



THE ART OF KNOWING

LESSON ONE

INTRODUCTION TO HAYY IBN YAQZAN

Created by The Art of Knowing Collaborative ◇ Arshad I. Ali, Ebtissam Oraby, Samuel Burmester

www.ArtOfKnowingCurriculum.com



OBJECTIVES

- ◇ To reflect on relationships with and among animals and the natural world and the concept of habitat.
- ◇ To analyze the story of Hayy and reflect on different ways of knowing that Hayy used to learn and engage with his habitat.

REQUIRED MATERIALS

- ◇ Paper and drawing/writing materials for reflection
- ◇ Giant Post-It Pads and Pictures for gallery walk
- ◇ Post-it Notes (3 different colors)

LESSON OVERVIEW

- ◇ Lead in: Habitat Gallery Walk
- ◇ First reading of Hayy
- ◇ Reflection: Connecting the Lessons
- ◇ Story Summary

LEAD IN:
HABITAT GALLERY WALK

SET UP

**This activity is meant to help students begin to reflect on how they feel about, and relate to, the natural world before engaging with the story of how Hayy does so.*

Adhere each image to a sheet of Giant Post it Paper and place them around the room in a way that makes sense for your space. Place three packs of sticky notes of three different colors on a desk or table accessible to students. Assign one color sticky note to "I see," "I think," and "I wonder."



ACTIVITY INTRODUCTION

We are going to do an activity called a gallery walk. There are five stations in the room. You will visit each one twice and take a few minutes to think about what you see, think, and wonder.

FIRST ROUND INSTRUCTIONS

For the first round, you will leave a post-it at each station about what you see, think, and wonder about the animals in the habitat and their relationship to it.

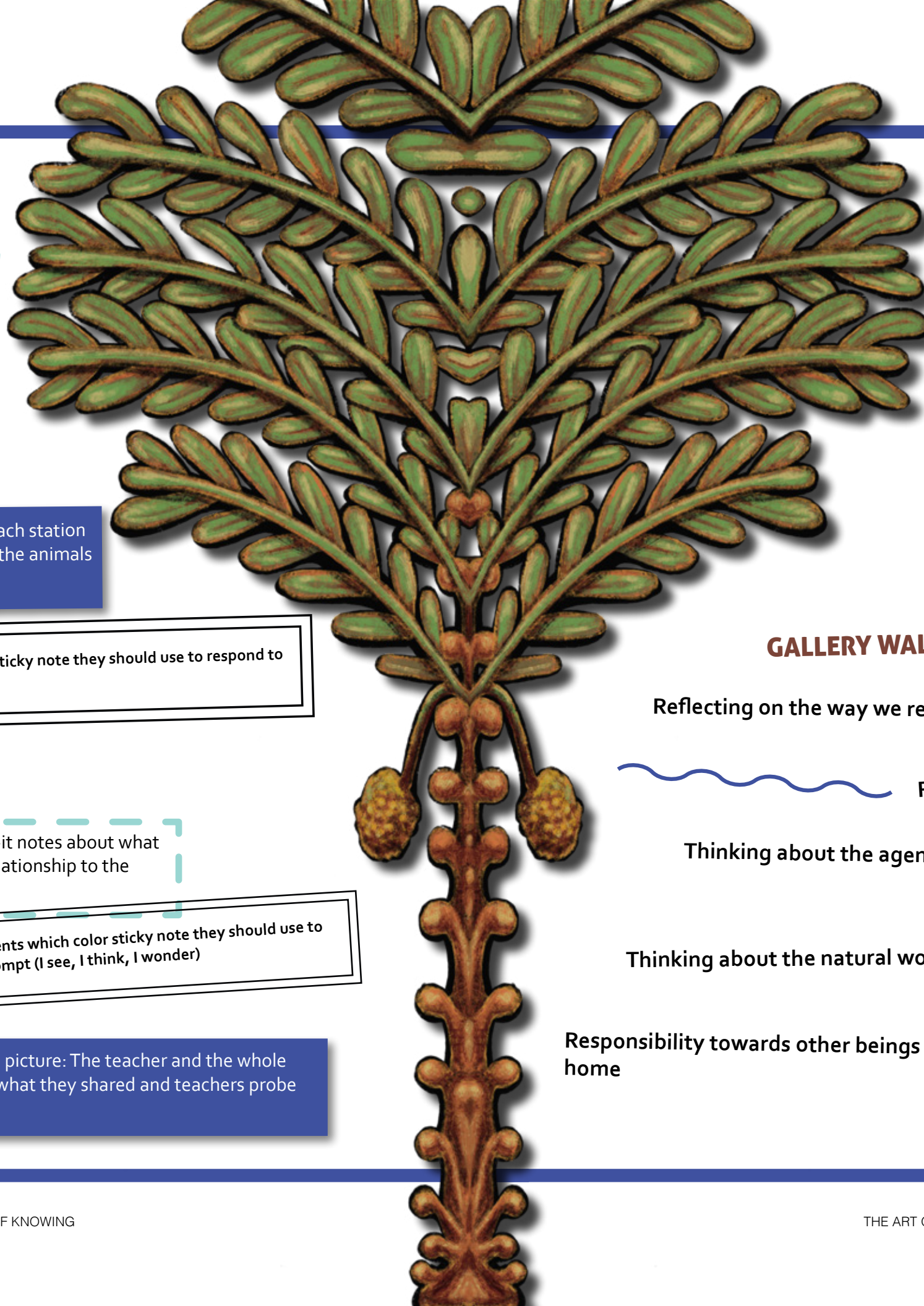
Explain to the students which color sticky note they should use to respond to each prompt (I see, I think, I wonder)

SECOND ROUND INSTRUCTIONS

For the second round, you will leave post-it notes about what you see, think, and wonder about your relationship to the animals and habitat.

Explain to the students which color sticky note they should use to respond to each prompt (I see, I think, I wonder)

Students share their notes on each picture: The teacher and the whole class visit each station and review what they shared and teachers probe for deeper conversation.



TRANSITION TO THE STORY OF HAYY

Now we will read a story about someone who grew up with animals on an island.

GALLERY WALK IN RELATION TO THE STORY

Reflecting on the way we relate to others in the world

Personification of nature

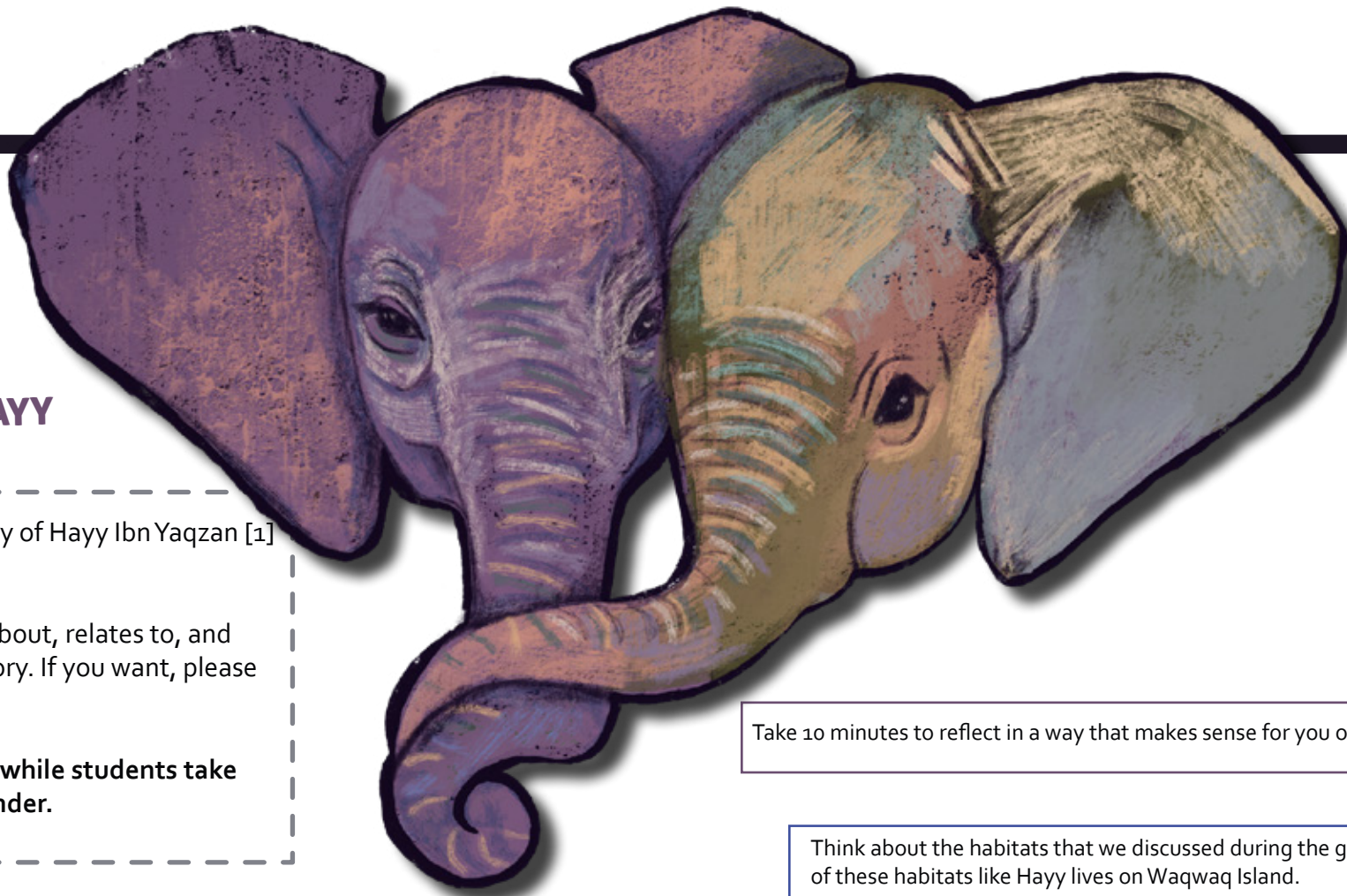
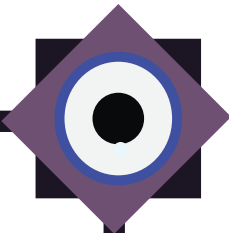
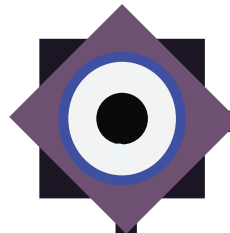
Thinking about the agency of different beings around us

Thinking about the natural world as an open book of knowledge

Responsibility towards other beings in the world as one family sharing a home

GALLERY WALK PHOTO EXAMPLE





FIRST READING OF HAYY

INTRODUCING THE STORY OF HAYY

We are going to read the first part of the story of Hayy Ibn Yaqzan [1] who grew up on an island with only animals.

I want you to pay attention to how he feels about, relates to, and learns from the animals and nature in this story. If you want, please make notes as I tell the story.

Teacher tells the story with illustration aid while students take note of what they hear/see, think, and wonder.

EXAMPLE Q'S

ASK COMPREHENSION QUESTIONS

- How does Hayy communicate with his mother and other animals around him?
- How does Hayy learn to eat?
- To walk?
- Who is his teacher?
- What happens when his deer mother dies?
- How does he feel?
- What does he do?
- What does he learn?
- What does Hayy do when he sees fire for the first time?
- How does Hayy learn to make animals help him?
- How does he convince the horse to let him ride on his back?
- How does Hayy relate to his habitat?
- Does this relationship change throughout the story? How?

REFLECTION

CONNECTING THE LESSONS

INTRODUCE ACTIVITY

Take 10 minutes to reflect in a way that makes sense for you on the following. You can journal, draw, or both.

Think about the habitats that we discussed during the gallery walk, now imagine that you are living in one of these habitats like Hayy lives on Waqwaq Island.

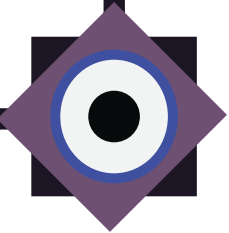
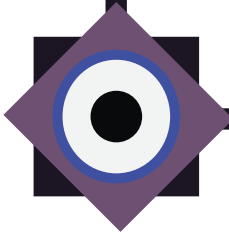
How does this change the way you think about your relationship with the animals or habitat from the gallery walk?

How does this change how you think about the animals' relationship with their habitat?

LEAD IN TO THE NEXT LESSON

In the story, Hayy comes to realize that life is more than just the physical, think about what that means to you and draw something that represents the more than physical.

[1] Ibn Tufayl, Abū Bakr, and Lenn Evan Goodman. Hayy Ibn Yaqzan: A Philosophical Tale. University of Chicago Press, 2009



INTRODUCTION

THE STORY OF HAYY IBN YAQZAN

[ALIVE, SON OF AWAKE]

INTRODUCTION

Hayy ibn Yaqzān” by Abu Bakr Ibn Tufayl, a 12th-century Andalusian scholar, is an Arabic tale about a boy who grows up in isolation on a remote island and learns about the world through nature as he grows to develop a sense of responsibility and duty toward the natural world. The story, grounded in Islamic perspectives of nature as a reflection of divine beauty, presents two origins for Hayy: a spontaneous biological generation and a royal infant castaway for his own protection. Ibn Tufayl, a master of philosophy and medicine, draws from the wild child motif found in stories like Romulus and Remus, and as mentioned in the earlier talk, his story grows out of earlier narratives of Hayy ibn Yaqzan.

So onto the story...

Many people ask how Hayy ended up on the remote, equatorial island, that few can find. Some say that Hayy emerged spontaneously on the island of Waqwaq, where the unique climate and soil conditions are said to allow people to form naturally from the earth’s mud, from its soil. Others say he was a child of a princess whose brother, the king, was determined to kill him so that he would not inherit his throne. To save his life, Hayy’s mother cast him to the sea and the baby ended up on the shore of Waqwaq Island. Hayy spends the first 50 years of his life on Waqwaq Island, without any human contact.

No matter Hayy’s origin, Hayy was taken care of by an “adoptive” Gazelle mother and lived among her herd. He learned what and how to eat, how to communicate from his mother gazelle, from the herd, and from living among other animals. He noticed that some animals had feathers, fur, or wool to keep them warm, while he shivered in the cold, and his skin burned in the heat. Hayy learned he could use leaves and animal skins to protect his body. Being in the natural world, animals attack each other and often have to defend themselves. Hayy saw that that animals (and even many plants) had natural defenses like horns, claws, and thorns. Hayy had his hands and legs, but utilizing what he found on Waqwaq, he began crafting tools to protect himself.

