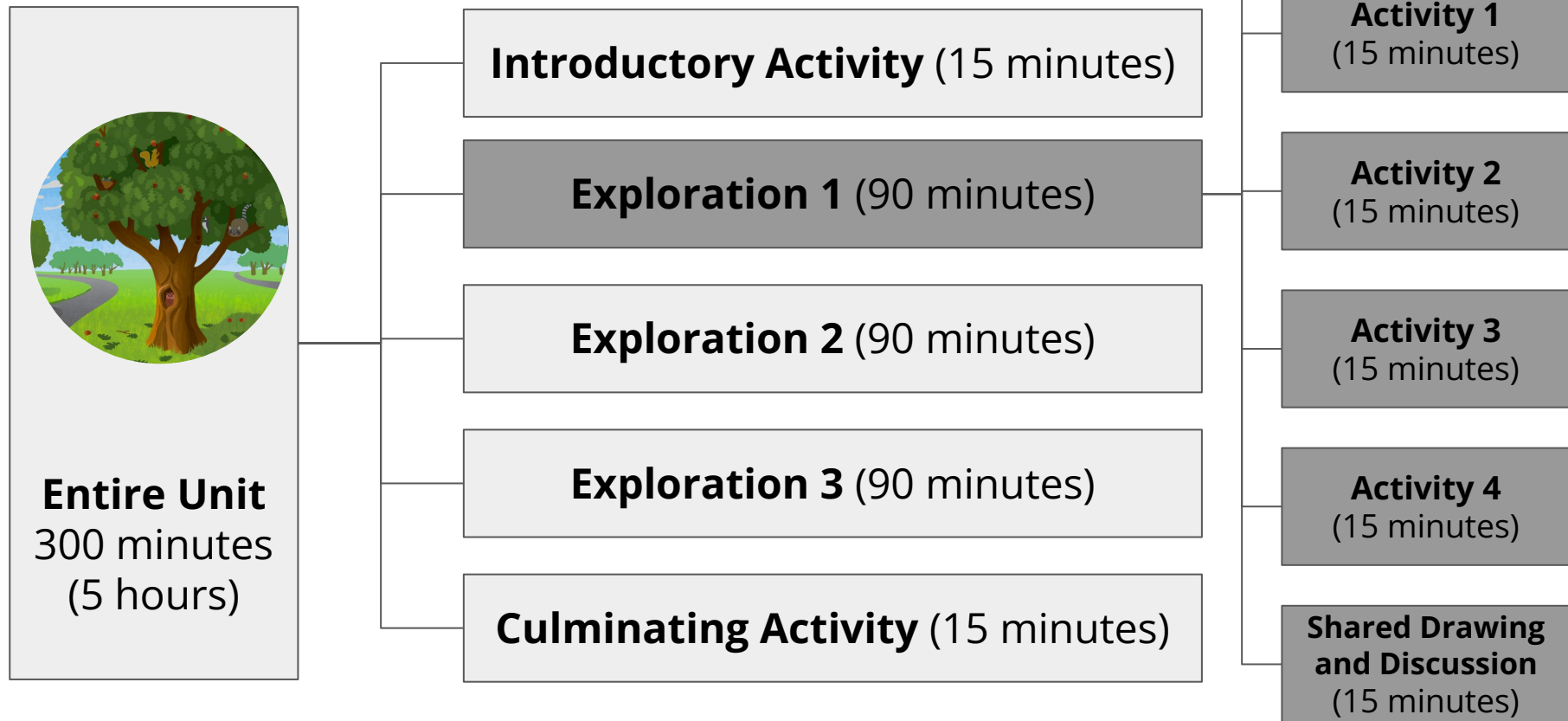
**Science Question 2:**

What are the animals doing in the tree that makes so much noise?

**Science Question 3:**

Why is the tree a good place for the animals to get food and make shelter?

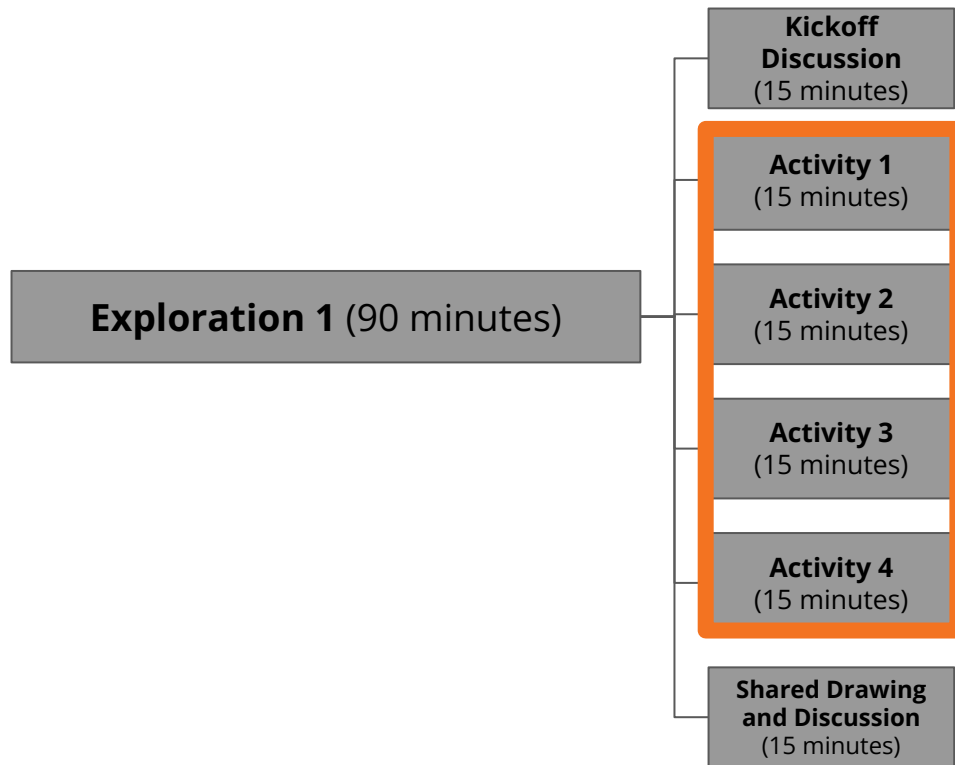
# Exploration Timing



# Explorations can be taught flexibly

The **four Activities** in an Exploration can:

- be taught full-group, small-group, or in centers
- be taught in any order
- be supplemented by additional instruction



# Guided Unit Internalization Planner

## Part 1: Unit-level internalization

Unit title: Wondering About Noises in Trees

What is the phenomenon students are investigating in your unit?

There are many noises coming from the tree.

Exploration Questions:

1. Why are so many noises coming from the tree?
2. What are the animals doing in the tree that make so much noise?
3. Why is the tree a good place for the animals to get food and make shelter?

Student challenge:

What's causing the noises and why?

What science ideas do students need to figure out in order to explain the phenomenon?

Students figure out that animals can make noises in trees when they get food and make shelter for themselves and their babies. Students discover that trees have things animals need, including food, building materials, and places for shelter.

What evidence sources do students engage with across the unit?

the unit big book, pictures and illustrations, models, sound recordings, and videos, & most importantly, observing REAL TREES!



# Exploration Note Catcher: Unit **#1 #2 #3** NAME: Wondering About Noises in Trees

Flexible Implementation Structure:

FOCUS AREAS	Introductory Activity	Exploration #1	Exploration #2	Exploration #3	Culminating Activity
<b>Science Question</b>	What is making the sounds coming from the tree that the little girl in the story is hearing?	Why are there so many noises coming from the tree?	What are the animals doing in the tree that makes so much noise?	Why is the tree a good place for the animals to get food & shelter?	Classbook with individual student pages Self-reflection & Partner discussion Class & student/family tree projects
<b>What will students learn? (objectives)</b>	Scientists wonder about things & try to figure out more about them. Scientists use their senses to figure things out.	The noises are made by animals that are in the tree, or using the tree for some reason.	Animals make noises when they are making a shelter or home for themselves or their babies, or getting food for themselves or their babies.	Different kinds of trees have lots of different kinds of parts that are good for both food & shelter for different kinds of animals.	Scientists share (collaborate) & help each other learn.
<b>Key Vocabulary</b>	<b>Scientist Observe</b>				
<b>Multiple Modalities</b> (Do, Talk, Read, Write, Visualize)					
<b>Assessments and/or Differentiation Opportunities</b>					
<b>Other Noticings</b>					

**PN Page 43**



**TK NoteCatcher**



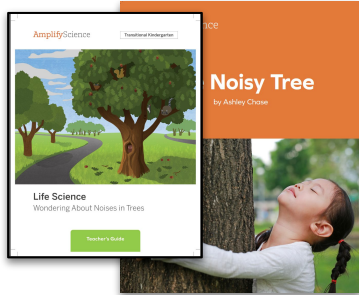
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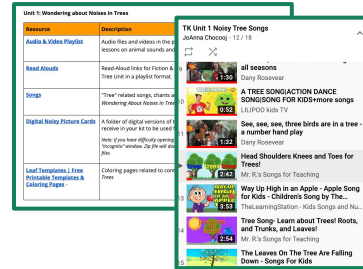
- Introduction & Framing the day



- Navigation & Planning Exploration 1



- New Curriculum & TK Instructional Approach



- Planning to Teach- Additional Program Resources



- Internalization & Navigation Unit 1



- Closing

# Exploration Kickoff Discussion

## Instructional Guide;

1. What
2. Why?
3. How? *Step- by- step*
4. Teacher Support

**Kickoff Discussion**

Life Science  
Exploration 1

---

### Kickoff Discussion: Listening to the Tree Noises

**What?**  
The class reviews what happened in the first section of *The Noisy Tree* and then listens to sound recordings of noises that are similar to the ones the girl in the book heard. The class is introduced to Science Question 1 and discusses their initial ideas in response to this question.

**Why?**  
Listening to noises like those described in the book deepens students' connection to the unit phenomenon and motivates them to figure out more about these sounds. Introducing and discussing Science Question 1 models how scientists approach a problem.

### Teacher Support

**Instructional Suggestion**

**Going Further: Embodying Tree Noises**  
If you have additional time, you may want to invite pairs of students to work with the Tree Model to recreate the phenomenon introduced in *The Noisy Tree*. One student could use the Tree Model to recreate noises they read about in the book and heard in the sound recordings. Students might choose to tap the tree, rustle the leaves, or vocalize the noises while their partners listen. After one partner has had a turn embodying the noises, the two can switch roles.

**Instructional Suggestion**

**Going Further: Thinking More About Models**  
This activity engages students in the science and engineering practice of *Developing and Using Models*. Students' use of the Tree Model throughout the unit is authentic to one of the ways scientists use models—to show their ideas. The Tree Model, like many scientific models, is similar to the thing it represents in important ways and different in many other ways. While explicit instruction on modeling is beyond the scope of this unit, there are opportunities for deeper discussion around modeling. For example, consider bringing in real leaves and having students discuss the ways the leaves on the Tree Model are similar to and different from a real tree's leaves. Thinking about how models represent scientific ideas in this basic and concrete way prepares students to engage with more complex and abstract models in later grades.

# Exploration One: Kickoff Discussion

**Science Question #1:** *Why are so many noises coming from the tree?*

## Activities:

- Revisit The Noisy Tree
- Listening to noises
- Shared Listening Routine
  - **What ideas do you have about what is making the noises in the tree?**



I hear a tap-tap-tapping noise from high in the tree. I hear crunchy noises, like crinkling paper.

I wonder why those noises are coming from the tree. What's going on up there?

# Exploration 1

## Kickoff Discussion

Let's listen to some sounds!