By the time he was seven years old, he began to find his way among his flock of gazelle on Waqwaq. But, Hayy’s gazelle mother was growing older and weaker. The seven-year-old Hayy took care of her, learning about love and responsibility. By watching and imitating the animals, Hayy learned to communicate, protect himself, and care for others. He cared for his mother gazelle as she grew weaker by bringing her food and water.

One day his mother was no longer moving. He tried to wake her, but she would not wake up. Hayy became increasingly worried about her and began examining her body. Nothing he could do would wake her or bring her back to life. Hayy looked for ways to fix her, to find what was wrong, but he found that nothing he tried would bring her back. Realizing his limitations, he came to understand that something important that he couldn't see or touch, had left his mother's body. He accepted her death and he buried her. Losing his Gazelle mother made Hayy curious about the essence of life in all living animals.

In the coming years, Hayy's fascination with life and death continued and he would often examine animals to learn about their bodies—he pondered how they moved, what gave them strength, and life. He learned to engage his natural environment, using animals for transportation and food and he learned how to create shelter for warmth, safety, and storage. He discovered how to make and use fire for light and cooking. Hayy started to understand the difference between animate and inanimate life. He began to categorize everything he saw in the world: animals, plants, and other things. He realized they were all made of physical matter. Reflecting back on his Gazelle mother's death, he realized life was more than just the physical.

By the time Hayy was 28, he realized that everything around him, the earth, plants, animals, even the stars and skies were constantly changing, growing, and decaying - nothing stayed the same forever. He continued to spend his days carefully observing the world and beings around him. As he reflected on this, he realized that everything that exists must have an origin. He thought everything must come from somewhere or some place—that there must be a universal origin for everything he has seen on this planet and in the heavens.

So, Hayy began to look upward, and to think deeply about the sun, the moon, and the stars, especially about how they moved. He also began to wonder about his place in the world and how he should live his life as a part of the ecosystem of the planet. As he considered these things, he came to the conclusion that there were three types of actions he should take.

First, there were bodily actions that made him like animals and other earthly beings because, like them, he had a body. Second, there were actions that would make him like the stars, because he had a spirit or soul. Finally, there were actions that would bring him closer to the Divine because he wanted, deeply, to understand and connect with his Creator.

From then on, Hayy decided to live his life based on these three principles. He would care for his body like the animals, nurture his spirit like the stars, and most importantly, strive to know and resemble the Divine. For Hayy, the greatest happiness came from learning about the Divine and doing everything he could to live in a way that reflected this. Hayy transitioned from being a possessor and master of the environment to having a relationship of responsibility for the environment which he was a part of.

If he noticed a plant cut off from the sun, he would remove what was screening it. If he saw one plant tangled in another that might harm it, he would separate the two carefully so that neither would be damaged. If he saw a plant dying for lack of water, he would water it. When he saw an animal attacked by a predator, caught in a tangle, stuck by a thorn, or thirsty, Hayy did all he could to help the living being.

But, for Hayy's life to endure, he needed sustenance. Yet, as his spiritual insight deepened, his relationship with eating transformed. With a heart attuned to the natural world as a reflection of the unity of the universe, the simple act of feeding himself became a moral question. To consume another living being, he realized, would interrupt its path toward fulfillment, denying it the chance to achieve its destined purpose. Hayy felt this would be a violation of Divine harmony. So, he resolved to take only what was necessary to sustain his body.

His every choice was an act of reverence, a way to live in harmony, to dance with the natural world and tread lightly upon the earth.

WHAT IS THE ART OF KNOWING?

The Art of Knowing Curriculum is designed as a supplement to elementary science education. It intentionally places Muslim Ways of Knowing at the center of science learning. It is designed to engage students in exploring “how we come to know” by asking questions about when, where, and why we use various ways of knowing through stories, art, and discussion. We offer suggestions for how to incorporate the curriculum as a once-weekly class, but the curriculum and other resources can be taken up in a variety of ways that suit the needs of your community.

WHAT IS THE PURPOSE?

We developed a curriculum that bridges science pedagogy and Muslim Ways of Knowing.

Through this research and teaching project, we explore the possibilities of teaching science through a non-western perspective and creating a space for young people to imagine possible futures through thinking not only about what is taught, but also about the teaching practices, activities, and artifacts in the classroom. Through engaging with art and storywork, we produced a curriculum that draws from classical Muslim systems of knowledge. We engage pre-colonial literature from the Muslim world to explore how young people come to know and how they relate to, and act on, what they know.

Our larger research project aims to open the space for interdisciplinary scholarship that focuses on inclusive STEAM education; offer non-Eurocentric approaches to science education; and, appreciate multiple, and culturally-situated, ways of understanding science.

THIS WORK WAS FUNDED BY

The Social Science Research Council (Grant Number: 48720-1-ECNS22004N)
The Spencer Foundation (Grant number: 202300086)

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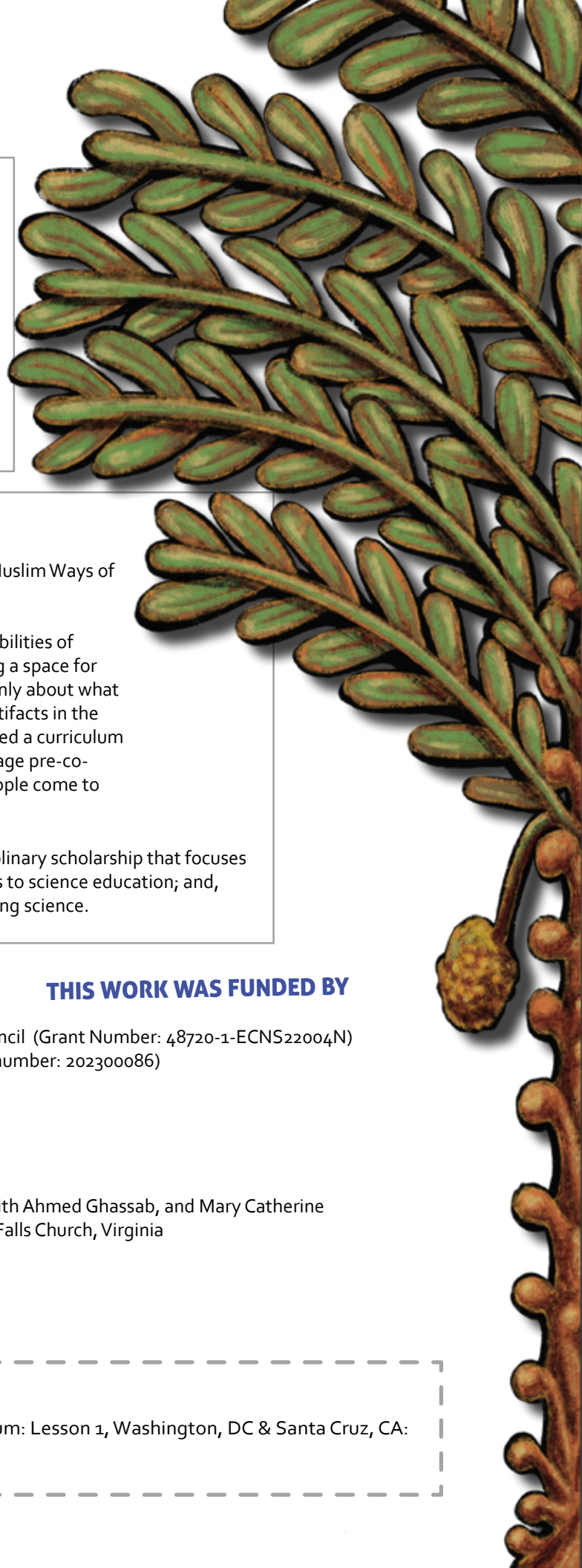
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ART DIRECTION & ILLUSTRATION

Susu Attar

SUGGESTED CITATION

Art of Knowing Collaborative (2024). Art of Knowing Curriculum: Lesson 1, Washington, DC & Santa Cruz, CA: Art of Knowing.





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LESSON TWO

ALIVE/ NOT ALIVE

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OBJECTIVES

- ◇ To reflect on relationships with and among animals and the natural world and the concept of habitat.
- ◇ To analyze the story of Hayy and reflect on different ways of knowing that Hayy used to learn and engage with his habitat.



REQUIRED MATERIALS

- ◇ Paper and drawing/writing materials for reflection
- ◇ illustrated Story of Hayy
- ◇ Images for Alive/ Not Alive



LESSON OVERVIEW

- ◇ Lead in: Revisit Lesson 1 Reflection
- ◇ 2nd Reading of Hayy: What is life and what is our ethical responsibility towards life?
- ◇ Alive/ Not Alive - Small Group Activity

REFLECTION

*Remind Students of the reflection prompt they concluded with last week, then give them a few minutes to finish their reflections before sharing out

In the story Hayy comes to realize that life is more than just the physical, think about what that means to you and draw something that represents the more than physical.





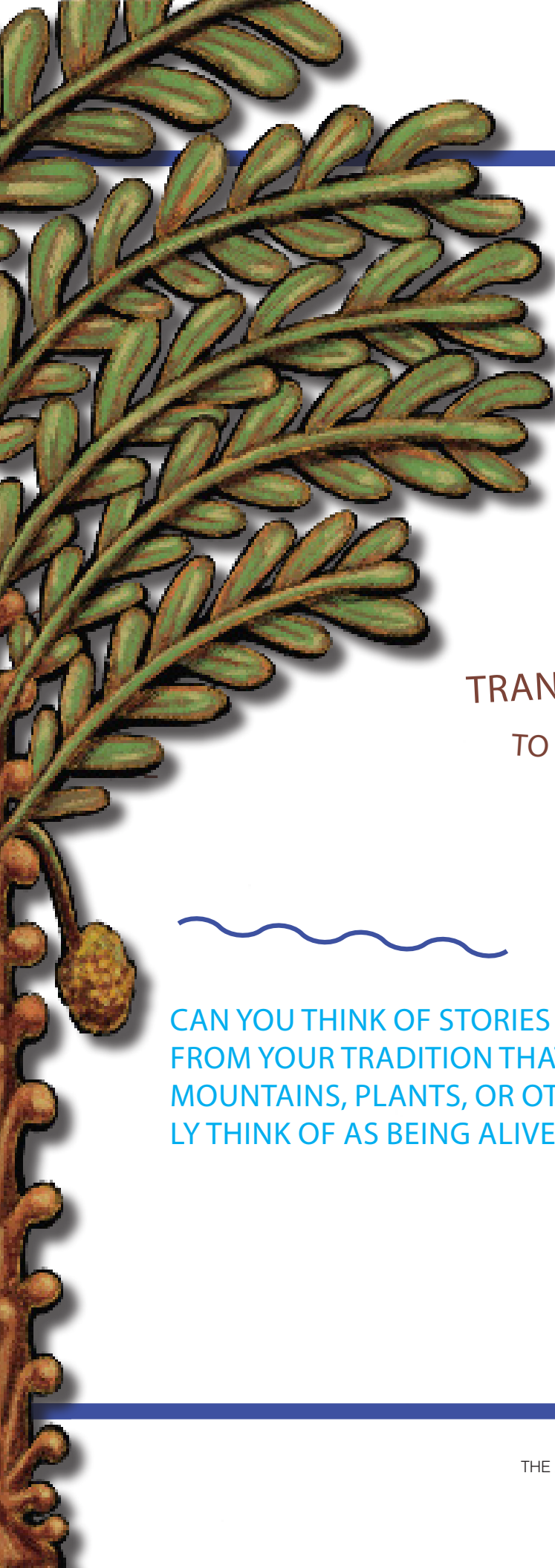
ACTIVITY INTRODUCTION

Revisit the first part of the story of Hayy from last class before telling part two

SECOND READING OF HAYY

ASK DURING AND AFTER READING:

- What conclusion does Hayy have when studying animals and creation around him?
- What does Hayy learn from animals, stars, etc?
- How did Hayy think of the universe as one being ?
- Why does Hayy make sure to plant the seed after eating a fruit? Why does he decide not to eat meat so often?
- How does Hayy's understanding shape his relationship with his environment and the way he used his knowledge, tools, and power? [discuss the difference between: mastering/utilizing vs. being responsible for the environment]



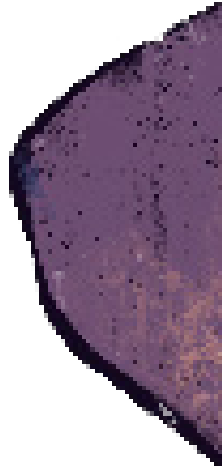
TRANSITIONS
TO ALIVE/
NOT ALIVE

CAN YOU THINK OF STORIES
FROM YOUR TRADITION THAT TALK ABOUT ROCKS, TREES,
MOUNTAINS, PLANTS, OR OTHER THINGS WE DON'T NORMAL-
LY THINK OF AS BEING ALIVE, AS BEING ALIVE?