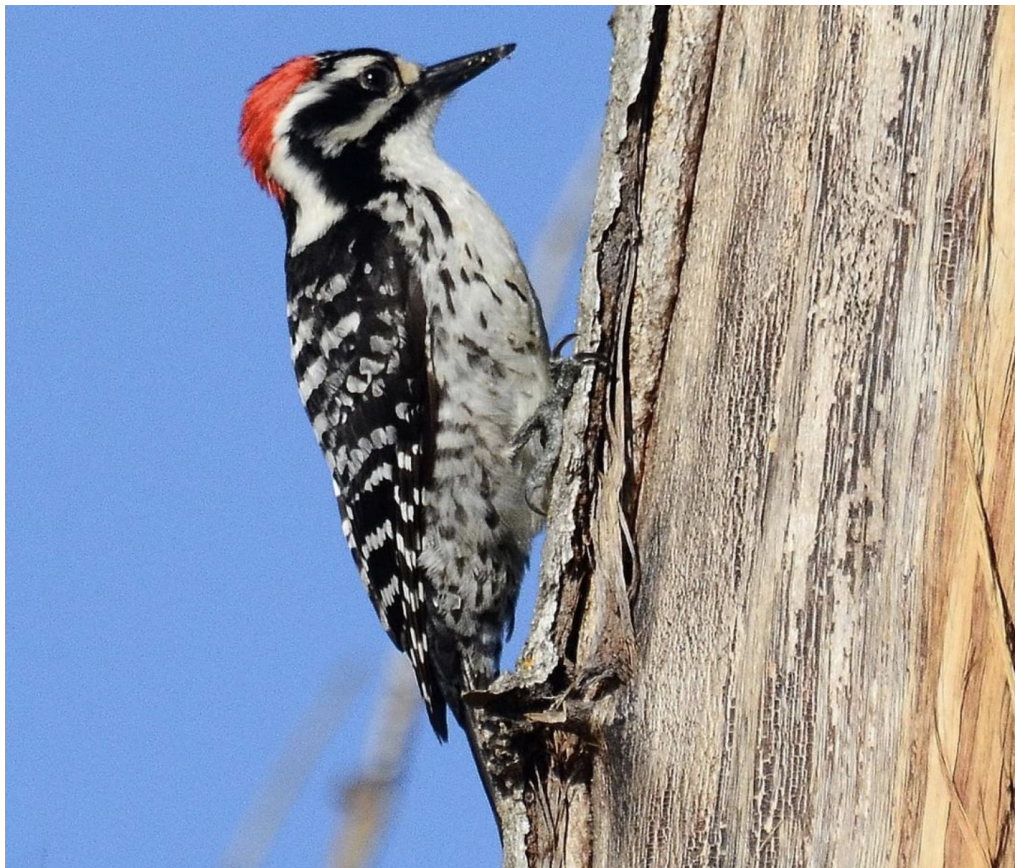
**listen**

Physical Science: Wondering About Buildings—Visual Directions Cards

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## Sound #1: Tap-Tap-Tapping



## Sound #2: Crunching noise



## **Science Question 1:**

***Why are so many noises coming from the tree?***

Physical Science: Wondering About Buildings—Science Question 1—Exploration 1—AMP022019.04 TK  
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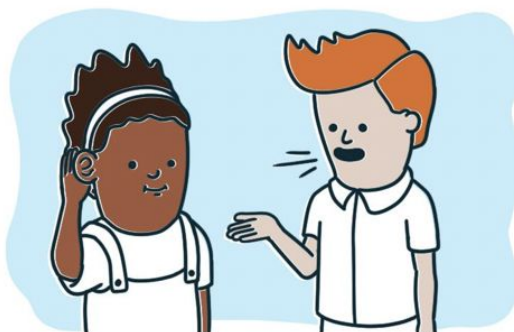


# Shared Listening



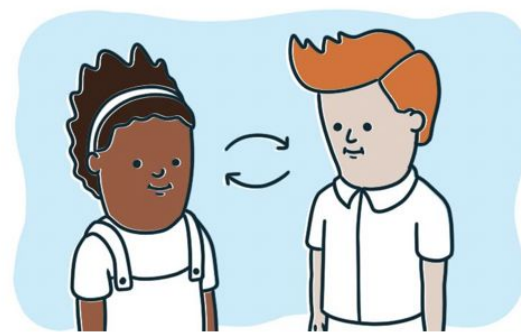
1.

**Partner A** shares.  
**Partner B** listens.



2.

**Partner B** repeats.  
*I heard you say...*



3.

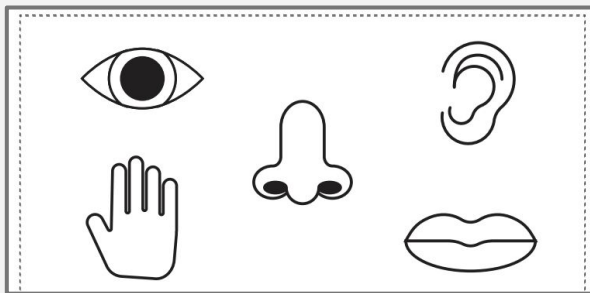
**Partners** switch.

# Wondering About Noisy Trees Classroom Wall

## Wondering about Noisy Trees

### Science Question 1:

Why are there so many noises coming from the tree?



### Vocabulary

**scientist**



**observe**

Physical Science Wondering About Buildings—Illustration—Copyright © 2013 University of California. All rights reserved.

**evidence**

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# Let's Chat...

- **What prior knowledge might our students have or not have that will help or hinder them in forming conclusions about the noises they hear?**



# Amplify Science TK Provides a Foundation to the NGSS:

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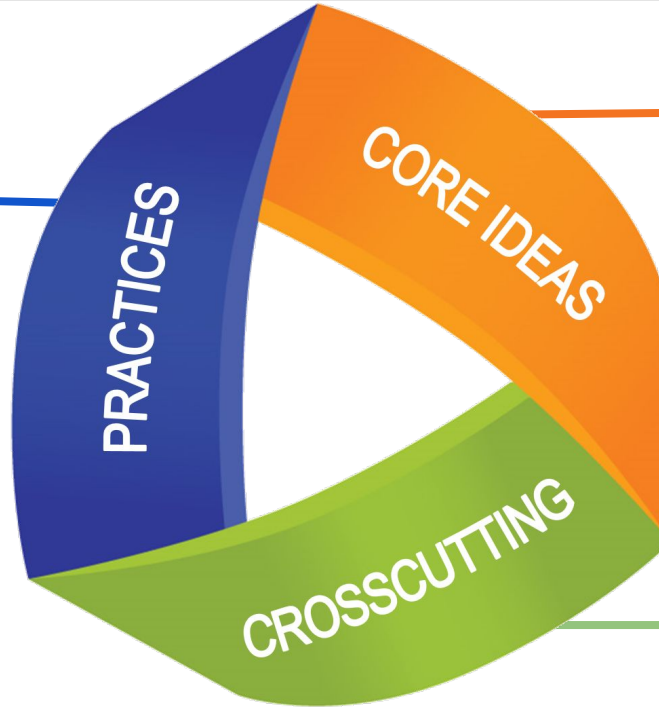


- **Phenomenon-based Learning**
- **3-dimensional**
- **Conceptual connections to K-5 NGSS & alignment with TK CA Preschool Foundations & Frameworks**

# Figuring out Phenomena

## Using 3-D teaching and learning

What scientists & students do to figure out the science.  
Science and Engineering Practices



What scientists want to know & students figure out  
Disciplinary Core Ideas

How scientists think - & students learning the habits that help them organize information  
Crosscutting Concepts

# Amplify Science TK Units

## Precursors & Linkages & between NGSS & PLFFs



### DCI's

(Science Topics)

- **Life Science**
- **Physical Science**
- **Earth & Space Science**

### SEP's

(Best Practices)

(from Scientific Inquiry Topic)  
*How we Figure things out!*

- Wondering
- Comparing and Looking for Patterns
- Describing what happened
- Collecting Evidence
- Talking, drawing & writing about what we know, read and learn about new discoveries

### CCC's

(Science Topics)

(from Scientific Inquiry Topic)

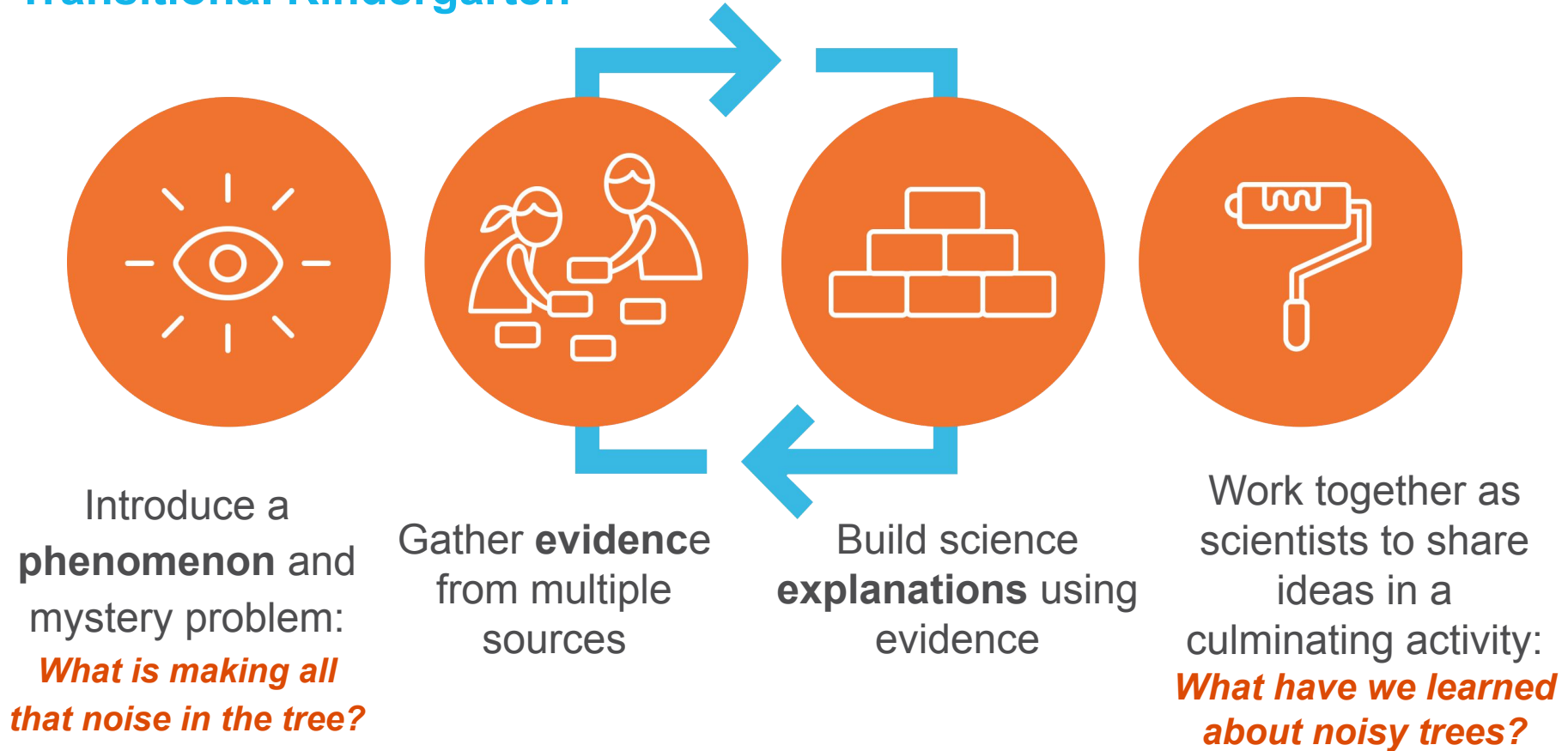
- **Cause & Effect**

(from MATH Topics)

- **Patterns**
- **Classification**

# Amplify Science Instructional Approach

## Transitional Kindergarten



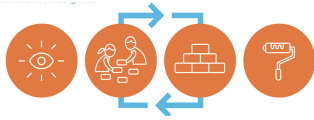
# Multimodal Instruction

Figuring out and making sense of ideas like scientists & engineers!