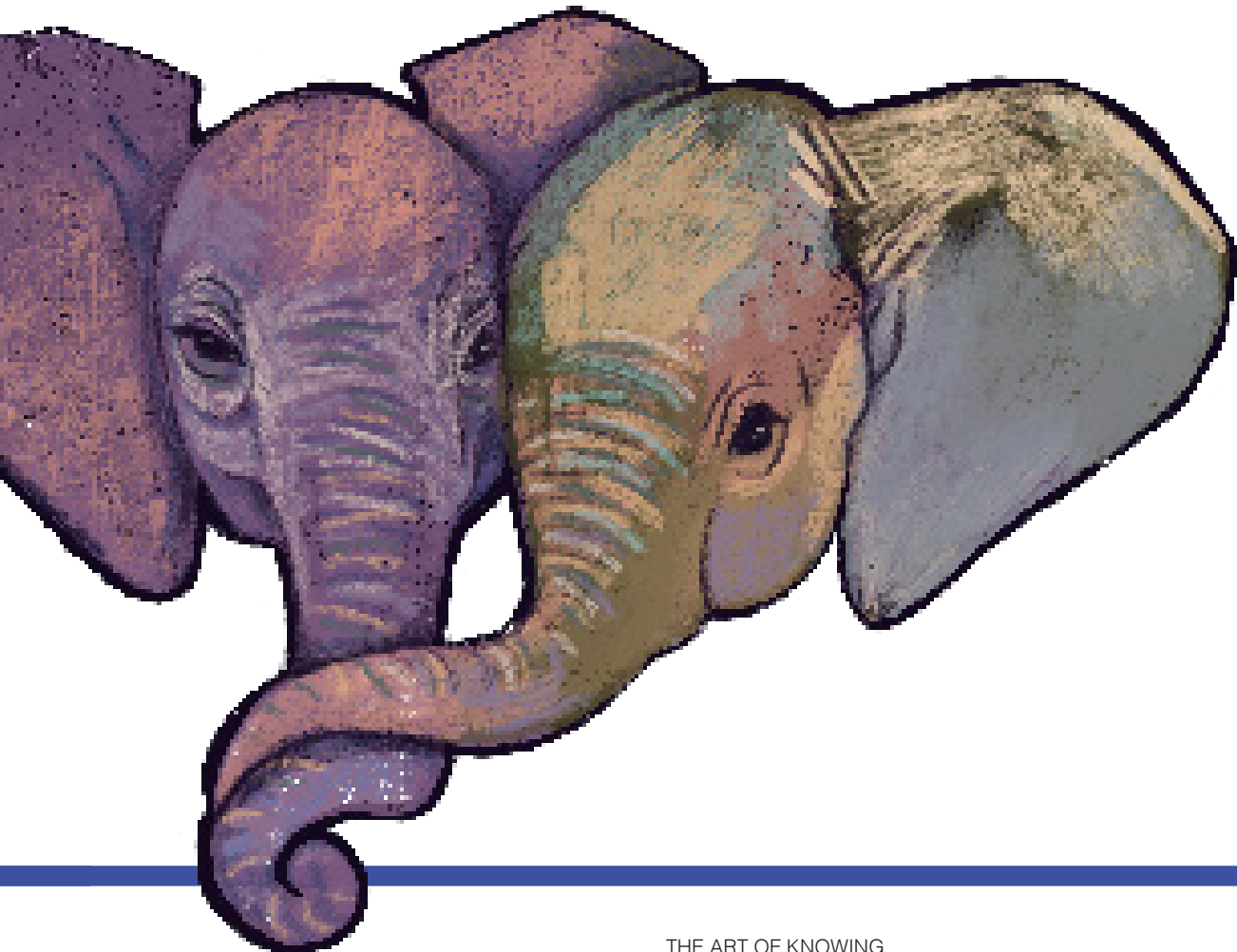


ALIVE/ NOT ALIVE

This activity relates to the time in Hayy's life where he begins exploring and categorizing beings around him. Just as Hayy's ethics and understanding of the relations of all things emerged, we can engage students in troubling and reflecting on their own understanding of categories, relationships, and responsibility.

- Introduce the activity: We will be breaking into groups of 3-4 and looking at some images. For each of them we want you to discuss if you think it is alive or not alive or something else. While you are in groups make sure to take note of what makes these things alive or not alive.
 - Before beginning, ask students to share an example of something that is alive and something that is not alive and what makes those things alive or not alive.
 - Break into groups and pass out the images with various beings and things.
 - After groups have discussed and made notes, the class comes back to share out: Let students from each group share the images on their cards. Have them share if their group decided their being or thing is alive, not alive, or if they are unsure AND have them explain why.
 - Next, ask the rest of the class if they agree with this or not and why.
 - Once all of the cards have been sorted, have students discuss the following:
 - What makes something alive or not alive?
 - What responsibilities does it put on us if something is alive?
- 

*A Note on encouraging deeper thinking during the activity:
Allow students the opportunity to discuss and decide on their own. In cases where student discussions do not dig deep, probe further. For Example: if students are discussing a card that says the word mountain, and they decide it is not alive because it is just made of rock, you can probe for further thinking by referencing what the Quran says about Mountains - (Mountains praising God with Prophet David, rejecting responsibility of free choice).






INTRODUCTION

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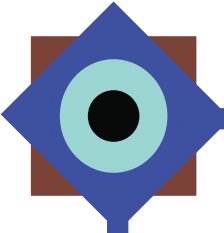


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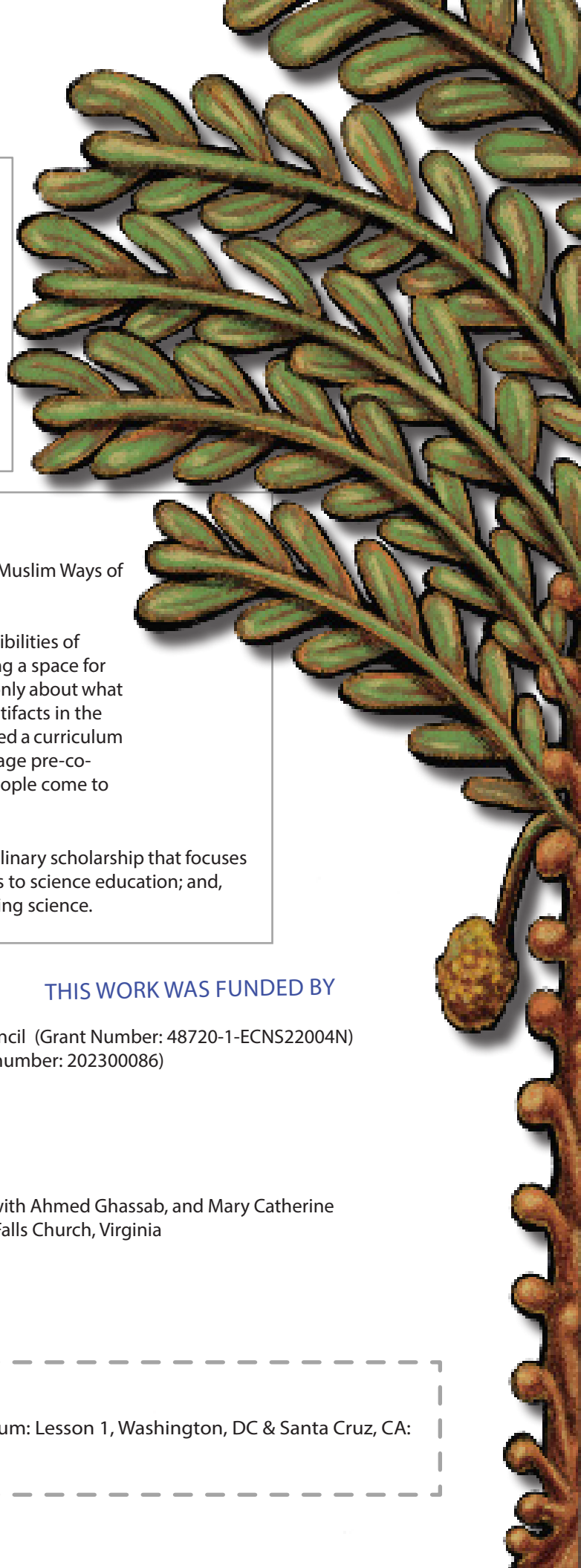
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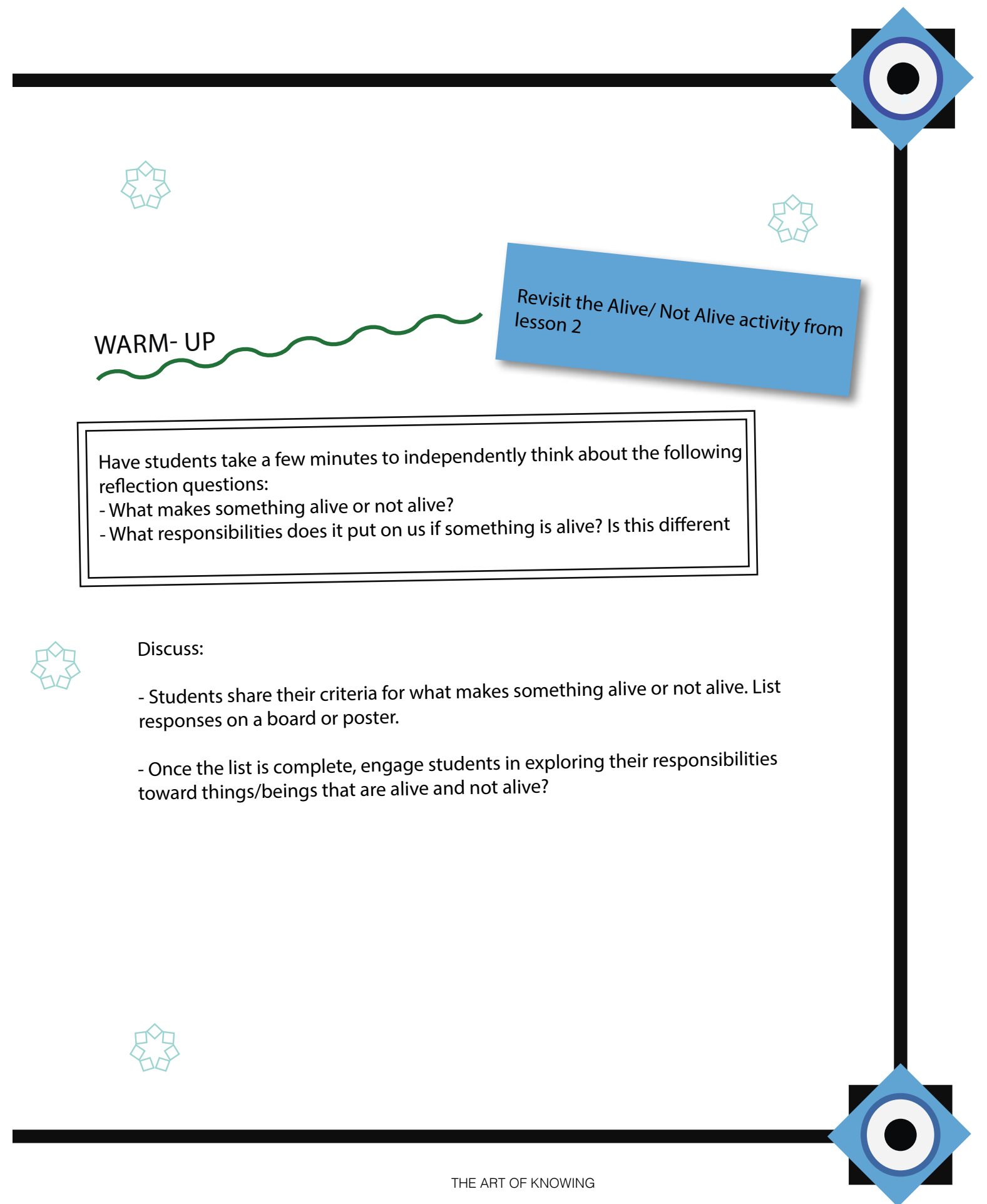
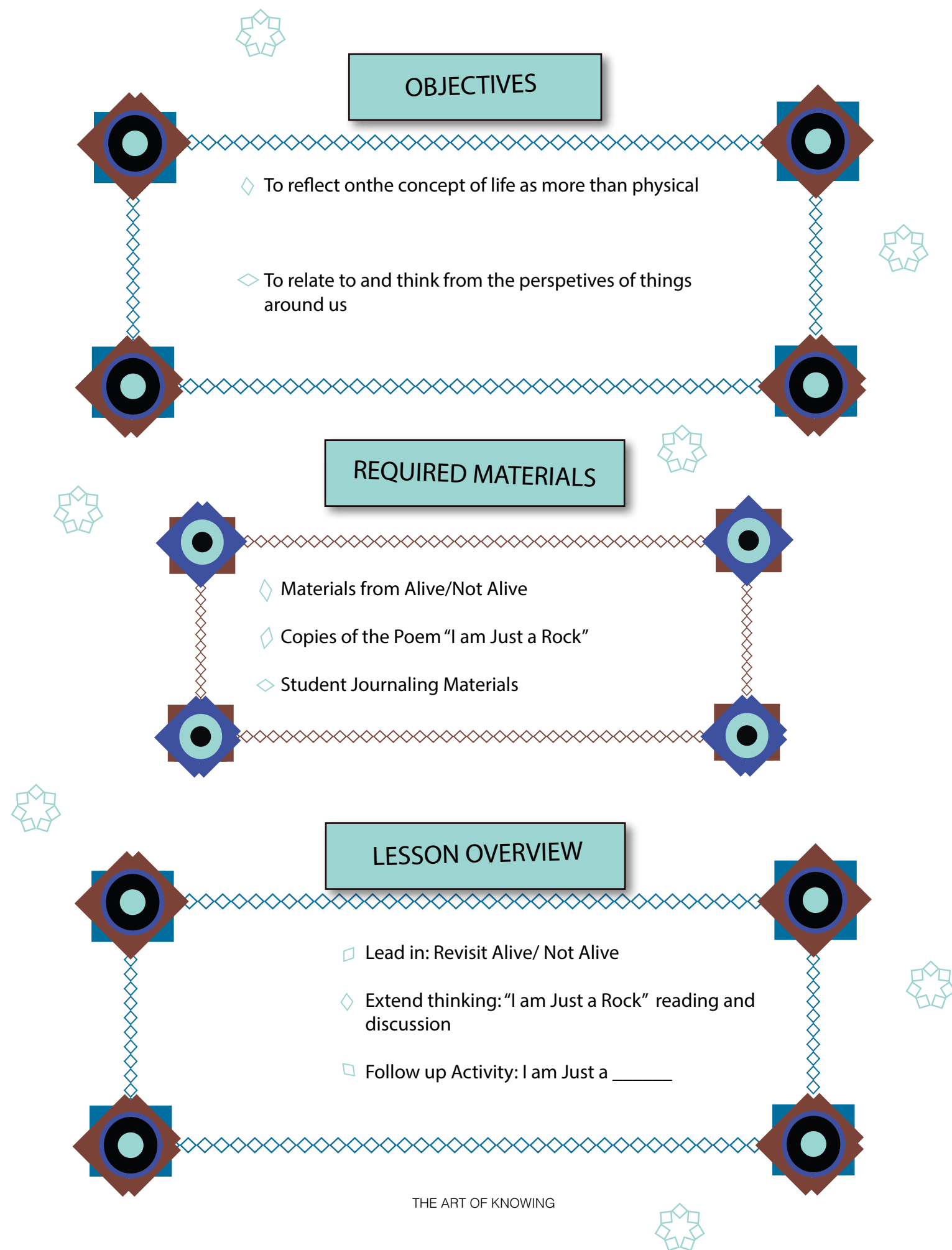
LESSON THREE

"I'M JUST A ROCK"

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ACTIVITY INTRODUCTION

Revisit the first part of the story of Hayy from last class before telling part two

SECOND READING OF HAYY

ASK DURING AND AFTER READING:

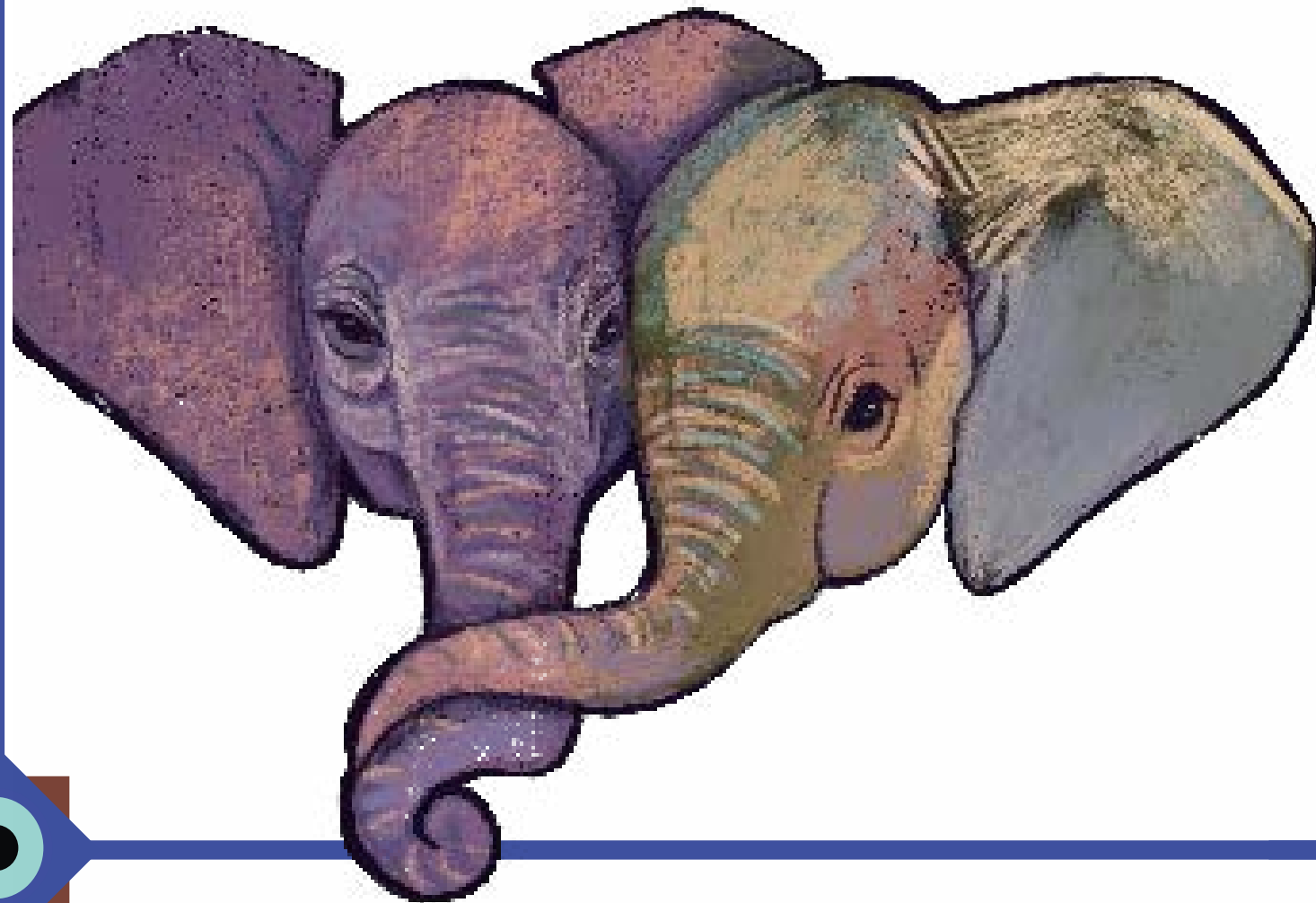
- What conclusion does Hayy have when studying animals and creation around him?
- What does Hayy learn from animals, stars, etc?
- How did Hayy think of the universe as one being ?
- Why does Hayy make sure to plant the seed after eating a fruit? Why does he decide not to eat meat so often?
- How does Hayy's understanding shape his relationship with his environment and the way he used his knowledge, tools, and power? [discuss the difference between: mastering/utilizing vs. being responsible for the environment]

CAN YOU THINK OF STORIES FROM YOUR TRADITION THAT TALK ABOUT ROCKS, TREES, MOUNTAINS, PLANTS, OR OTHER THINGS WE DON'T NORMALLY THINK OF AS BEING ALIVE, AS BEING ALIVE?

"I AM JUST A ROCK"

Introduce the activity:

We are going to keep thinking about what makes something alive or not alive and even if there are things that are somewhere in between alive and not alive. We will read the poem I'm just a rock . While you listen, think and take notes about if the rock and the tree in the poem are alive or not alive (or something else) based on the lists we made or other thoughts you have.



I am just a rock
And everyday I sit and watch the sky
I sleep here in the sun and rain
And do not question why
I don't want to be a bird
'cause us rocks were never meant to fly
But you can sit and rest on me
When you pass by

Alhamdulillah, alhamdulillah, I'm a rock
And that is all Allah asks of me
Alhamdulillah, alhamdulillah, I'm a Muslim
And there's nothing else I'd rather be

I am just a tree
And this is the only life I'll ever know
I bow my boughs in worship
Whenever I feel the wind blow
And my purpose in life
Is to grow when Allah says grow
And be a home for the birds and shade
For folks below

Alhamdulillah, alhamdulillah, I'm a tree
And that is all Allah asks of me
Alhamdulillah, alhamdulillah, I'm a Muslim
And there's nothing else I'd rather be

I am just a person
And my life is full of opportunity
I can travel through the world
Over land and over sea
But will I choose the path of Truth
Or a path to misguide me?
Sometimes I wish I had a simple life
Just like a rock or a tree

But alhamdulillah, alhamdulillah, I'm a person
And Allah has given me a choice that's free
So, alhamdulillah, I choose to be a Muslim
And there's nothing else I'd rather be

CLOSING

“I’M JUST A ...”

Students choose an object or thing from the alive/not alive activity and write one stanza (at least 4 lines; but more is okay too!) of a poem about that object or thing in the style of I’m just a rock. Encourage students to include illustrations as a part of their poem.

Prompt: What you would be thinking and doing if you were that thing? Also think of how you would like to be treated if you were that thing. Include those details in your poem!

Students who are comfortable can share poems and explain their reasoning.

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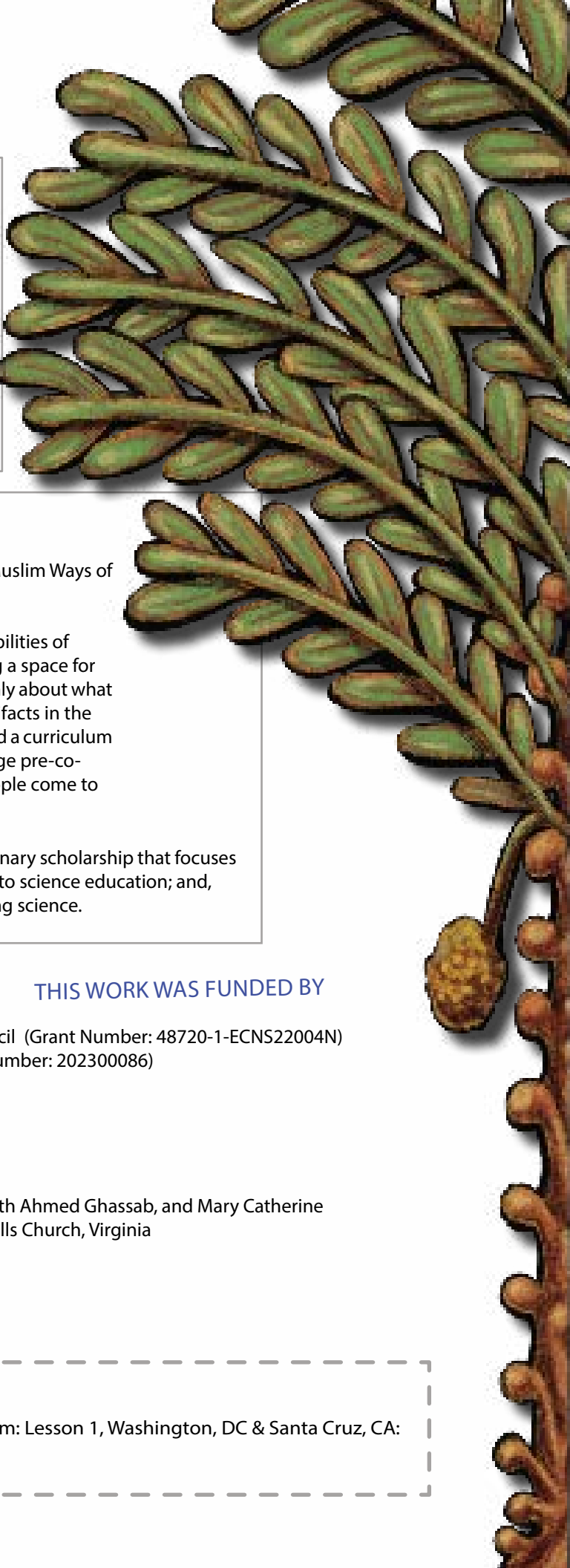
The Social Science Research Council (Grant Number: 48720-1-ECNS22004N)
The Spencer Foundation (Grant number: 202300086)

AUTHORS & CURRICULUM DEVELOPERS
Arshad I. Ali, Ebtissam Oraby, Samuel Burmester

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ART DIRECTION & ILLUSTRATION
Susu Attar

SUGGESTED CITATION
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THE ART OF KNOWING

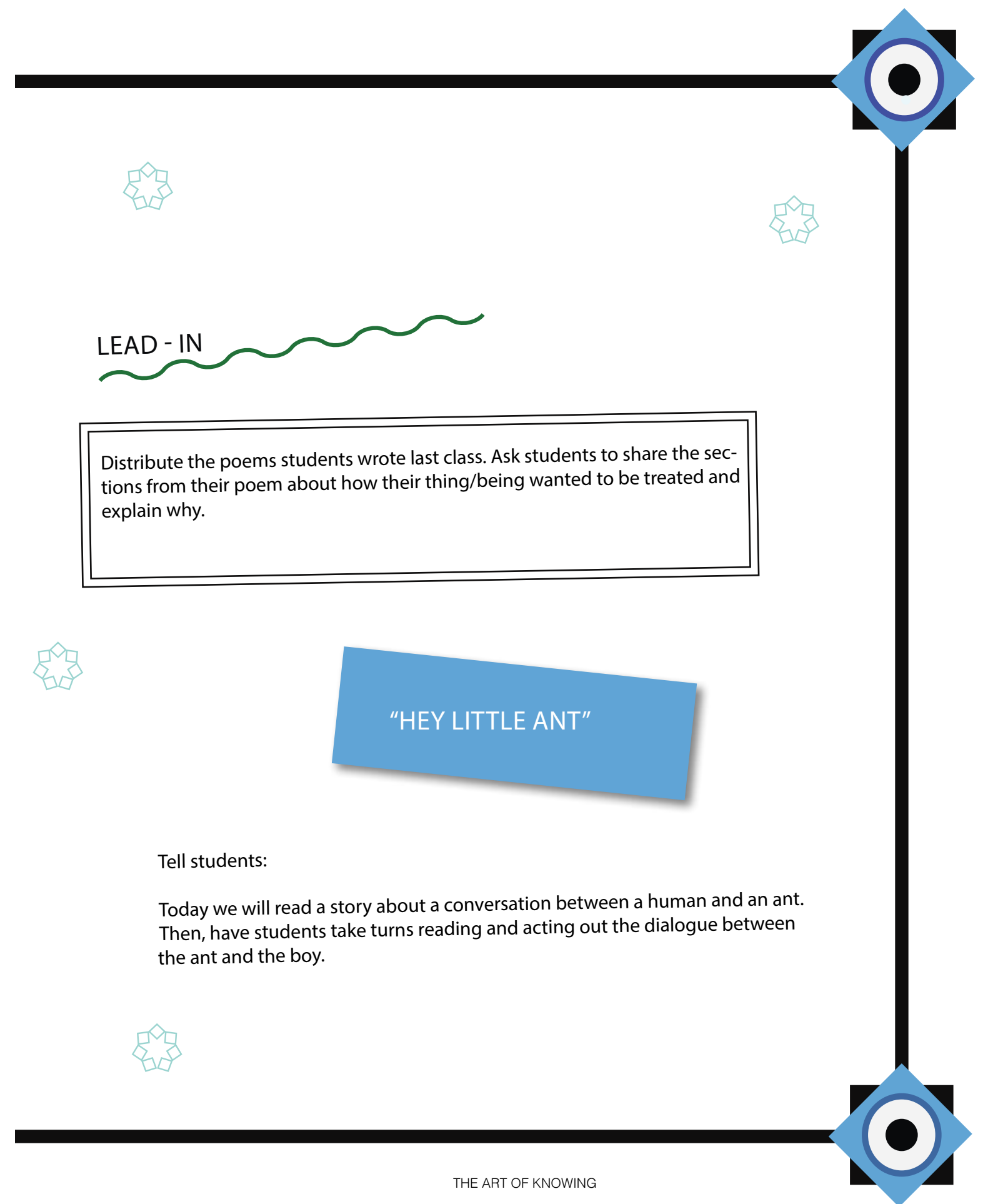
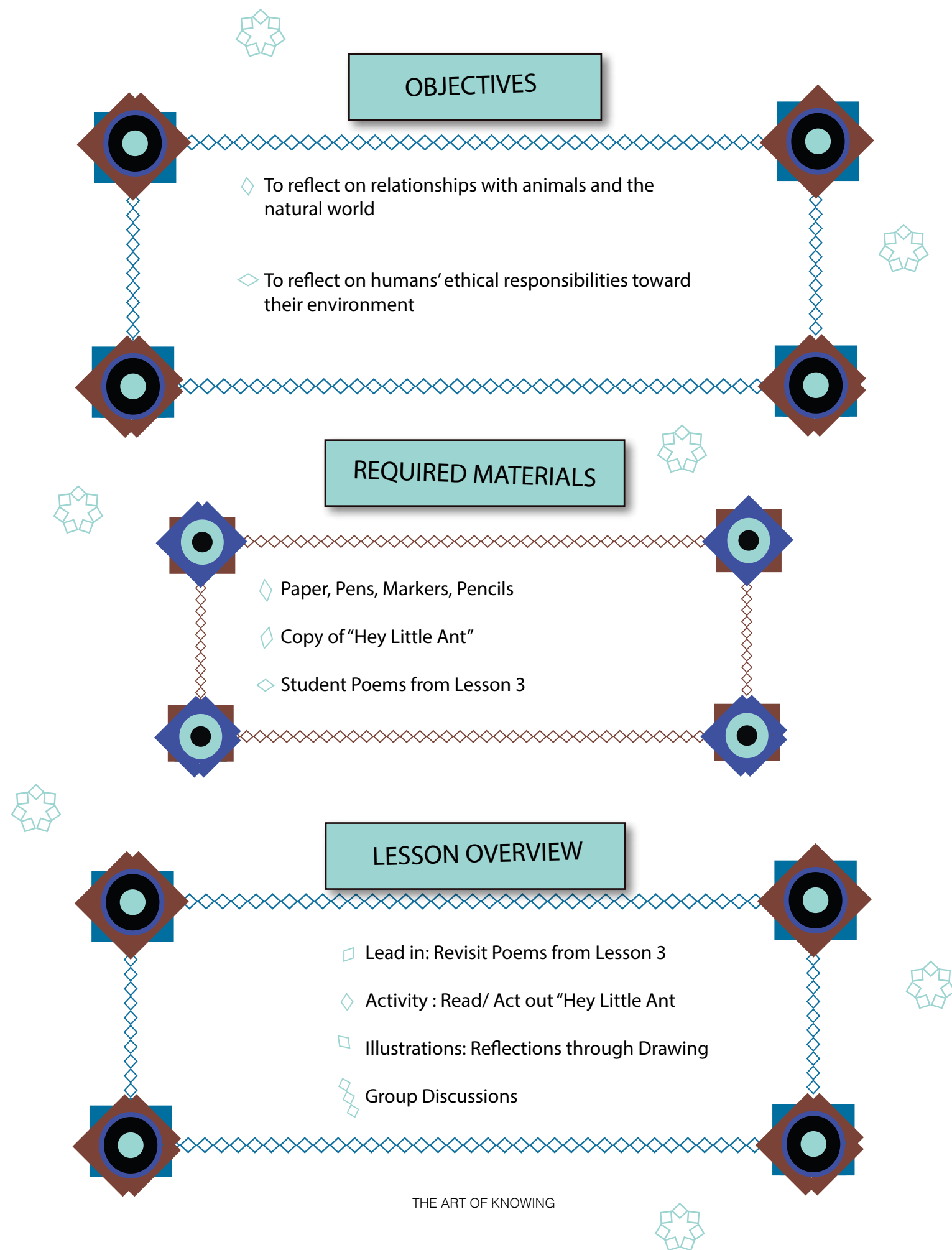
LESSON FOUR