- Do
- Talk
- Read
- Draw & Write
- Visualize

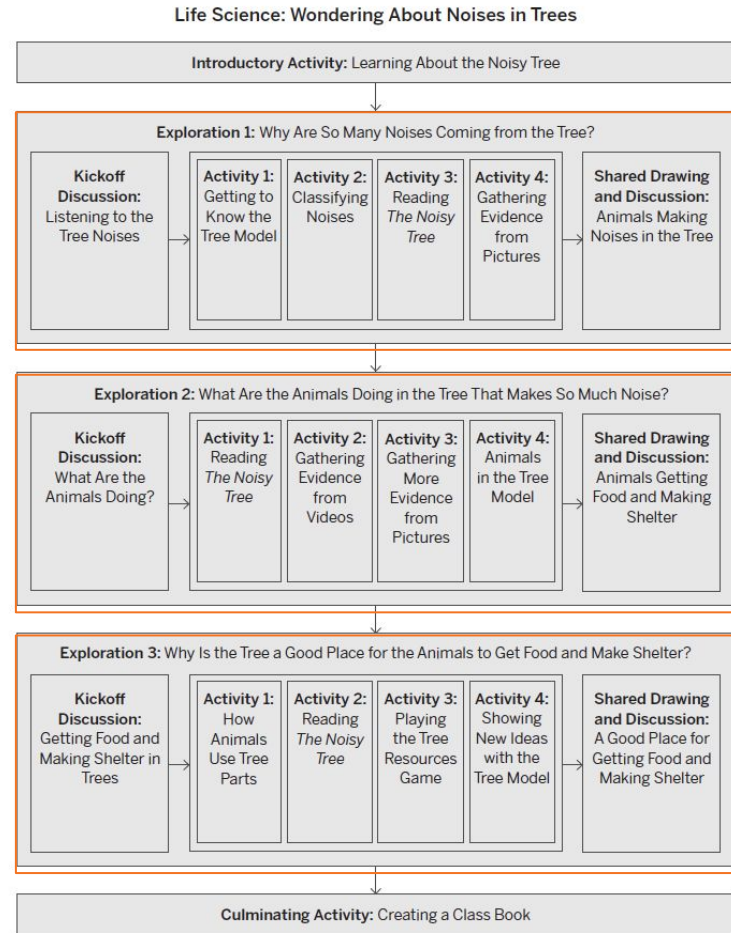




# Wondering about Noises in Trees

Analyze the unit structure document.  
Looking at the Title of each  
Exploration...

- What do you anticipate students will know and be able to do at the end of each Exploration?
- How do the Exploration Activities support this learning?



# Explaining the phenomenon: Science Concepts



Unit Question: *What is making all the noise in the tree?*

# Wondering About Noises in Trees



Unit Question: *What is making all the noise in the tree?*

What science concepts do you think students need to understand in order to explain the phenomenon?



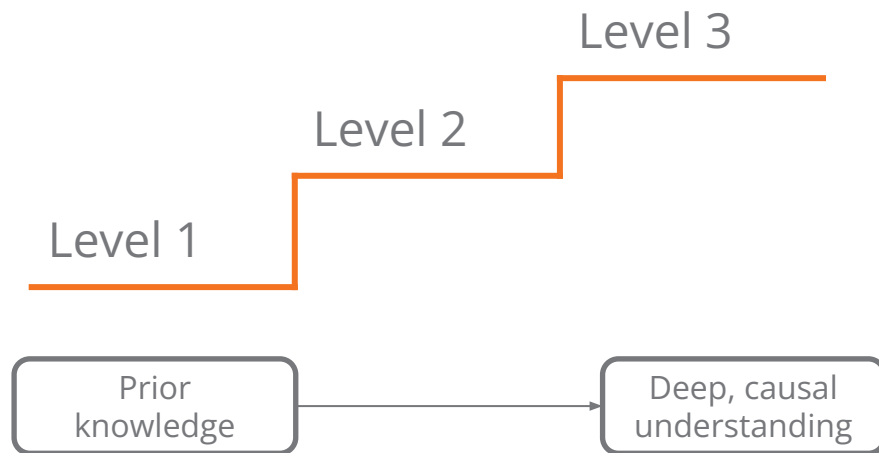
# Progress Build

A Progress Build describes the way in which students' explanations of the central phenomenon should develop and deepen over the course of a unit. It is an important tool in understanding the design of the unit and in supporting students' learning. **A Progress Build organizes the sequence of instruction and defines the focus of the assessments.**

# Unpacking the Progress Build

Understanding a unit's Progress Build will help you guide your students, address misconceptions, and avoid giving ideas away too early in the unit.

In this activity, we'll look at the Progress Build for Unit 1.



# Progression of Wondering About Noises in Trees

## Level 3

Trees are good places for animals to get food and make shelter because trees have things that animals need. Different animals use different parts of trees to get food and make shelter.

## Level 2

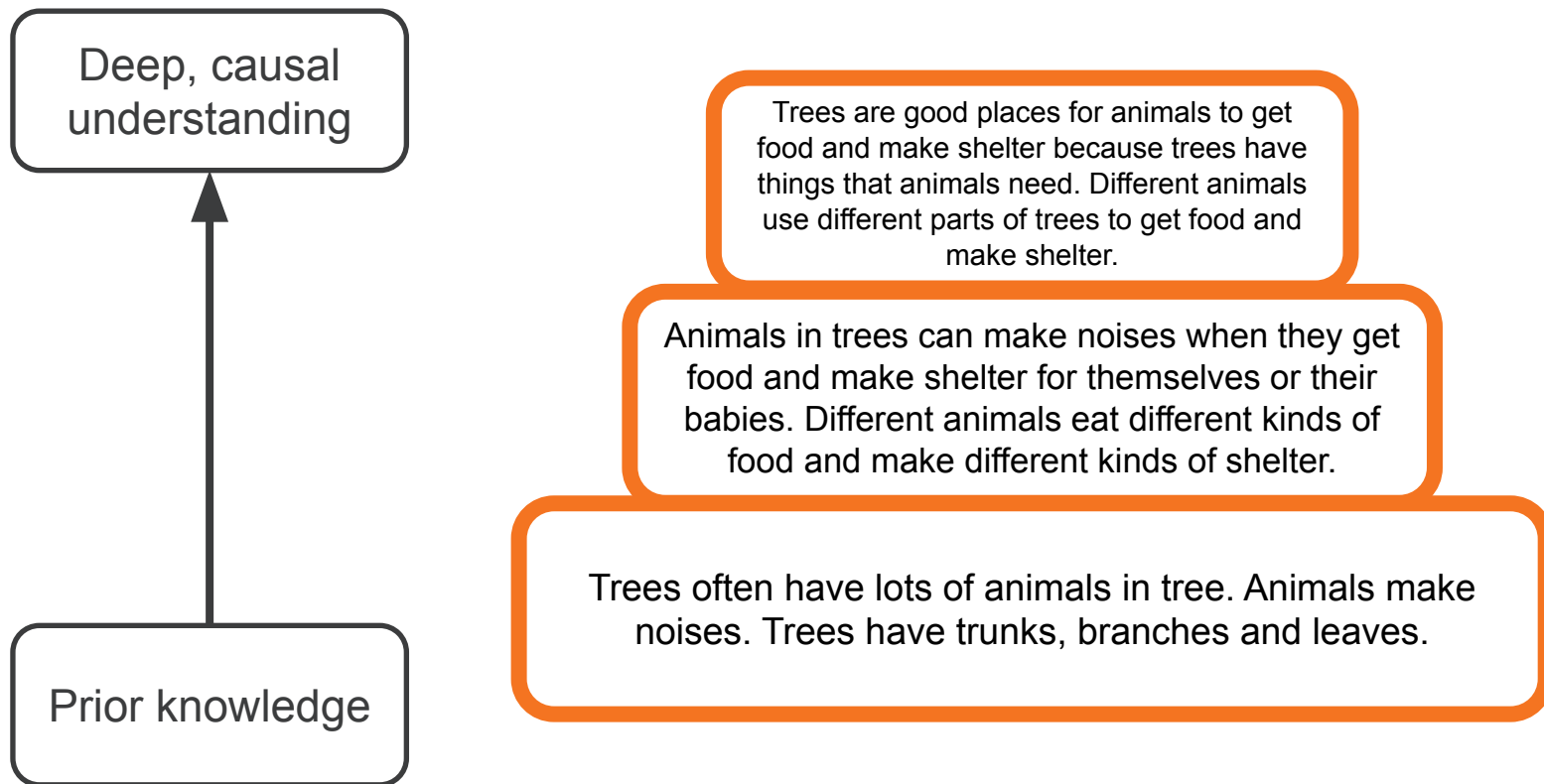
Animals in trees can make noises when they get food and make shelter for themselves or their babies. Different animals eat different kinds of food and make different kinds of shelter.

## Level 1

Trees often have lots of animals in them. Animals make noises. Trees have trunks, branches and leaves.

**Prior knowledge (preconceptions):** Students may or may not know that plants and animals are living things. They might know that other elements can be noisy, like the wind - but they may or may not know that wind & other weather-related noisy elements are not living things.

# Progression of Wondering About Noises in Trees



Questions? Concerns?  
Aha's! This reminds me...





# Navigating the Unit:

## Science Question 1:

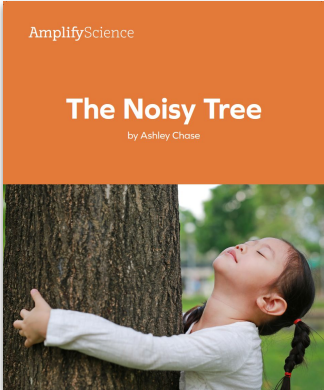
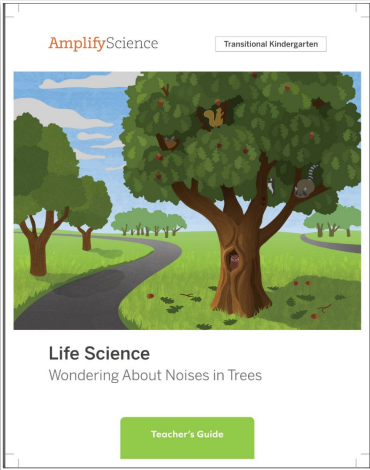
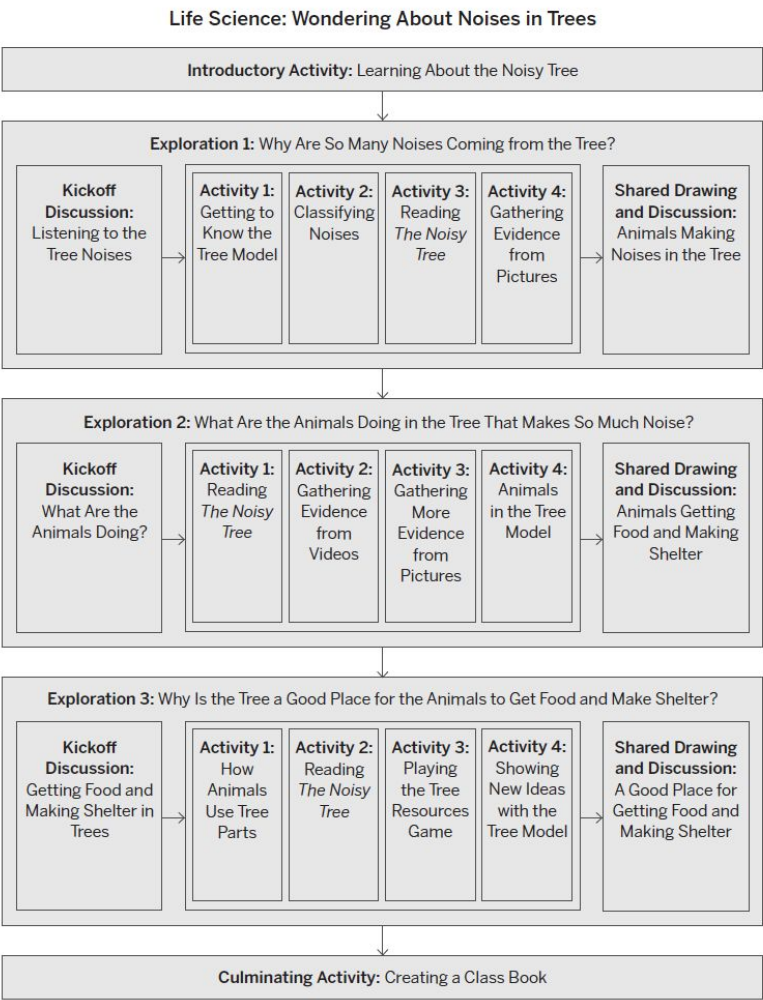
Why are so many noises coming from the tree?