CHYU LIT LANT

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ILLUSTRATIONS

After the first reading of the poem, ask students to take a few minutes to illustrate something from the story that stuck out to them. These illustrations will guide the reflection on the poem through explaining which part they chose to illus-

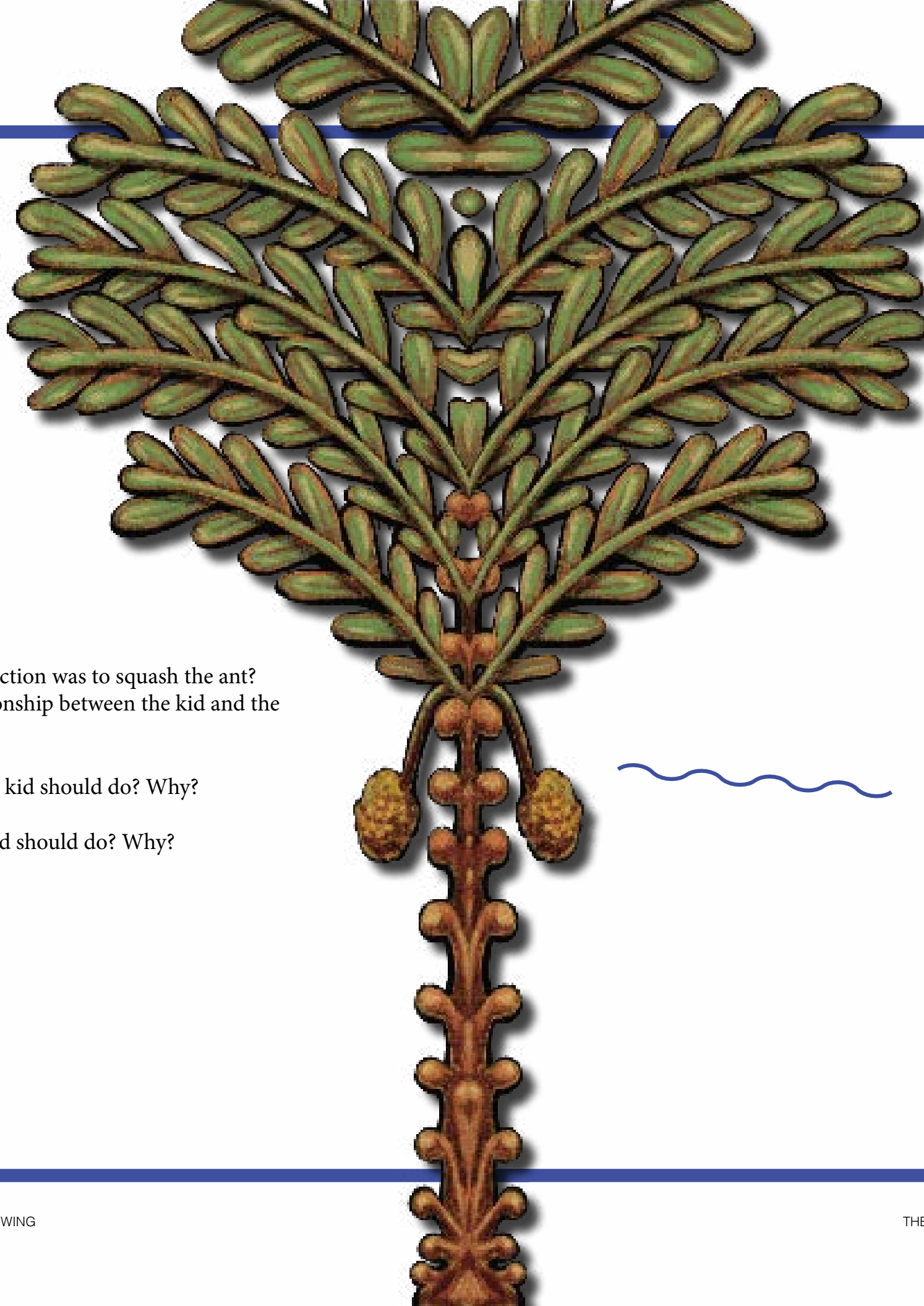
REFLECTIONS AND DISCUSSION

Example Questions:

Why do you think the kid's first reaction was to squash the ant?
How would you describe the relationship between the kid and the ant?

As a human, what do you think the kid should do? Why?

As an ant, what do you think the kid should do? Why?



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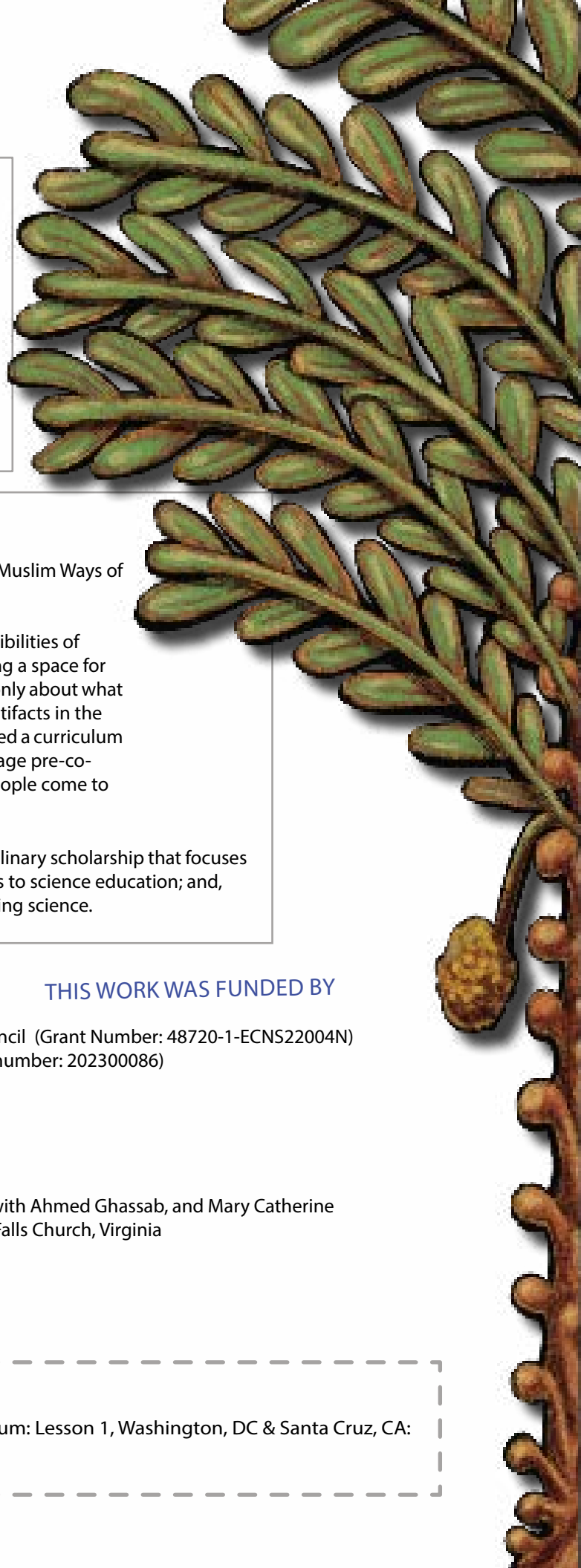
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THE ART OF KNOWING

LESSON FIVE

BIG, BAD WOLF

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OBJECTIVES

- Reflecting on the complexity of ecological relationships
- Expanding the concept of alive to include space/habitat
- Embracing different perspectives on good and bad depending on contexts and relationships



REQUIRED MATERIALS

- Picture of a wolf
- Images of Yellowstone before and after intervention



LESSON OVERVIEW

- Lead in: Think, pair, share - Good vs. Bad
- Discussion Activity: Video "How the wolves change the rivers" - whole class discussion
- Reflection: Habitat/place as alive not alive

LEAD IN: *GOOD VS. BAD*

1. Share the image of the wolf

2. Have students independently think and write or draw about the following questions:

What kinds of stories do we hear about wolves?
How do we usually think about wolves on a scale of good to bad?
Why do we think about them in that way?

3. Have students pair up
and discuss what they
thought and reflected on

4. Have students share out
with the whole class





VIDEO WATCHING AND DISCUSSION: “HOW THE WOLVES CHANGE THE RIVERS”

Introduce the activity: We will watch a video called “how the Wolves change the river”. While we watch, pay attention to what the wolves do and how this relates to their habitat.

Show students the video: <https://www.youtube.com/watch?v=ysa5OBhXz-Q> (4:33 min)

Engage students in thinking about the wolves’ relationships in and with the habitat:

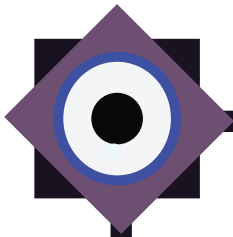
- How did the wolves disappear from Yellowstone? What happened to the park after they disappeared?
- What did the wolves do when they were reintroduced to Yellowstone?
- How did that affect the river and the park and the plants and animals living there?
- Does this change your perspective on the wolf being good/bad? Why?



FOLLOW UP REFLECTION [SMALL GROUPS OR WHOLE CLASS]

1. Show students images of the before/after of Yellowstone National Park
2. Probe them to reflect on some of the following
 - a. What do these images show is happening?
 - b. What happened in the time space between the two images?
 - c. How did the relationships between beings and things in the place change after reintroduction of wolves?
 - d. How does the web of relationships shape life in the place?[What happens if some lives take over other lives ? the web of relationships gets broken - the whole place dies]
 - e. How does that affect your thinking about your relationships with other beings around you?

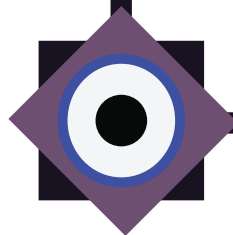
Images of the place before and after the reintroduction of wolves:
<https://www.popsci.com/environment/wolf-beaver-reintroduction-west/>



Return of wolves



Return of beaver



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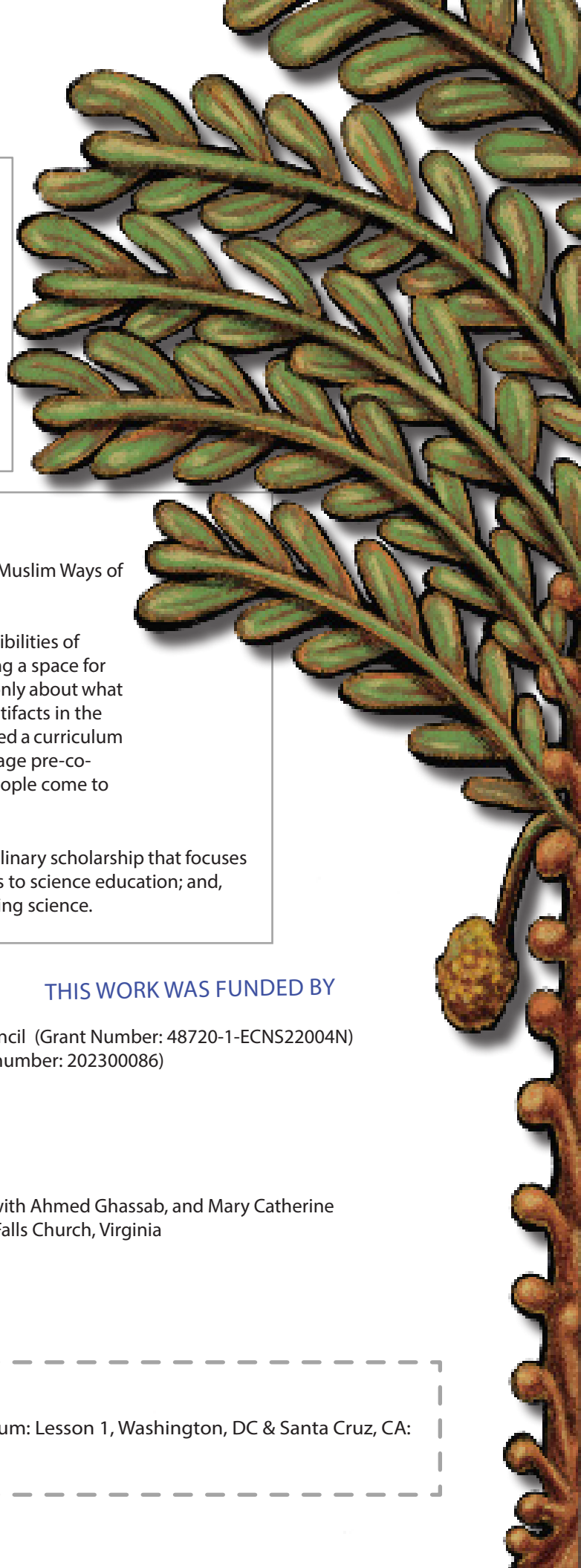
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ART DIRECTION & ILLUSTRATION

Susu Attar

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THE ART OF KNOWING

LESSON SIX

THE BLIND MEN AND THE ELEPHANT



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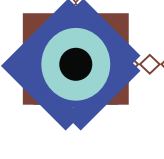
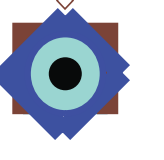


OBJECTIVES

- ◇ Understand how perspective and context shape what we can know
 - ◇ Reflect on the importance of multiple perspectives of what is known
- 
- 



REQUIRED MATERIALS

- ◇ The poem "The Blind Men and the Elephant"
 - ◇ Video "The Blind Men and the Elephant"
- 
- 





LESSON OVERVIEW

Lead-in: "Color contrast" and "Circles and ovals"

Watch and discuss "The Blind Men and the Elephant" video

Students read the poem

Final reflections: Reflect back on perceptions shaping our understanding of the world





LEAD IN:

COLOR CONTRAST AND CIRCLES OR OVALS



COLOR CONTRAST: Display the color sheets:
<https://www.exploratorium.edu/snacks/color-contrast>

Prompt and discuss:



Which purple is darker?

Which yellow is brighter

How do you know these things?

Then, Take out the color strips and display them over the colors on the color sheet so students can tell that the colors are actually the same.

Prompt: Why do you think you perceived the colors differently even though they were the same color?
[their contexts]





CIRCLE OR OVAL:


Activity Set-Up:

<https://www.exploratorium.edu/snacks/circles-or-ovals>

Introduce Activity, Then:

- Have students take turns sharing if they see a circle or an oval
- Have students switch the eyes they are holding each tube up to
- Ask them to share again if they see a circle or an oval

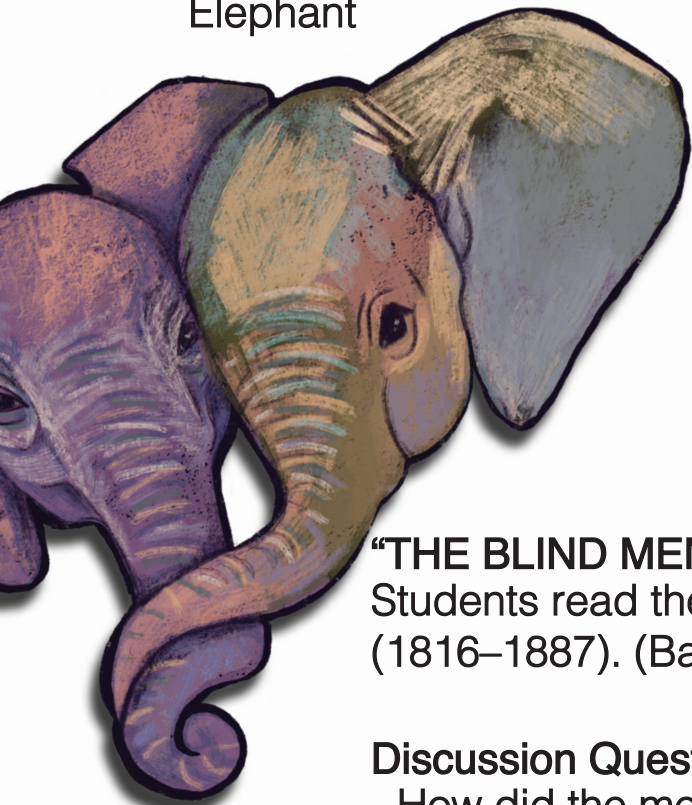
Reflective Prompts:

- Why did some people see a circle and some an oval?
 - Why did some see a circle the first time and an oval the second?
 - How is this similar to and different from the color activity?
- 

“THE BLIND MEN AND THE ELEPHANT” - VIDEO

Introduce the story: Now we will watch a video about a village in India where a group of blind men lived. They have never been to the forest and never met an elephant.

Students watch the video: “The Blind Men and the Elephant”

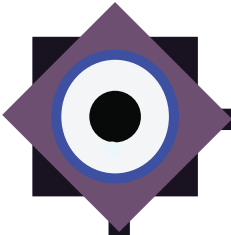


“THE BLIND MEN AND THE ELEPHANT” - POEM

Students read the poem by John Godfrey Saxe (1816–1887). (Based upon a Hindu Parable)

Discussion Questions:

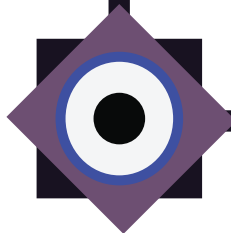
- How did the men describe the elephant?
- Do you agree with each description?
- Which one is right? Are they all right? Are they all wrong? In what ways are they all right and wrong at the same time?



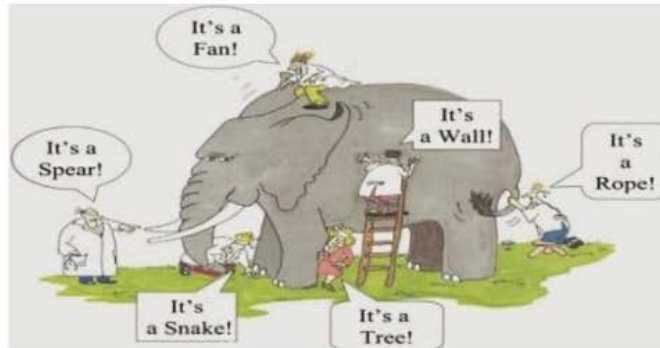
FINAL REFLECTIONS

Have students reflect back on perceptions shaping our understanding of the world:

- How perspectives on wolves were shaped:
Why do people tell stories about wolves as bad/harmful?
- How has your perception of wolves changed after watching the Yellowstone video?
- How do you feel when you see a wolf (different images - How the image changes our feeling)?
- What makes something bad or good?
- How does our perspective shape our perception of beings around us?
- Can you think of any examples of a time when multiple perspectives helped you better understand something?



THE BLIND MEN and THE ELEPHANT



<https://www.youtube.com/watch?v=Vn9BUfUCL4I>

It was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

The First approached the Elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
"God bless me! but the Elephant
Is very like a WALL!"

The Second, feeling of the tusk,
Cried, "Ho, what have we here,
So very round and smooth and sharp?
To me 'tis mighty clear
This wonder of an Elephant
Is very like a SPEAR!"

The Third approached the animal,
And happening to take
The squirming trunk within his hands,
Thus boldly up and spake:
"I see," quoth he, "the Elephant

Is very like a SNAKE!"

The Fourth reached out an eager hand,
And felt about the knee
"What most this wondrous beast is like
Is mighty plain," quoth he:
"'Tis clear enough the Elephant
Is very like a TREE!"

The Fifth, who chanced to touch the ear,
Said: "E'en the blindest man
Can tell what this resembles most;
Deny the fact who can,
This marvel of an Elephant
Is very like a FAN!"

The Sixth no sooner had begun
About the beast to grope,
Than seizing on the swinging tail
That fell within his scope,
I see," quoth he, "the Elephant
Is very like a ROPE!"

And so these men of Indostan
Disputed loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the right,
And all were in the wrong!

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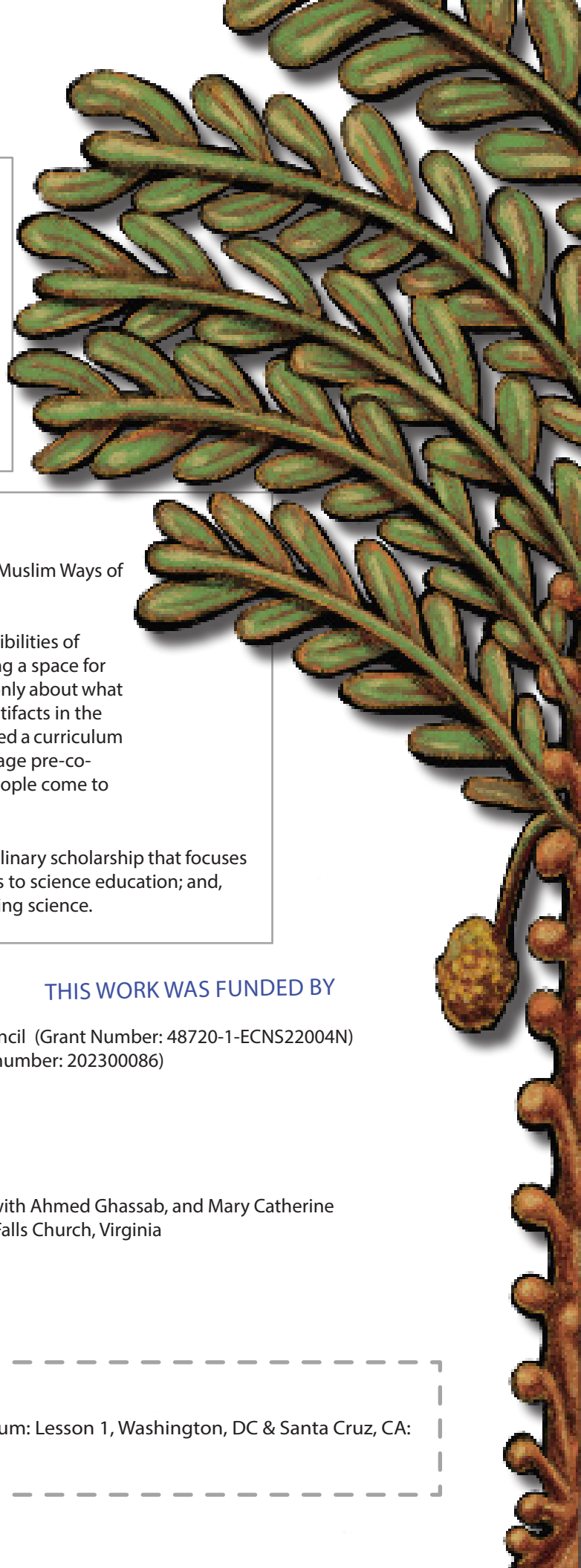
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THE ART OF KNOWING

LESSON SEVEN

THE FOX AND THE DRUM

Created by The Art of Knowing Collaborative ◇ Arshad I. Ali, Ebtissam Oraby, Samuel Burmester

www.ArtOfKnowingCurriculum.com





OBJECTIVES

- ◇ Develop deeper understanding of what perspective is and how it is shaped
- ◇ Develop appreciation for understanding and considering multiple perspectives



REQUIRED MATERIALS

- ◇ Video: The Fox and the Drum
- ◇ The story of The fox and the Drum



LESSON OVERVIEW

1. Reflection: Perspective shifts
2. Revisit Hayy: Shifting perspectives on relationships with animals
3. The Fox and the Drum reading + small groups discussion
4. Closing activity and reflection

LEAD IN:



Prompt and discuss:

Can you think of any examples of a time when multiple perspectives helped you better understand something or change your mind?
What are some things that shape how we perceive things?



THE FOX AND THE DRUM

1. Read together/ Watch Video
2. Break into small groups. Prompts for discussion:
 - a. How are the foxes' initial perspectives shaped? What types of knowledge does he draw on to try to understand what the drum is? How does this affect how he acts toward it/ behaves?
 - b. How does his perspective change? What does he do that allows him to better understand what the drum is?
 - c. Input (how information we receive through our senses and our interpretation of it changes our perception and widens our perspective)?
 - d. How does his behavior toward the drum change once he takes a new perspective?





CLOSING ACTIVITY

1. Discussion Prompt: How does this (The story of the fox and the drum) relate to other stories we have talked about (The wolves and Deer at Yellowstone, the blind men and the elephant)?
2. Introduce “6/9 perspective taking” activity:
 - a. If a large table is available, have students gather around two opposing sides. If only a large table isn’t available, have students break into smaller groups and gather on either side of a central desk for each respective group.
 - b. Place a printout of a 6/9 on the table.
 - c. **Prompts:**
 - i. [Directing question to students on one side of the table] What number do you see from your perspective?
 - ii. [Directing question to students on the other side of the table] What number do you see from your perspective?
 - iii. [Directing question to all students]
 1. What is perspective?
 2. How does our perspective shape what we know and how we know it?
 3. Why is it important to consider other perspectives and where they come from?



The Fox and The Drum: https://www.youtube.com/watch?v=_lYuVFjNzOY

There lived a fox in a forest. One day, he was roaming in the forest in search of food. Suddenly, he heard loud sounds ..
BANG... BANG... BANG...

The fox was frightened. "What a deafening sound this is!" he thought. "It echoes through the forest! It seems to be the sound of some strange new animal. Let me run away from here."

But then he changed his mind. He thought. "If I run away, I might starve to death. Let me hide myself and see how big the animal is. If it lives by killing and eating other animals, it might share its prey with me."

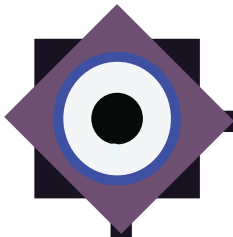
The fox quietly walked in the direction from where the sound was coming. And what did he see? There was a big drum under a tree. The hanging branches of the tree were swaying in the breeze. As they swayed, they would strike against the drum; and this produced the sound of beats-

BANG...BANG...BANG...