## Science Question 2:

What are the animals doing in the tree that makes so much noise?

## Science Question 3:

Why is the tree a good place for the animals to get food and make shelter?

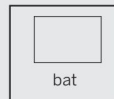
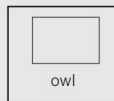


# Language Frames Build

## Language Frame 1

On one or two sentence strips, write the language frame shown below. Place the language frame in a pocket chart or attach it to a whiteboard with magnets. Place the cards in the pocket chart beneath the language frame. Make sure the cards are not revealed to students until you discuss them in Activity 2.

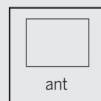
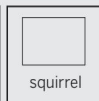
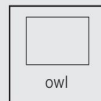
There is a \_\_\_\_\_ in the tree.



## Language Frame 2

On one or two sentence strips, write the language frame shown below. Place the frame in a pocket chart or attach it to a whiteboard with magnets. Place the cards in the pocket chart beneath the language frame. Make sure the cards are not revealed to students until you discuss them in Activity 2.

The \_\_\_\_\_ makes a \_\_\_\_\_ noise when it is \_\_\_\_\_.



## Language Frame 3

On one or two sentence strips, write the language frame shown below. Place the language frame in a pocket chart or attach it to a whiteboard with magnets. Place the cards in the pocket chart beneath the language frame. Make sure the cards are turned over so they are not revealed to students until you discuss them in Activity 3.

The \_\_\_\_\_ is \_\_\_\_\_ in the tree because the tree has \_\_\_\_\_.

# Exploration Level - Activities

## Overview:

- Lesson Brief
- Students Learn
- Activities at a Glance
- Vocabulary

### Exploration 1 Overview

In this Exploration, students investigate Science Question 1: *Why are so many noises coming from the tree?* Exploration 1 begins with the Kickoff Discussion in which students listen to sound recordings of noises like those from the tree and share their initial ideas in response to Science Question 1. Four activities help students gather evidence about

Students are introduced to Activity 2, students listen to a recording of each sound. In Activity 3, students describe their observations. In Activity 4, students describe their observations. The class summarizes the class observations. Activity 1 is for students to use the evidence they have a lot of

es.

questions.

noises coming from the tree in Exploration 1.

Understanding of the tree in the unit.

### Introductory Activity Overview

This Introductory Activity introduces students to the *Life Science: Wandering About Noises in Trees* unit and sets the stage for the Explorations to follow. The teacher reads aloud the first few pages of *The Noisy Tree*, which begins the story of a young girl who works like a scientist as she observes nature in her park. She hears mysterious noises from a tree and wonders what is going on. During the Read-Aloud, students are introduced to their role as scientists. After reading, students share their initial ideas about what could be making the noises in the tree. The purpose of this Introductory Activity is to introduce students to the unit phenomenon and to their role as scientists in order to motivate their learning throughout the unit.

#### Students learn

- Scientists wonder about things and try to figure out more about them.
- Scientists use their senses to figure things out.

#### Vocabulary

- scientist



## Life Science

### Wondering About Noises in Trees

Teacher's Guide

# Exploration 1 Overview

## Overview

Life Science  
Exploration 1

### Exploration 1 Overview

In this Exploration, students investigate Science Question 1: *Why are so many noises coming from the tree?* Exploration 1 begins with the Kickoff Discussion in which students listen to sound recordings of noises like those from the tree and share their initial ideas in response to Science Question 1. Four activities help students gather evidence about trees and possible sources of noises from a tree. In Activity 1, students are introduced to the Tree Model that they will use throughout the unit. In Activity 2, students listen to additional sound recordings and draw their ideas about the source of each sound. In Activity 3, the teacher reads aloud a new section of *The Noisy Tree*. In Activity 4, students observe a series of tree pictures and use a language frame to describe their observations. Exploration 1 ends with the Shared Drawing and Discussion in which the class summarizes and applies what they have learned. The purpose of Exploration 1 is for students to use science practices and ideas about patterns to figure out that trees often have a lot of animals in them and that animals make noises.

#### Students learn

- Trees often have lots of animals in them. Animals make noises.
- Trees have trunks, branches, and leaves.
- Scientists ask questions and gather evidence to answer their questions.
- Scientists draw, write, and talk to share their ideas.

#### Activities at a Glance

##### Kickoff Discussion: Listening to the Tree Noises

The teacher introduces Science Question 1: *Why are so many noises coming from the tree?* to motivate the activities students engage in throughout Exploration 1.

##### Activity 1: Getting to Know the Tree Model

Students are introduced to the Tree Model in order to build an understanding of the parts of a tree and to become familiar with a central resource of the unit.

PN Page 5



## Part 2: Exploration-level internalization

Exploration 1  
Question:

Why are so many noises coming from the tree?

What do students learn in Exploration 1?

- Trees often have lots of animals in them. Animals make noises.
- Trees have trunks, branches, and leaves.
- Scientists ask questions and gather evidence to answer their questions.
- Scientists draw, write, and talk to share their ideas.

What is the purpose of Exploration 1?

The purpose of Exploration 1 is for students to use science practices and ideas about patterns to figure out that trees often have a lot of animals in them and that animals make noises.

# Summary of Exploration 1

PN Pages 5-6



## Activity 1: Getting to Know the Tree Model

Students are introduced to the Tree Model in order to build an understanding of the parts of a tree and to become familiar with a central resource of the unit.

## Activity 2: Classifying Noises

Students listen to a series of sound recordings and make drawings of their ideas about the source of each noise. This activity supports students' preliminary understanding that many noises are made by animals.

## Activity 3: Reading *The Noisy Tree*

The teacher leads a Read-Aloud of a new section of *The Noisy Tree* to introduce students to animals in the tree. This section of the book helps students understand how scientists make observations to gather evidence to help answer their questions.

## Activity 4: Gathering Evidence from Pictures

Students describe what they observe in trees on the Tree Cards in order to gather evidence that many kinds of animals can be found in trees. Students use a language frame to practice sharing ideas like scientists do.

## Shared Drawing and Discussion: Animals Making Noises in the Tree

The class participates in a shared drawing and an accompanying discussion to consolidate and apply their understanding of Science Idea 1: *Trees often have lots of animals in them. Animals make noises.*

[TK NoisyTree Unit Audio & Video Links](#)

[TK Unit 1 Noisy Tree Picture Cards ZIP File](#)



# Exploration One: Activity Centers

*How would you introduce & scaffold these activities in your classroom?*

## **Activity One:**

Observe the tree model and think about how the students would make the different types of leaves and add them to the model. Discuss how the model is similar and different to a real tree.

## **Activity Two:**

Listen to different noises and make drawings of ideas about what made each noise. Look for patterns in the data you've recorded

## **Activity Three:**

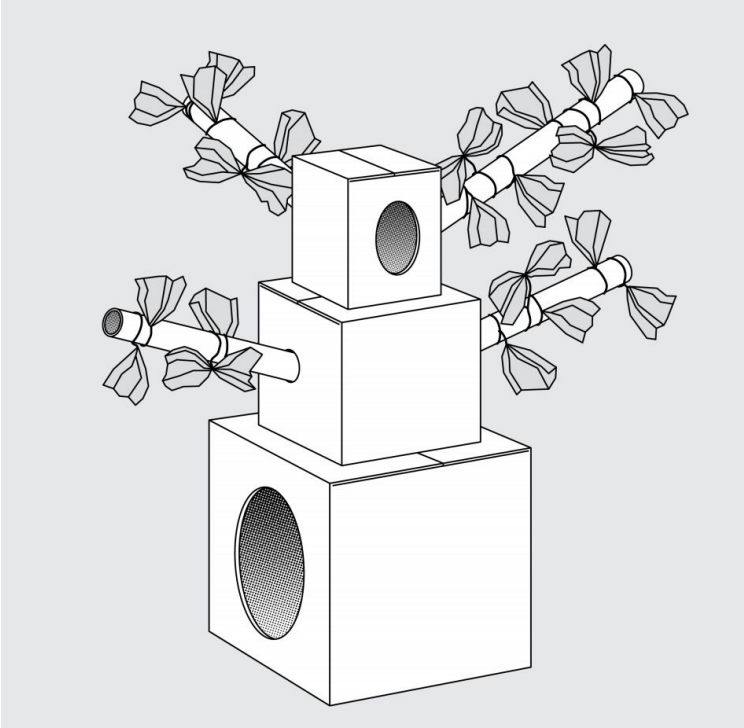
Read the next section of The Noisy Tree in which the girl makes new observations of the tree in the park.

## **Activity Four:**

Observe pictures of trees and notice there are animals in many of the trees. Use the language frame to describe your observations.



## Activity One: Tree Model



## Activity Two: Listening to Recordings of Noises

## Activity Three: The Noisy Tree

### The Noisy Tree

by Ashley Chase



## Activity Four: Tree Cards

# Instructional Routines & Approach

Instructional Elements & Routines repeat throughout each unit to support students & teachers.

Language Frames Discussion  
Routines

Looking at the same thing multiple times to  
get different information

Visual Direction  
Cards

Creating Physical Models to share ideas  
& to make connections

Vocabulary Routines

Reenacting/creative play to make kinesthetic, visual  
& auditory connections (songs, chants, visual arts)

Science Question Routines

Synthesizing information

Setting a Purpose for Activities  
Routines

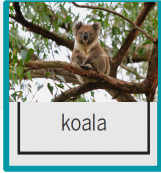
Focal pages in book (setting a purpose) -  
Reading an Informational Text Routines

Shared-Listening & Discussion  
Routines

Shared Writing & Drawing Routines

# Unit 1 Shared Drawing & Writing Build - Exploration 1

**Science Question 1:** *Why are so many noises coming from the tree?*



There is a koala in the tree.



There is a gecko in the tree.

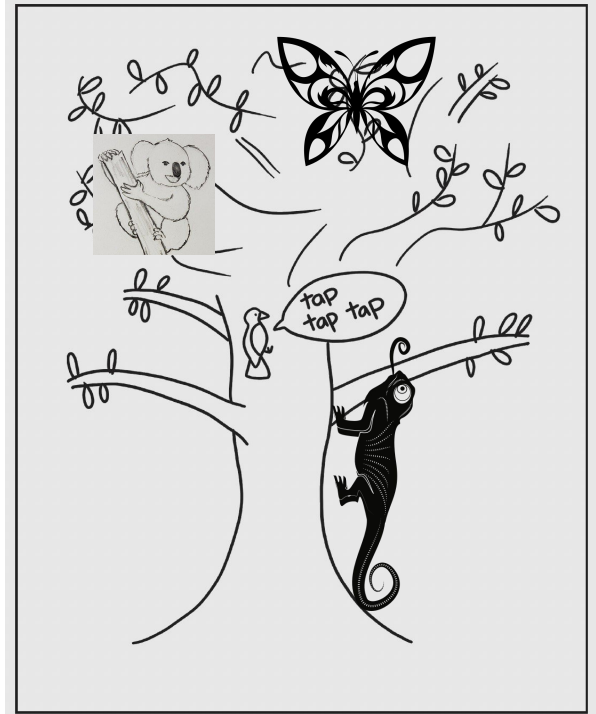


There is a butterfly in the tree.

There is a woodpecker in the tree.  
There is a koala in the tree.  
There is a gecko in the tree.  
There is a butterfly in the tree.

**Science Idea 1:**

**Trees often have lots of animals in them. Animals make noises.**



# Let's Chat...



- **How can you integrate & personalize the Instructional Routines in the Units to your own classroom layout & organizational structure?**





# Science

observe

Trees

Taste

We use our **tongue**  
to taste things.

senses

Sight

We use our **eyes**  
to see things.

Touch

We use our **hands**  
to touch things.

Smell

We use our **nose**  
to smell things.

Hearing

We use our **ears**  
to hear things.

scientist

Science Question 1:

Why are so many noises coming  
from the tree?



Model



Real

## Example TK Science Wall

This fabulous science wall is from the 1st TK Science Unit, Life Science focus, "***Wondering Noises in Trees***" Implemented by Amplify Pilot TK Teacher Julie B.

### Instructional Routines: Vocabulary Words & Science ?s

Julie began her back-to-school theme with the traditional TK/Kinder theme "*All About Me*"

Julie included her "*My 5 Senses*" science unit as part of "*All About Me*" theme.

She introduced Amplify Science **TK Vocabulary Routine** as part of "*My 5 Senses*"

Students began with learning vocabulary words **Senses** & the names for their 5 senses, & the word **OBSERVE**.

When she started TK ***Noises in Trees***, students had already practiced the **Vocabulary Routine** with these words multiple times & were ready to begin with the vocabulary words **SCIENTIST** and **COMPARE**, **Science Question #1 Routine**, & discussion of similarities & differences between Real & model trees..[Amplify Science Scientist Profile Cards](#)



**PUPPETS: “Groot” Tree Puppet for example of related Tree Model Activities. Animal Puppets Beanie Babies, & Tiny Stuffed Animals to start adding to Model Tree in Exploration 2 Activities.**



# CLASSROOM ARRANGEMENTS

How can you expand Dramatic Play to:



Science Center:  
Add class tree & puppets or stuffed animals...  
Water/Sand Table Area:  
Fill Sensory Table/Tuff Trays with "Tree" realia for Free Exploration!  
Library/Quiet areas: "Tree" related books for students to read together.  
Art Area:  
Pictures of trees & animals to inspire students...

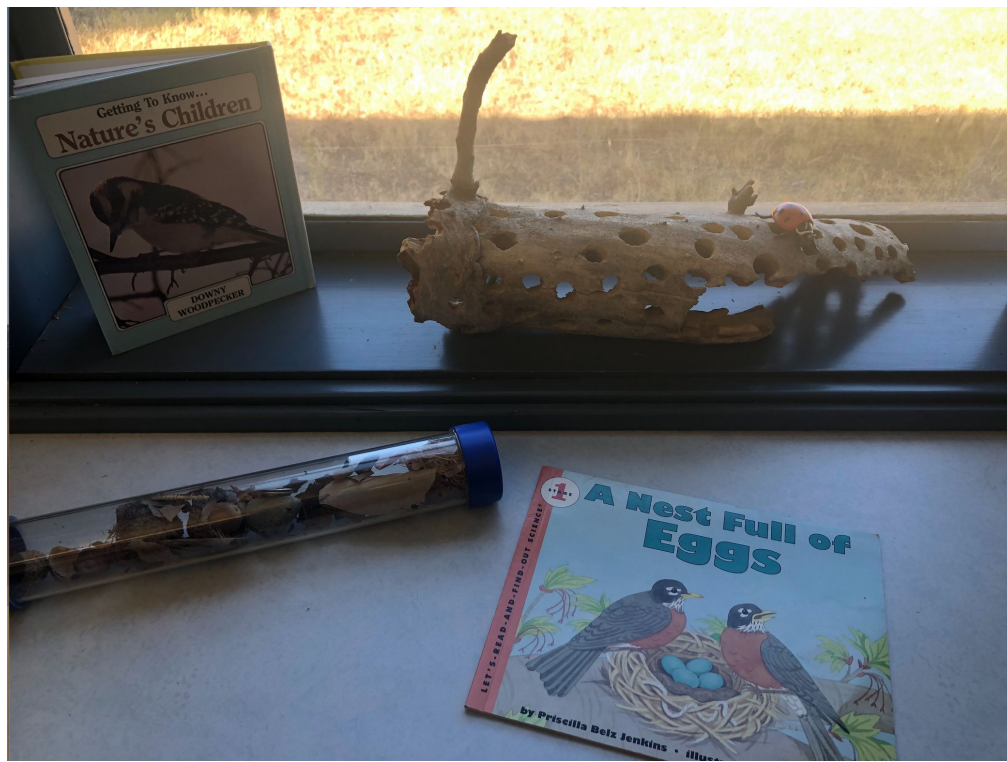
**Integrate Thematic Literature with Noisy Tree Unit  
- Fiction, Non-Fiction, Songs, Chants & Poems to  
build students' background knowledge**

**[TK Noisy Tree Read-Alouds](#) - new related read aloud  
YouTube playlist: fiction, non-fiction, chants, socio-  
emotional, "tree" related Read-Alouds in Eng. & Span..**



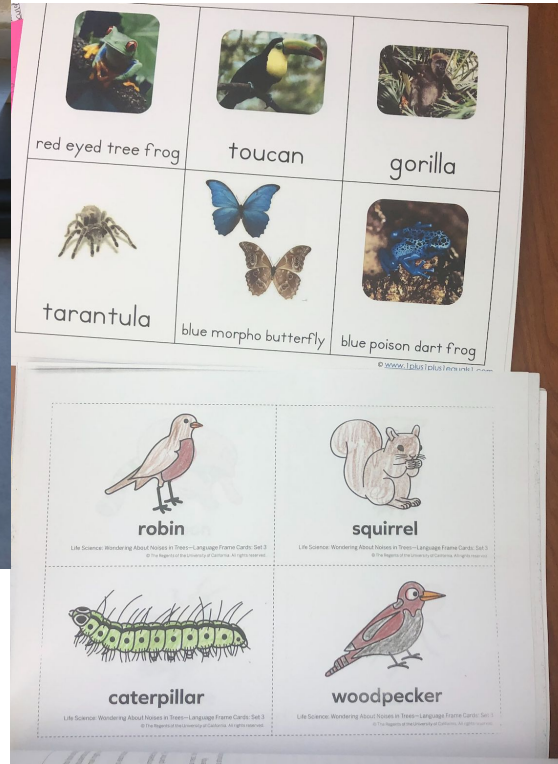
**Books are  
available on  
the Noisy  
Tree Unit 1  
Playlist on  
YouTube.  
For extra  
Classroom  
Teacher  
ReadAlouds  
Listening  
Center  
Rereading @  
home - share  
in Seesaw or  
DoJo...**





## Sample Connected Read Alouds, Realia & Sensory Tube

## Sample Language Frame & Sorting Cards



Language Frame cards can be used for whole class modeling of Activity on pocket chart, for partner or small group language frame practice @ ELA/language arts center time, or for math sorting practice (kinds of animals in trees, by what the animals are doing in the trees, etc.)



## Extension Activities for Math Learning Centers &/or Free Choice Time Centers:

- Cut up branches & have students lightly sand pieces during “My 5 Senses” - Touch. Then in Noisy Tree, use Tree Branch Pieces:
- Sorting - by size, height, shape, colors.
- Ordering: by size, by height.
- Patterning: ABAB - BIG little BIG little
- Touch-Counting practice

Lincoln Logs Construction Activities - include cards with sample model homes & buildings for more MODELING examples.





## Extension Activities for Math Learning Centers &/or Free Choice Time Fine-Motor Centers:

- **Sorting Acorns**
- **Sorting Pinecones**
- **Sorting Tree related “stuff”** (also put in sensory table/Tuff tray as Exploration Bin)
- **Lacing Wooden Beads &/or Buttons**
- **Calming Containers w/Tree realia**
- **Related Books** for Read Alouds &/or “Reading Time”
- **Notecards** for visualizations, math-sorting activities, & Drawing/Writing Center.



## Extension Activities for ART activities &/or Free Choice Time Fine-Motor Centers:

- Hand and arm print “fall trees” with watercolors.
- Or use tissue paper fall color shapes to make collages.
- Leaf collages to make animals who live in trees., or Leaf People.
- Chicka Chicka Boom Palm Torn Paper Art Trees - Match stickers of name letters to name tags if students can't write them.





# Extension Opportunity

## Teacher Support

### Sesame Street: Nature Walk

#### Instructional Suggestion

##### **Providing More Experience: Class Nature Walk**

You can extend the Introductory Activity by taking a class nature walk if you have access to a natural or semi-natural area with trees. This area can be a part of the schoolyard, a small local park, or a larger protected area. Let students know that they will look and listen to figure out more about what is in, on, and around the trees. Guide students on a walk, pausing frequently to model looking and listening closely to the trees. For example, you can say, "I look closely at this tree, and I see leaves." "I look closely at these leaves, and I see that they have lines on them." "I listen closely to this tree, and I hear chirping." During the class nature walk, invite students to share any observations they make.

#### Instructional Suggestion

##### **Providing More Experience: Home Connection**

The Introductory Activity includes an optional Home Connection that introduces families to one of the science practices students will learn in this unit. Home Connections can encourage interaction and discussion between students and their families around science concepts, which is beneficial for student learning. The Home Connection: Observing Trees invites students and an adult to observe sights and sounds near a tree or several trees. Make one copy of the Home Connection: Observing Trees copymaster for each student to take home.



- **Realia:** Have students collect different kinds of leaves during tree observations & leaf walks. Sand Table for explorations? &/Or individual shoeboxes?
- **Math Center:** Observe & Sort leaves w/magnifying lenses
- **Art Center:** Have students make leaf rubbings of collected leaves. - Start w/just 1 color rubbings (have students sort old crayons by color, leaf activity next day).



# Exploration One: Activity Stations

How would you introduce & scaffold these activities in your classroom?

## Amplify Science TK ACTIVITY Center Notes

UNIT: 1 2 3

Unit: Noisy Tree

EXPLORATION: ✓1 2 2

Use this organizer to record notes on how to structure & scaffold the Activities in your classroom for each Exploration. Decide where/how you will set up the stations (part of LA or Math, or general Learning Centers? Part of Free Choice Centers?), ideas for visual arts & music, extension & home opportunities

### Activity One:

Observe the tree model and think about how the students would make the different types of leaves and add them to the model. Discuss how the model is similar and different to a real tree.

### Activity Two:

Listen to different noises and make drawings of ideas about what made each noise. Look for patterns in the data you've recorded.

### Activity Three:

Read the next section of The Noisy Tree in which the girl makes new observations of the tree in the park.

### Activity Four:

Observe pictures of trees and notice there are animals in many of the trees. Use the language frame to describe your observations.

#### Activity 1: Tree Model (e.g. Science Center)

Tree Walk - class around campus, families in their own backyards, neighborhoods or parks.

Collect Tree Realia

H2O/Sand Table of Realia

Other tree models

Tree Related Literature

Songs About Trees

Puppets

#### Activity 2: Classifying Noises

Use 12" X 18" size blackline masters for whole class game - sit in a circle, students all get cards, stand up when they hear their card's sound.

Use same images small group - have small copies, show kids 2 or 3 @ a time, have them pick which is making sound. They can color while they say name & repeat sound, drop images into prelabeled baggies. When finished, they each have a baggy to take home to play "guess the sound" with their family members.

#### Activity 3: Big Book Reading (whole class read aloud - rug area?)

Puppets to act out tree & animals

Tree Walk

Other tree-related literature read alouds, see Unit 1 Resource sheet.

Related poems, songs & finger plays, see Unit 1 Resource sheet.