The drum might have been used by soldiers during a battle and since then, it might have been lying in that place. The fox hid himself behind a tree and watched the drum. He thought, "It is dangerous to be in this place. If this huge animal sees me, it will surely kill me and eat me up. Now I must leave this forest and go away."

But then the fox again thought, "This forest is my house. Why should I leave my home and go away? My mother used to say, 'Never make a hasty decision when you are frightened.' Let me go near the animal and observe it closely."

Although frightened, the fox slowly went near the drum. He said to himself, "As soon as this animal raises its paws to pounce on me, I will run away from here." But the animal did no such thing! So the fox went a little closer. But still the animal did not do anything. Now the fox gathered some courage. "Let me touch it," he thought and raised his paws and gently tapped on the drum.



BANG...BANG...BANG... The sound of the drum beat echoed through the forest.

The fox moved back a few steps. He again gathered courage and went closer to the drum. Now he was no longer frightened of the drum. He smelled it and thought, "How big this animal is! And, how thick its skin is! It must be fleshy." The fox's mouth started watering.

The fox climbed up on the drum tried to bite it. But the hide was too thick for the fox to bite into. He was surprised. "Such a big animal and yet i is so helpless! It cannot even my face my attack. Poor animal!" said the fox to himself. The fox tried very hard to bite off a piece of the thick hide. But he broke his tooth instead! Blood began to drip from his mouth.

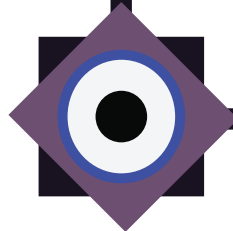
The fox was very angry. Now with all his might, he bit into hide. And, at last, he succeeded! Then it became very easy for him to tear it up. The fox was amazed. "I have bitten into this animal's skin and torn it open. And yet there is no blood," he wondered.

The fox entered the drum. It was hollow!

The fox sighed. He was disappointed. He did not get any food to eat and, to add to his miseries, he had lost a tooth!

As the breeze blew, the branches of the tree struck against the drum. But this time, there were no sounds of the beats. The fox said to himself, "Well, I don't mind losing a tooth. But I am happy that I have lost my fright. I have killed this big animal."

The fox was very proud of himself. The proud fox held his head high and, once again, began to wander in search of food.



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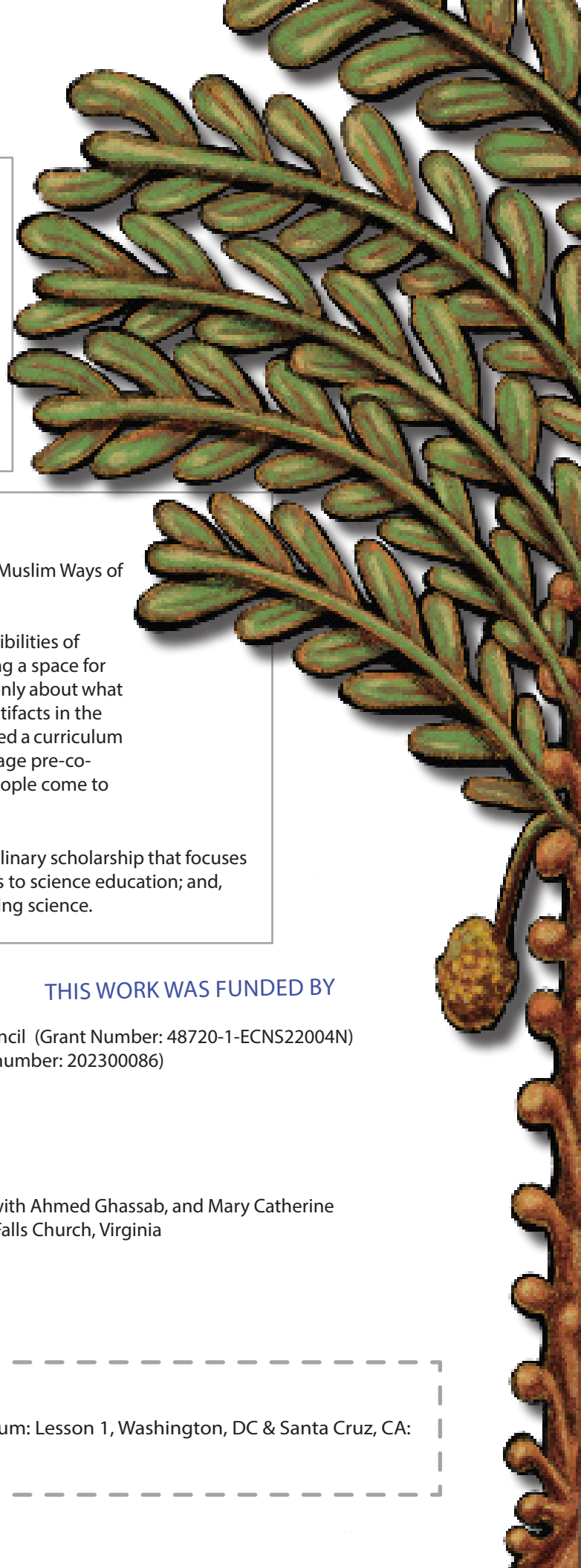
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THE ART OF KNOWING

LESSON EIGHT

REPORTED KNOWLEDGE 1

Created by The Art of Knowing Collaborative  Arshad I. Ali, Ebtissam Oraby, Samuel Burmester

www.ArtOfKnowingCurriculum.com





OBJECTIVES

To reflect on the concept of reported knowledge and how to evaluate and validate knowledge received from different sources

REQUIRED MATERIALS

Copies of the story, "Cookie Crumbs"

LESSON OVERVIEW

Lead in: Read the micro-story
Activity: Broken Telephone
Reflection and report Back

LEAD IN:



"COOKIE CRUMBS"

<https://www.shortkidstories.com/story/cookie-crumbs/>



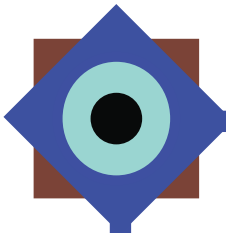
LEAD IN:

1. Introduce the activity: Tell students to read "Cookie Crumbs" and tell them they will share out about it at the end of the lesson[10 minutes]

BROKEN TELEPHONE ACTIVITY

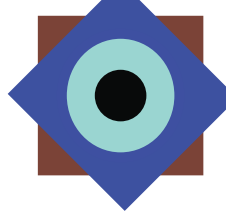
1. Start the activity by sharing a simple sentence to 1 person only. Make sure you remember the exact wording.
2. Have that student pass it to another student, who will pass it to the next student. Repeat the passing of the message from one student to the next until the message is shared with the last student in the class.
3. Have the last student state the sentence.
4. Play other iterations of the game using new sentences for each iteration:
5. Tell 2-3 students a sentence and have all of them report to a 4th student, who will state the sentence.
6. Form a circle with all the students. One student will be the "telephone" and share the same sentence to the two students on either side of them. Each student will pass the message on to the next student until the message reaches the final student positioned in the middle. Have the final student state the sentence.





REFLECTION AND REPORT BACK

1. Take 5 minutes to let the students write down the story that they read at the beginning of class
2. Have 2-3 students share their version of the story
3. Prompts for discussion:
4. What differences do you notice?
5. Are there any differences from your story that differ from what others shared
6. Why do you think there are differences?
7. Do you think you would have remembered this better if you wrote or drew the story sooner? [difference in attention to certain details, difference in interpretation and the relationship between that and the life experience of the teller]



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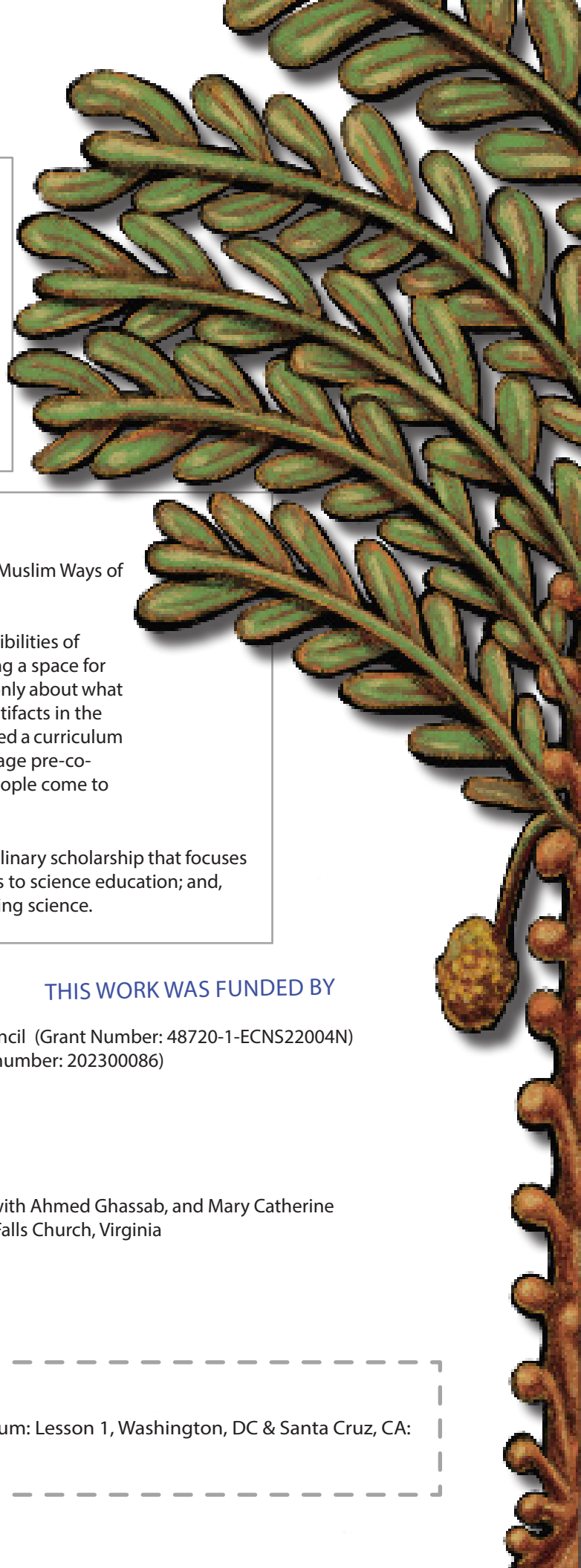
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ART DIRECTION & ILLUSTRATION

Susu Attar

SUGGESTED CITATION

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THE ART OF KNOWING

LESSON NINE

REPORTED KNOWLEDGE 1

Created by The Art of Knowing Collaborative ◇ Arshad I. Ali, Ebtissam Oraby, Samuel Burmester

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OBJECTIVES

Understand traditions for evaluating/categorizing hadith

Develop criteria based in these traditions for evaluating reported knowledge generally

REQUIRED MATERIALS

- Handouts w/ hadith
- Handouts with Hadith Evaluation Charts
- Handouts with parts of the Hadith

LESSON OVERVIEW

1. Introduce parts of the Hadith
2. Practice Evaluating Hadith
3. Applying to reported knowledge generally



Introduce the Parts of the Hadith

1. A hadith is made up of three parts, the text and the chain of narrators and the compiler. (Place cards for text, chain of narration and compiler)
2. Hadith parts are always placed in the same order
 - a. Narration (one or more people)
 - b. Text Compiler
 - c. The text is the actual statement/story

* The Narration is the chain (or list) of people who heard this hadith and transmitted it, starting with the Sahabi, who heard it from the prophet, Allah bless him and grant him peace, all the way until it reached the Compiler. The Compiler is the researcher who collected it into a book.

Practice Evaluating Hadith

1. Give students an example of a Hadith + ask them to evaluate it/ evaluate it together
2. Introduce chain of Transmission/ hadith evaluation criteria:
 - a. Reference to Authority - Who is speaking? (words of god, prophet, companion?)
 - b. Reliability of reporter
 - c. Links/ chain - proximity to event
 - d. Number of Reporters
 - e. Nature of the text'

Applying to Everyday Life

1. Ask Students: How can we apply this to things we hear in everyday life?
2. Ask Students to come up with their own list of evaluation criteria for reported knowledge in general
3. Play a round of telephone and apply these criteria



General Notes on Hadith for Reference

Chain of Transmission

Hadith consists of the Prophet's:

Words

Actions

States ("month of Ramadan was more generous")


Description (Shama'il)

Things he witnessed and accepted – (did not disagree with)

Who qualifies as a companion?