#### Activity 4: Evidence from Pictures (whole class &/or small groups, language arts)

Leaf Realia for patterning

Language Frames - do whole class, then

Small groups - set up sentence strips with images in folders/baskets for students to do with partners &/or small groups @ LA time.

# Work Time: Unpacking Exploration One

## Resource to use:

- Exploration 1 PDF (in your PN or TG)

## FOCUS:

- Activity 1
- Activity 2
- Activity 3
- Activity 4

Record & Share Ideas on your Activity's Jamboard: [TK Unit 1 NPE](#) (Slide 32, 92, 104, 108)



Record your notes for Activities & Centers for each Exploration to plan your unit.

## Questions to answer:

- Purpose of Activity & vocabulary introduced
- Modalities of each activity (do, talk, read, draw & write, or visualize)
- How will this Activity help students develop an understanding of the new key concepts?
- How will this Activity help students answer the science question?
- How could you structure this Activity in your classroom?

**Amplify Science TK ACTIVITY Center Notes**

Activity: 42-19 NAME: EXPLORATION #1: 92-93

Use this organizer to record notes on how to structure the Activities in your classroom for each Exploration. Divide where you will set up the stations (part of 4-6 Math, or general Learning Centers). Part of Free Choice Center's ideas for visual arts & music, extension & home opportunities.

Station One:	Station Two:
Station Three:	Station Four:

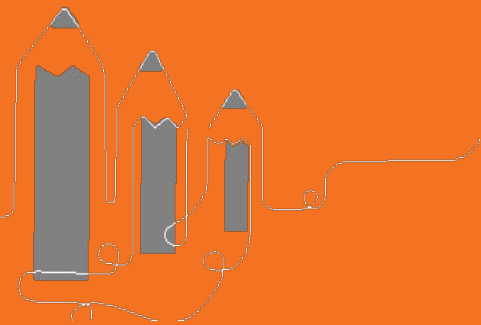
- [TK Activities Notes](#)

# Share Out

- Give a synopsis of the Activity the students do and what they learn.
- What are some notes you made about this Activity to support your students?



# Break





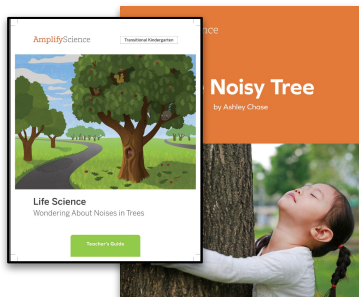
# Plan for the Day



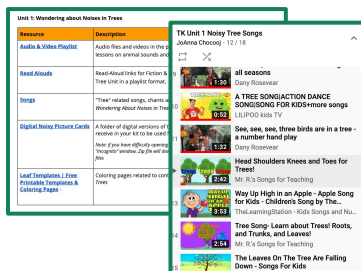
- Introduction & Framing the day



- Navigation & Planning Explorations 2 & 3



- New Curriculum & TK Instructional Approach



- Planning to Teach- Additional Program Resources



- Internalization & Navigation Unit 1



- Closing

# Animals in Trees: Framing Activity

- What do you hear?
- What do you picture?
- As you listen to the noises, write what you think it is and what makes you think that.



# Animals in Trees

What do you hear? What do you picture?



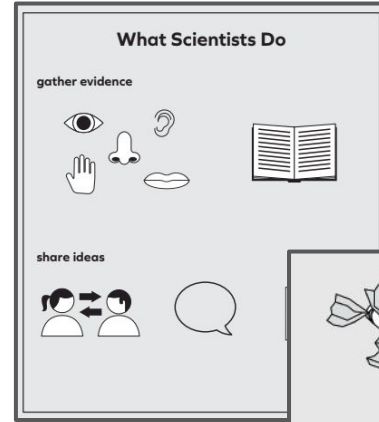


# Instructional Routines:

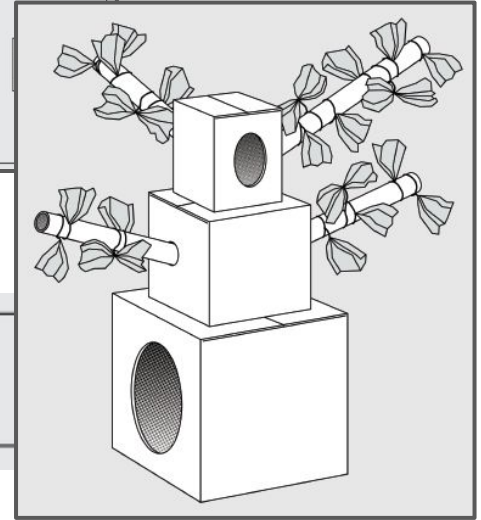
Repeated throughout the units

Building in differentiation!

- Charts
- Models
- Vocabulary
- Shared Listening & Speaking
- Shared Drawing & Writing
- Science Questions
- Language Frames
- Assessments



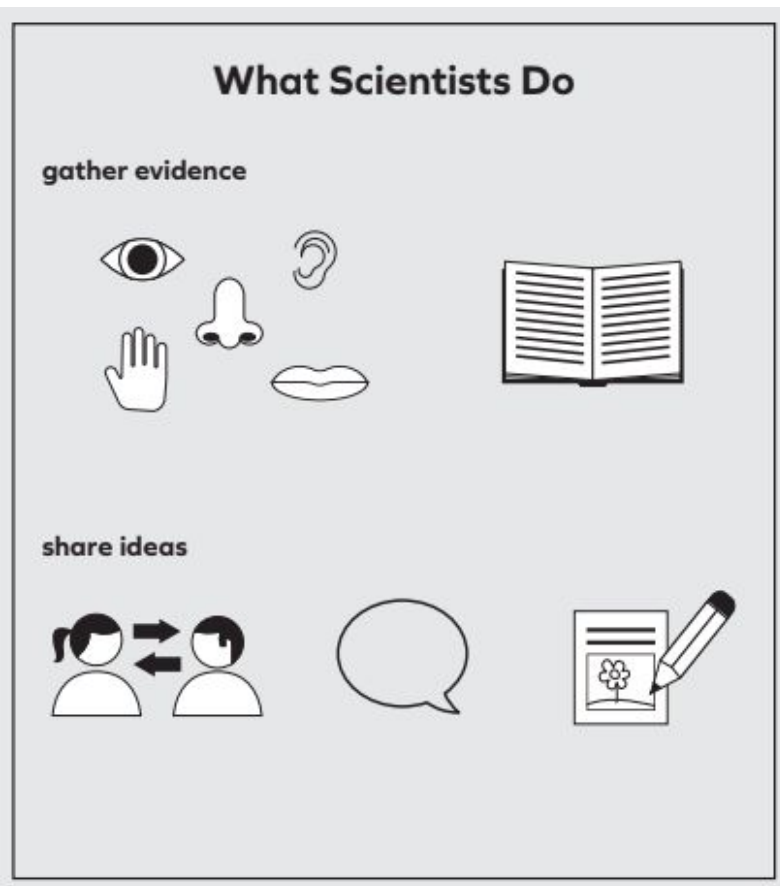
There is a \_\_\_\_\_ in the tree.



# Charts

## What Scientists Do

- Not only do students engage with learning science concepts, they are also learning about what scientists do.
- They engage as scientists throughout the unit and add to the chart as they go through.



# Exploration Two

**Students gather evidence about different kinds of things that animals do in trees.**



## Part 2: Exploration-level internalization

Exploration 2  
Question:

What are the animals doing in the tree that makes so much noise?

What do students learn in Exploration 1?

- Animals make noise when they are making a shelter for themselves and/or their babies.
- Scientists ask questions and gather evidence to answer their questions.
- Scientists draw, write, and talk to share their ideas.

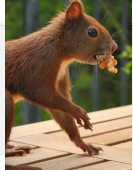
What is the purpose of Exploration 1?

The purpose of Exploration 2 is for students to use science practices and ideas about patterns to figure out that animals have important needs for food and for shelter, for themselves and for their babies, and that some animals can take care of their needs in trees

# Unit 1 Shared Drawing & Writing Build - Exploration 2

## Science Question 2:

*What are the animals doing in the tree that makes so much noise?*



squirrel

The squirrel makes a crunchy noise when it is getting leaves to make a nest for shelter.



woodpecker

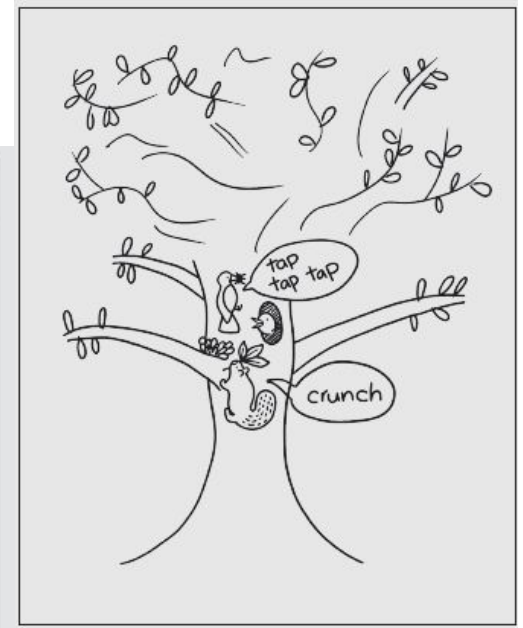
The woodpecker makes a tapping noise when it is getting food.

There is a woodpecker in the tree.

The woodpecker makes a tapping noise when it is getting food.

There is a squirrel in the tree.

The squirrel makes a crunchy noise when it is getting leaves to make a nest for shelter.

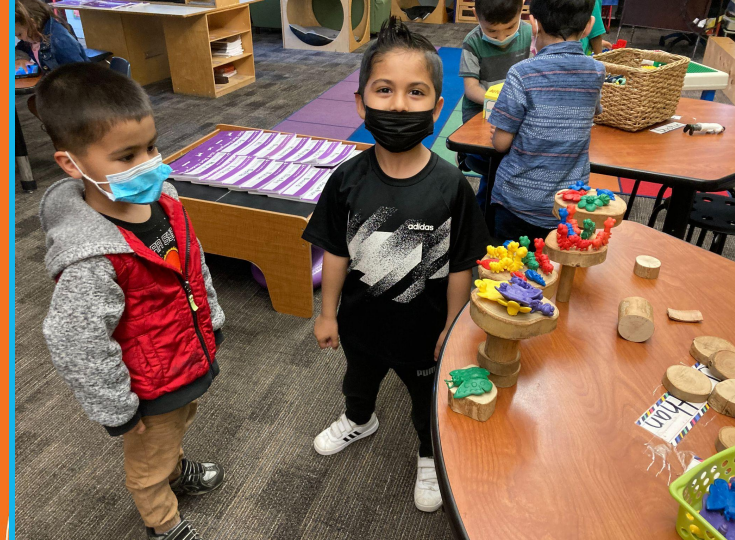


**Science Idea 2: Animals in trees can make noises when they get food and make shelter for themselves or their babies.**





How can we incorporate old & new materials to add to our Activities & students' experiences? Tree made w/crumpled paper bag "bark" & leaves turning from summer green to fall colors. Using tree branch rounds to demonstrate & count animals in trees in math!



# Work Time: Unpacking Exploration 2

## Resource to use:

- Explorations 2 PDF (in your TG or online)

## FOCUS:

- Activity 1
- Activity 2
- Activity 3
- Activity 4

Record & Share Ideas on your Activity's Jamboard: [TK Unit 1 NPE](#) (Slide 32, 92, 104, 108)



Record your notes for Activities & Centers for each Exploration to plan your unit.

## Questions to answer:

- Purpose of Activity & vocabulary introduced
- Modalities of each activity (do, talk, read, draw & write, or visualize)
- How will this Activity help students develop an understanding of the new key concepts?
- How will this Activity help students answer the science question?
- How could you structure this Activity in your classroom?

Amplify Science TK ACTIVITY Center Notes	
UNIT #1: #2: #3 NAME: _____	EXPLORATION #1: #2: #3
<small>Use this space to record notes on how to structure the activities in your classroom for each Exploration. Decide where you will set up the stations: get all L.A. in Mark, or general shared Centers? Part of Free Choice Center's, use for visual arts &amp; music, extension &amp; home opportunities</small>	
Station one:	Station Two:
Station Three:	Station Four:

- [TK Activities Notes](#)



# Exploration Three



Students gather evidence about why trees are good places for animals to get food and make shelter.

## Part 2: Exploration-level internalization

Exploration : 3  
Question:

Why is the tree a good place for the animals to get food and make shelter?

What do students learn in Exploration 1?

- Trees have many parts (branches, twigs, leaves, bark, etc.) that are useful for making shelter. The parts can also be food for certain animals.
- Scientists ask questions and gather evidence to answer their questions.
- Scientists draw, write, and talk to share their ideas.



What is the purpose of Exploration 1?


The purpose of Exploration 3 is for students to use science practices and ideas about patterns to figure out that trees have special parts that can be used by animals to make shelter for themselves and/or their babies. Different tree parts from different kinds of trees can also be food for different animals.

# Unit 1 Shared Drawing & Writing Build - Exploration 3

## Science Question 3:

*Why is the tree a good place for the animals to get food and make shelter?*

The  is  in the tree,

because the tree has .

There is a woodpecker in the tree.

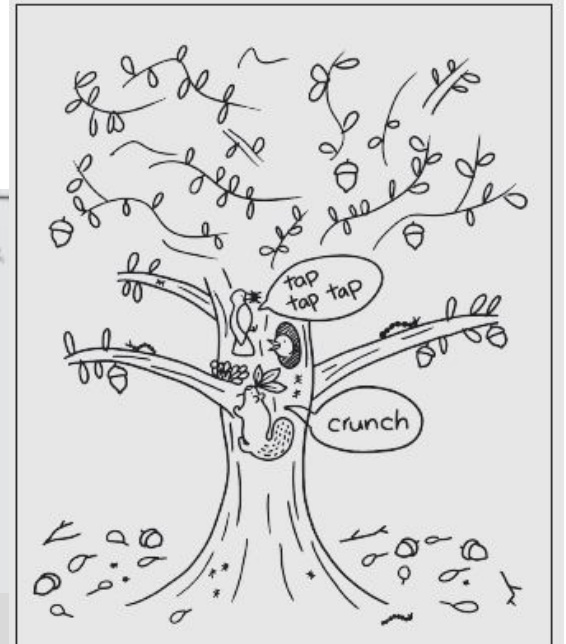
The woodpecker makes a tapping noise when it is getting food.

The woodpecker is getting food in the tree because the tree has bugs.

There is a squirrel in the tree.

The squirrel makes a crunchy noise when it is getting leaves to make a nest for shelter.

The squirrel is in the tree because the tree has leaves.



**Science Idea 3:** Trees are good places for animals to get food and make shelter because trees have things that animals need.

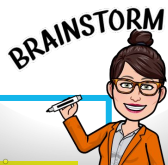
# Work Time: Unpacking Exploration 3

## Resource to use:

- Exploration 3 PDFs (in your TG or online)

## FOCUS:

- Activity 1
- Activity 2
- Activity 3
- Activity 4



Record & Share Ideas on your Activity's Jamboard: [TK Unit 1 NPE](#) (Slide 32, 92, 104, 108)

## Questions to answer:

- Purpose of Activity & vocabulary introduced
- Modalities of each activity (do, talk, read, draw & write, or visualize)
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- How will this Activity help students answer the science question?
- How could you structure this Activity in your classroom?

Record your notes for Activities & Centers for each Exploration to plan your unit.

Amplify Science TK ACTIVITY Center Notes	
UNIT #1: #3: #3 NAME: _____	EXPLORATION #1: #2: #3
<small>Use this space to record notes on how to structure the activities in your classroom for each Exploration. Decide where you will set up the stations (part of LA or Math, or general science). Part of Free Choice Center's, use for visual arts &amp; music, extension &amp; home opportunities.</small>	
Station one:	Station Two:
Station Three:	Station Four:

- [TK Activities Notes](#)

# Share Out

- Give a synopsis of the Activity the students do and what they learn.
- What are some notes you made about this Activity to support your students?





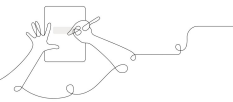
# Plan for the Day



- Introduction & Framing the day

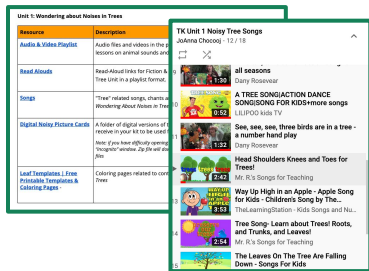
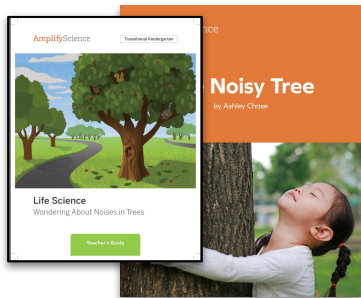
## Participant Notebook

TK, Wondering About Buildings  
Guided Unit Internalization Workshop



- Navigation & Planning  
Explorations 2 & 3

- New Curriculum  
& TK Instructional  
Approach



- Planning to Teach- & Additional Program Resources

- Internalization & Navigation Unit 1



- Closing



# Wondering About Noises in Trees

A stylized illustration of a large, leafy green tree. In the upper left, a squirrel is perched on a branch. To its left, a small bird is visible in a nest. On the right side of the tree, a raccoon is curled up on a thick branch. Further up and to the right, a woodpecker is seen on a vertical trunk. The background shows a blue sky with white clouds and a green landscape with a path.

Students investigate *what can be making all the noises in the tree* - if it's something besides the wind. They figure out that animals can be in trees. They then investigate a question about the animals: *What are they doing in the tree that makes so much noise?*...Students gather evidence through careful observations of photographs and videos of real organisms and by listening to a read aloud of a science text. Students play games and create multiple models throughout the unit to explain their ideas about what the animals are doing, and why they're doing it in the tree - *why trees are special*.



# Multimodal Instruction

Figuring out and making sense of ideas like scientists & engineers!



- Do
- Talk
- Read
- Draw & Write
- Visualize

# Wondering about Noises in Trees: Exploration 3

## Do: Activity 3, Playing the *Tree Resources Card Game*

Students play the *Tree Resources Card* game to think about what things trees have that animals might need to make shelter or for food.





# Wondering about Noises in Trees: Exploration 3

## Science Question 3:

*Why is the tree a good place for the animals to get food and make shelter?*

**Talk:** Language Frames -  
Talk like scientists!

The  is  in the tree,

because the tree has  

# Wondering about Noises in Trees: Exploration 3

## Science Question 3:

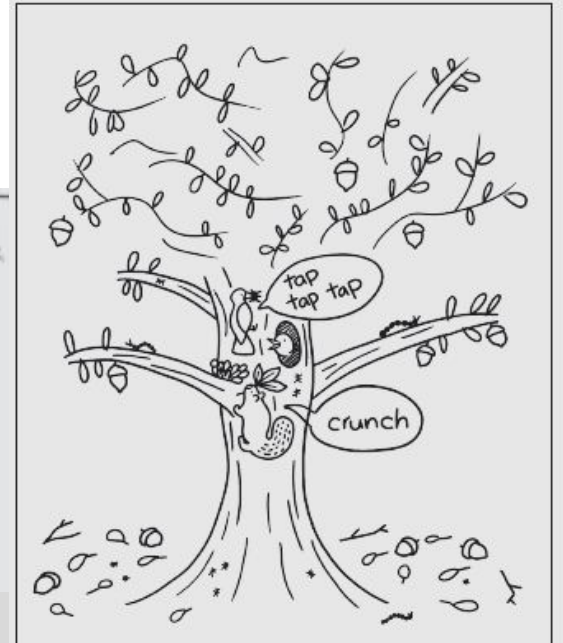
*Why is the tree a good place for the animals to get food and make shelter?*

**Draw & Write:** students make their own journal pages throughout the unit. They end each Exploration with a shared drawing and writing activity about what they've learned.

There is a woodpecker in the tree.

The woodpecker makes a tapping noise when it is getting food.

The woodpecker is getting food in the tree because the tree has bugs.



There is a squirrel in the tree.

The squirrel makes a crunchy noise when it is getting leaves to make a nest for shelter.

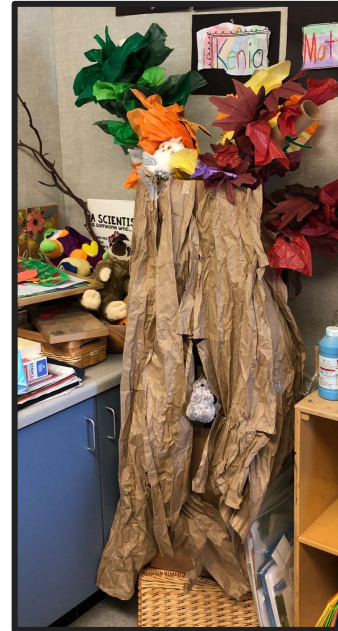
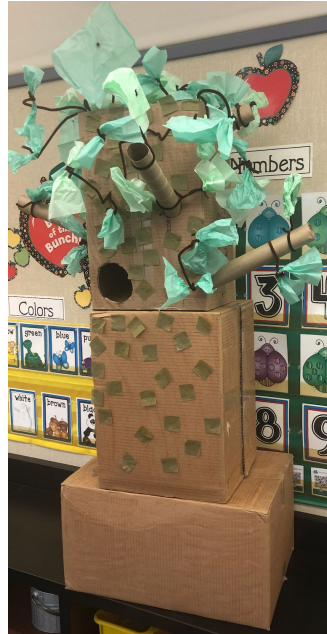
The squirrel is in the tree because the tree has leaves.

# Wondering about Noises in Trees: Exploration 3

**Visualize:** An animal and what it's doing in the tree.

Students visualize animals and what they do in trees. They visualize the plant structures of trees and how animals use them. Students help make a class model, and draw their own pages for a class book.

Students play & “act out” the animals in dramatic play with the tree model.



9

1

in the tree.

There is a

Animals in Trees

Name: \_\_\_\_\_

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Permission is granted to photocopy for classroom use.

# Multimodal Instruction

Figuring out and making sense of ideas like scientists & engineers!



- **Do** Students play the Tree Resources card game
- **Talk** Students talk like scientists about what trees have that is useful for animals.
- **Read** Students listen to a read aloud about animals in trees.
- **Draw & Write** Students draw & write their own pages & contribute to a shared-writing/drawing about animals in trees.
- **Visualize** Students visualize & help create a class tree model. Students play & “act out” the animals in dramatic play with the tree model.



# Multimodal instruction (multiple at bats)

Activities of different modalities are intentionally sequenced to support deep understanding of complex concepts.



# Reflection

How will multiple at-bats with multimodal evidence sources support diverse learners in your class to master complex science ideas?



# Evidence sources work together

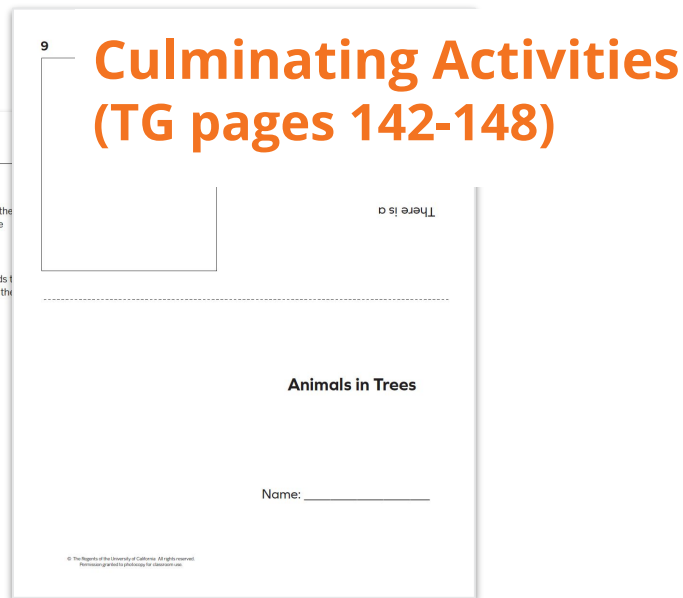
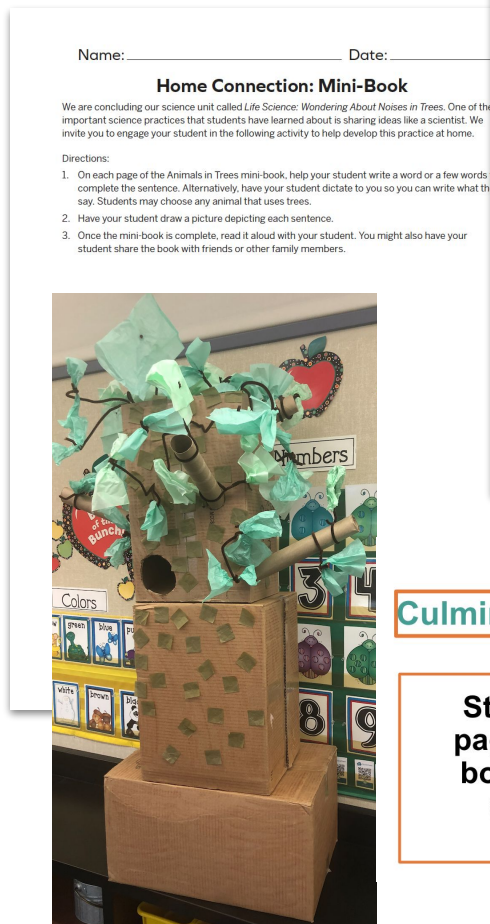
**Teacher tip:** Every evidence source plays an important role in student learning. Be sure to teach every Activity.

- How can we encourage and support students in play-based learning experiences throughout the activities?



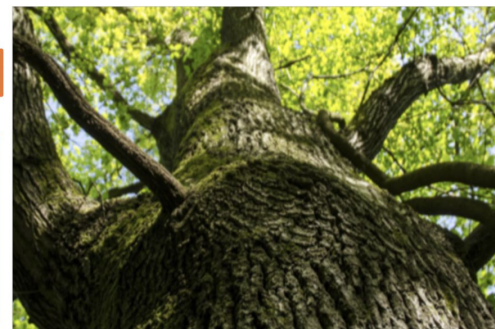
# Culminating Activities:

- Reflect on their work as TK Scientists
- Review learning throughout the unit -
- Create **Animals in Trees** Class-Book about how animals use trees with individual student pages.
- Make individual Student **Mini-books** to send home to families for students share their learning with them.
- Share/post in both Class-Book and Mini-book family photos/video clips in class online gallery.
- If students have made their own tree models, have them bring to share in class - or share via photos &/or short video clips in Class Gallery of projects on Classroom or School-site websites



## Culminating Activity

**Students create pages for a class book about how animals use trees.**



# TK & UTK - Developmental Considerations

- **Engaging, relatable context for learning**
- **Short activities**
- **Varied modalities**
- **Repeated routines**
- **Supportive teacher modeling and leading**
- **Experience and exposure to science**



# Flexible Implementation: Activity Structures

Which one(s) you see working best for your students?

*Implement Activities as a part of your regular Learning Center times in Math or Language Arts, especially Writing Center times..*

**Small Groups:** Teacher introduces the activities in small groups as part of the centers/small group/partner time. **(Optional:** making the previously covered activities independent centers)



**Large Group/Single center:** Introduce the activity as a large group **and then** open them individually to independent centers

*Implement Activities as a part of your regular Choice Time Centers along with related Art, Dramatic Play & extra Writing Center time.*

**Large Group/Multiple Centers:** Introduce the activities first in large groups, then once they have all been done together open them **ALL** up to independent centers



# UNIT Planning:

## Small Groups &/or Partners

**In-person & Hybrid/  
Distance Learning:  
Activities** which will work  
in a remote environment  
(ie setup a 'Science Wall'  
matching with an online  
class 'Science Wall')  
- that you can then  
reinforce & extend during  
classroom time together.

## Large Group/ One Center

### Resources & Materials

- What do you have already in your classroom that you can add to the unit?
- What is available @ your school site?
- What do you want to create/collect/get donated to be ready to implement the unit?
- What online resources are available to you to implement your unit & share with students?

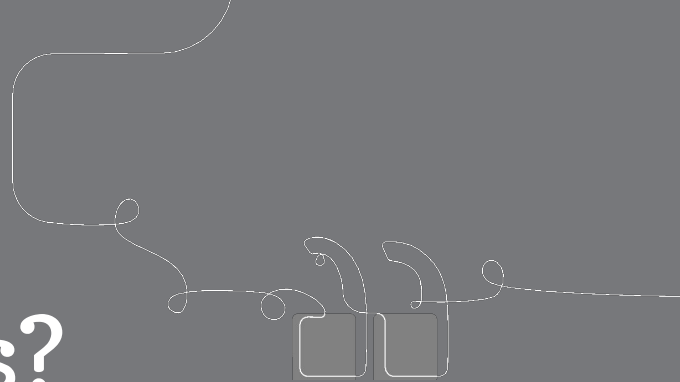
## Large Group/ Multiple Centers

**Hands-On, In-Person  
Classroom Activities** to do  
together.

**@ Home Extensions**  
Hands-On projects to have  
students do @ home with  
their families as Family  
Projects.

**Online Gallery & Links** to  
share with families whether  
in-person or hybrid.

Questions? Concerns?  
Aha's! This reminds me...





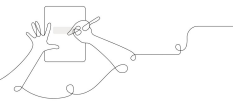
# Plan for the Day



- Introduction & Framing the day

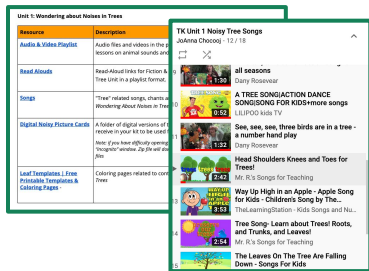
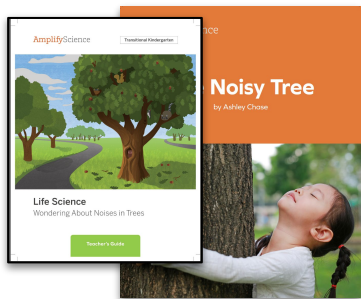
## Participant Notebook

TK, Wondering About Buildings  
Guided Unit Internalization Workshop



- Navigation & Planning Explorations

- New Curriculum & TK Instructional Approach



- Planning to Teach- Additional Program Resources

- Internalization & Navigation Unit 1



- Closing

# Overarching Goals



- **Navigate the Amplify Science TK curriculum to understand the structure and resources at the Unit, Exploration and Activity levels.**
- **Experience how all the multimodal activities & instructional routines work together to support students' success.**
- **Become familiar with planning resources to prepare to teach Amplify Science TK to my students..**



(reminder: after lunch go to  
auditorium)

## LAUSD SUMMER INSTITUTE 2023

Session 2 (after lunch)  
UCLA Center X Presentation



# Lunch Break



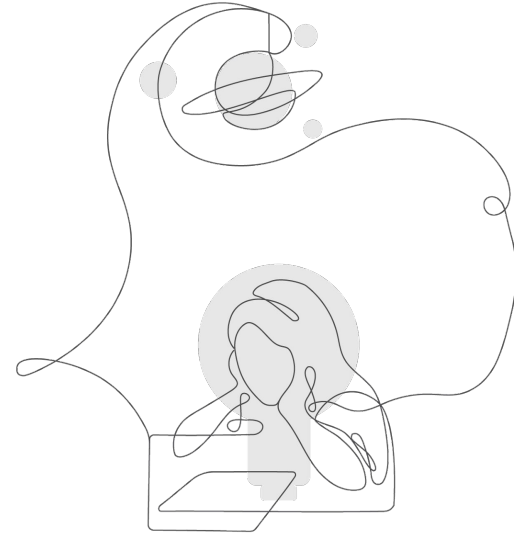
# LAUSD SUMMER INSTITUTE 2023

## Session 3 Planning



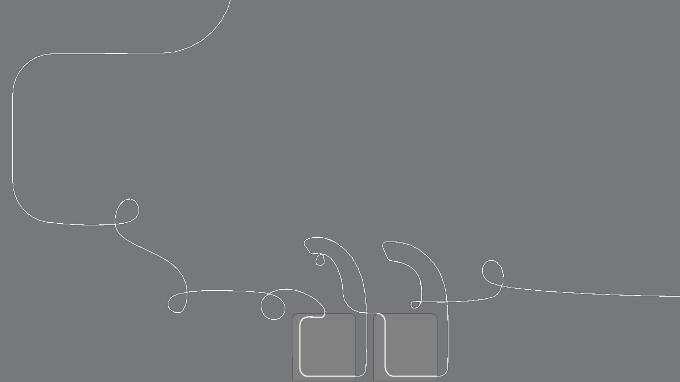
# Share Out

- Let's continue planning our 3 Explorations for Unit 3.
- Questions? Concerns? Aha's!
- Are you planning differently for the unit after our work today?
  - Have you made any additions to your planning?
  - Have you made any adjustments?
- Check last shared ideas on your Activity's Jamboard: [TK Unit 1 NPE \(Slide 32, 92, 104, 108\)](#)



# Teaching science

“Science [is] both a body of knowledge and an evidence-based, model and theory building enterprise that continually extends, refines, and revises knowledge.”



# Closing reflection

**Based on our work today, please share:**

**Head:** something you'll keep in mind

**Heart:** something you're feeling

**Feet:** something you're planning to do

# Additional resources and ongoing support

## Customer Care

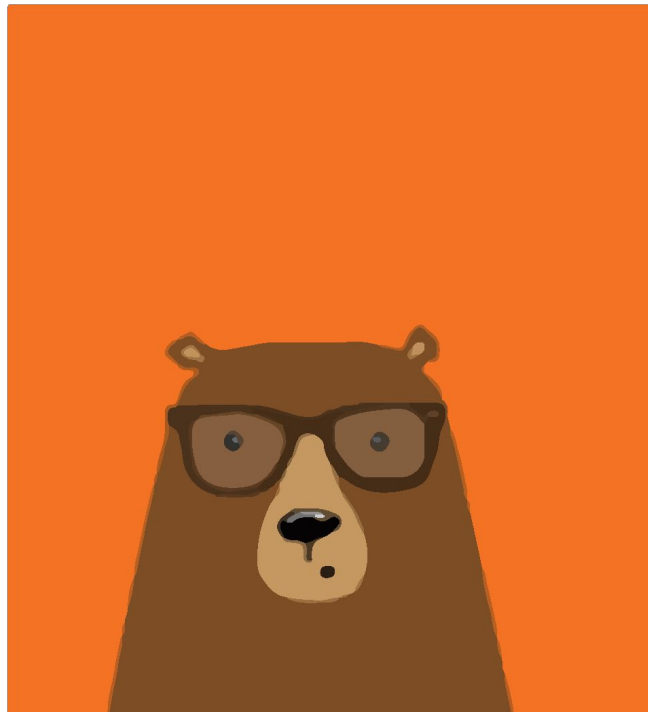
Seek information specific to enrollment and rosters, technical support, materials and kits, and teaching support, weekdays 7AM-10PM EST and weekends 10AM-6PM EST.



[help@amplify.com](mailto:help@amplify.com)



800-823-1969



# Please provide feedback!

**Type:**

Strengthen

**Session title:**

Unit one deep dive

**Professional Learning Specialist name:**

Insert name

(insert email, if you would like)