- There were under 120 companions in Mecca and around 12,000 in Medina
- Some "companions" may have simply passed by the Prophet.
- Farewell pilgrimage over 100,000 – may have been the first and last time they saw the prophet
- Hadith Scholars (who relate hadith) require that companion met the Prophet
- Was a believer at the time of meeting the Prophet
- stayed a believer throughout life
- Fiqh Scholars (who need to ask the question "What would the Prophet do in this case?") require that companion who is narrating has the above conditions and he stayed with the Prophet for a period of time

Types of Narrations

- Mutawatir to the prophet-abundantly transmitted (at least five companions) Or companions who were at different parts of the world. Not possible for these to all agree on a lie. Almost 100% sure or authentic. (almost as strong as Quran)
 - Mutawatir to a companion- abundantly transmitted (but traced to one particular companion)
 - Non-mutawatir
 - Mashour Hadith- less than five companions narrating
 - Aahaad Hadith from one person only. (Weakest level)
- 



Verifying the Chain of Transmissions

- Must be a continuous chain links in time and space. (transmitters were contemporary and were able to meet geographically)
- Each narrator is analyzed for soundness mind, good and accurate memory, truthfulness
- Did the person have a political agenda personal ideology?
- Was the person known to conceal his source (eg. if it was not reliable)?
- Is the name accurate or could it be confused with another person of the same name?
- Verify the style of the narration (unlike the Prophet's manner of speaking).
- Prophet was concise but hadith is lengthy and overly wordy
- Prophet had perfect grammar (hadith contains mistakes of grammar)

Levels of Hadith

Sahih: Authentic

Hassan: Less Authentic

Da'if: Weak

Da'if Jaddin: Very Weak

Mawdu: Completely Fabricated

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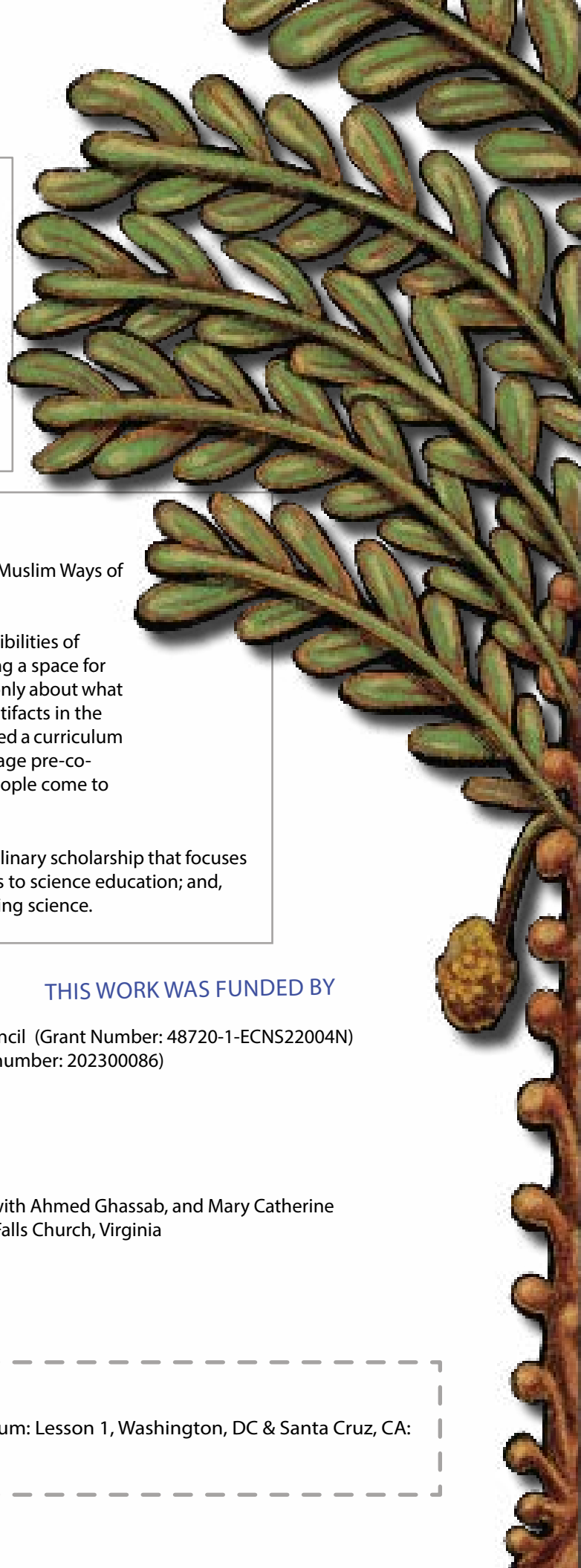
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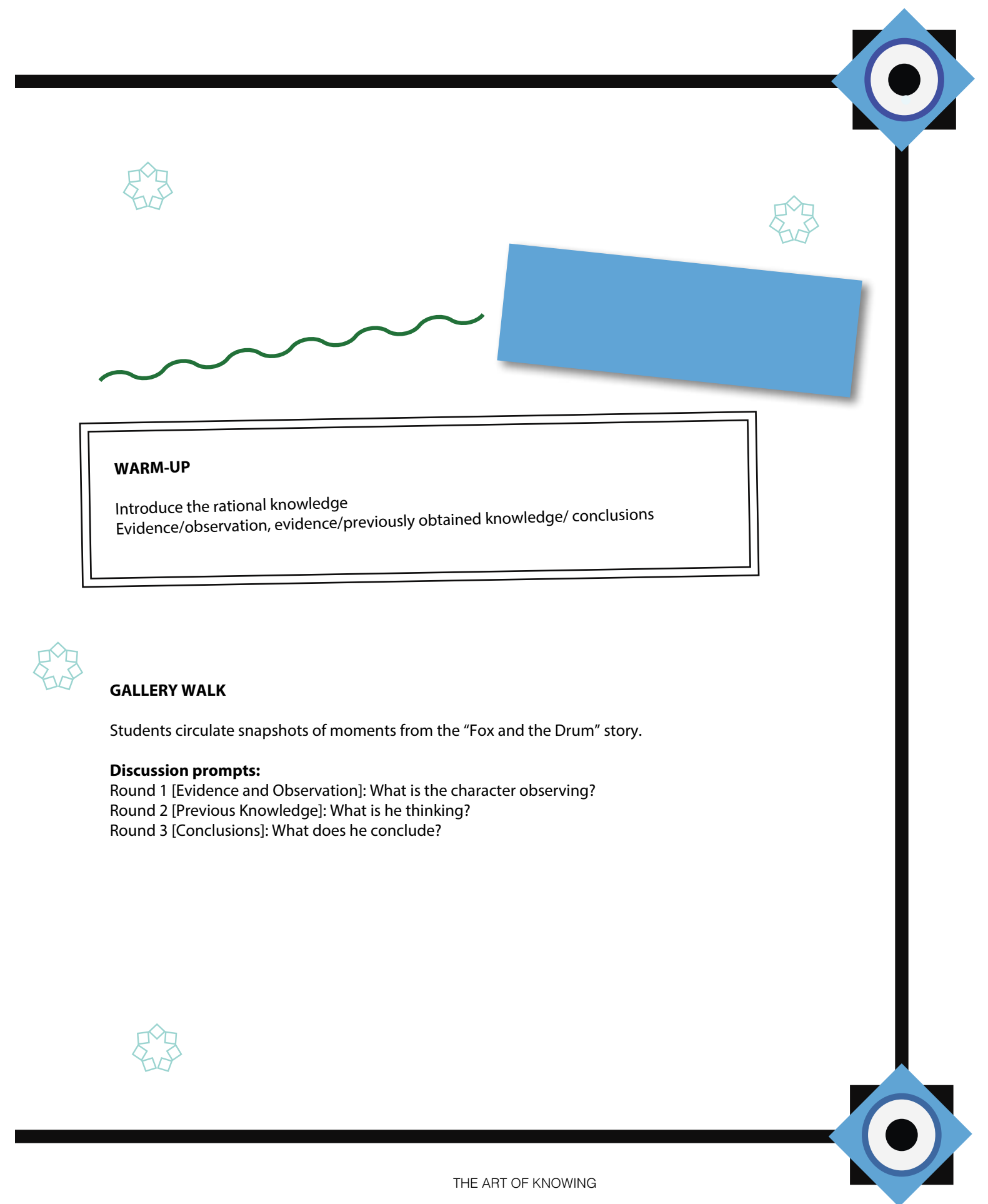
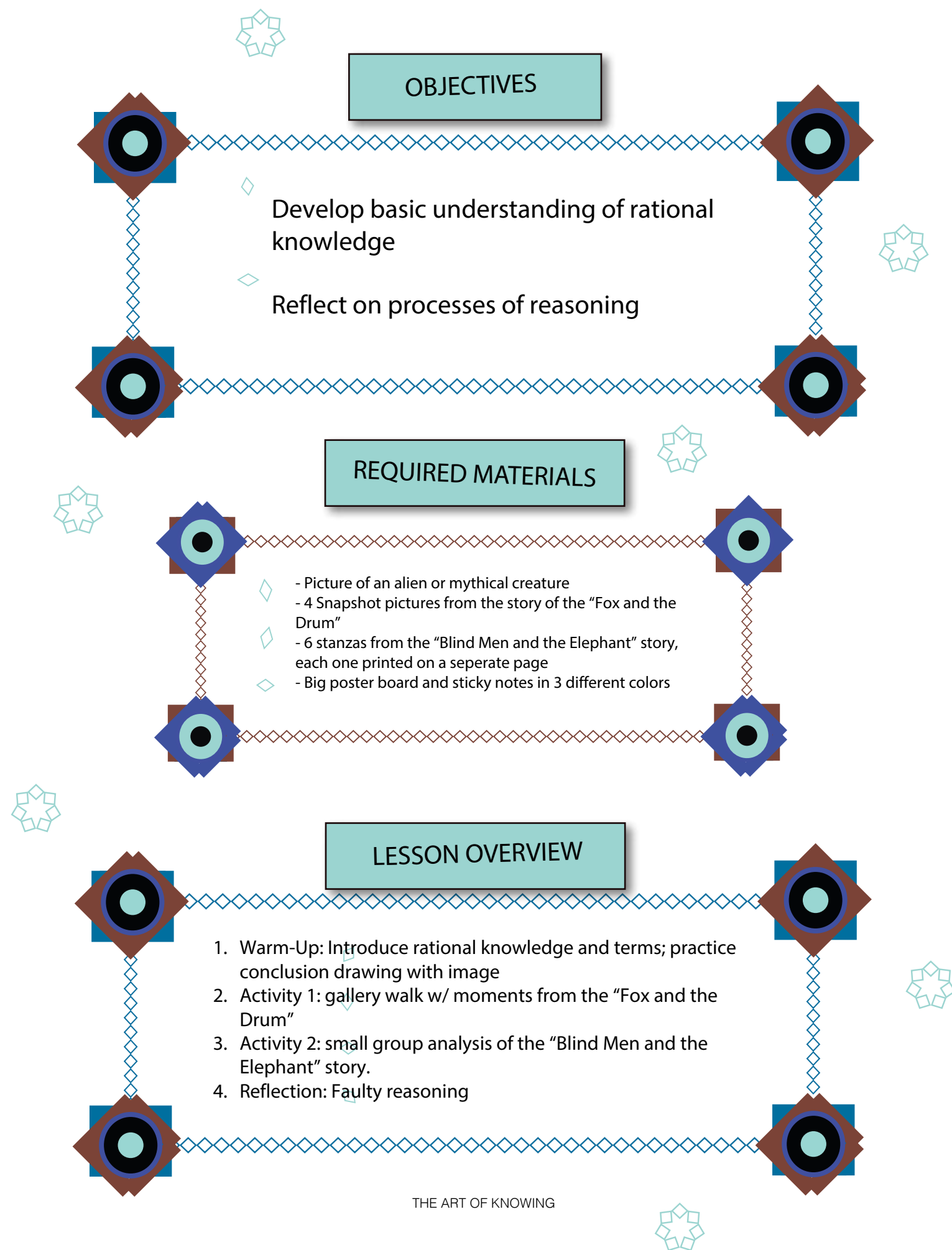
LESSON 10

RATIONAL KNOWLEDGE

Created by The Art of Knowing Collaborative ◇ Arshad I. Ali, Ebtissam Oraby, Samuel Burmester

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ACTIVITY 2: SMALL GROUP ANALYSIS

- 1. Read or watch the “Blind Men and the Elephant” story, pausing at key moments:
 - a. At each moment, ask students:
 - i. What is each character is observing?
 - ii. What is each character thinking?
 - iii. What is each character concluding?
 - iv. Ask students to clarify:
 - v. Do we agree with this conclusion?
 - vi. What was faulty about each line of reasoning?
 - vii. Can we pinpoint what the issue is at each stage?

REFLECTION

- 1. Ask students to journal about or otherwise reflect on a time when they drew a conclusion that was incomplete or faulty.
- 2. Reflection prompts:
 - a. What happened with your reasoning? Why?
 - b. What did you learn from that experience?

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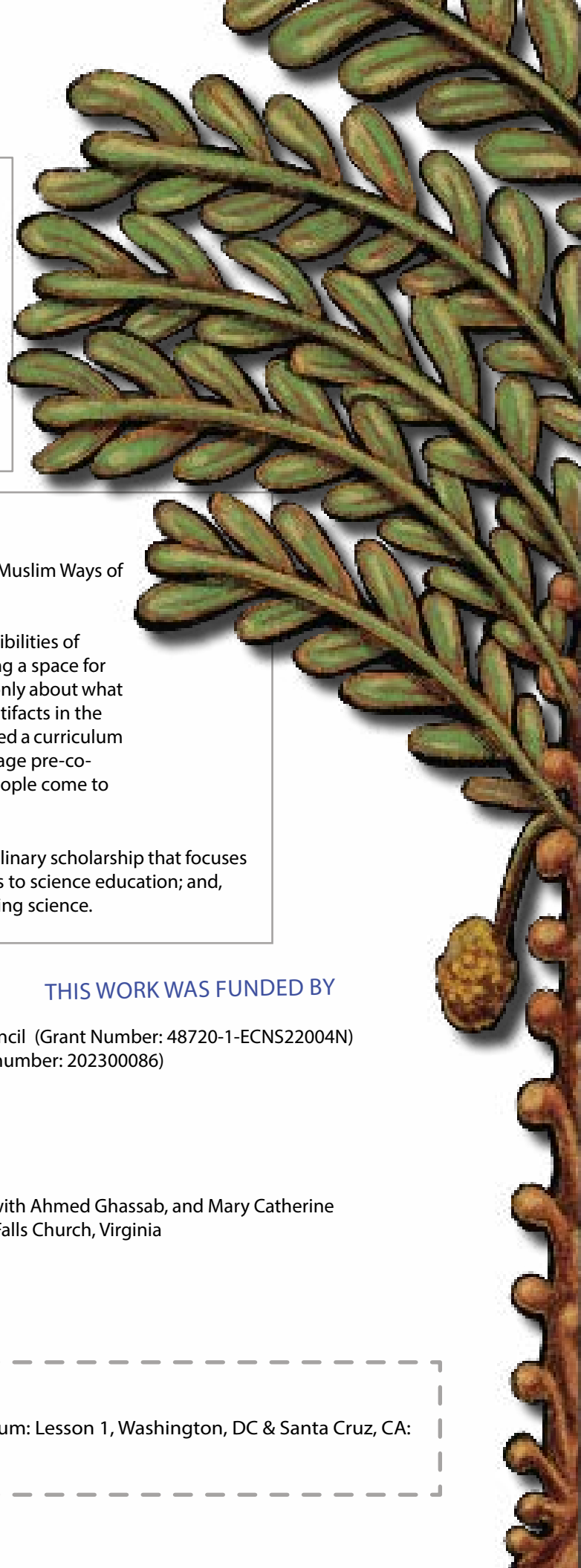
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THE ART OF KNOWING

LESSON 11

RATIONAL KNOWLEDGE 2

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OBJECTIVES

Further their understanding of rational knowledge

Reflect on processes of reasoning

Reflect on how emotions/affect shape/change rational thinking

REQUIRED MATERIALS

- 6 stanzas from the "Blind Men and the Elephant" story, each one printed on a separate page
- Big poster board and sticky notes in 3 different colors
- Images of moments from the story of the "Fox, Pigeon and Heron"

LESSON OVERVIEW

Warm-Up: Review rational knowledge and terms; practice conclusion drawing with image

Activity 1: "Blind Men and the Elephant" gallery walk

Activity 2: The story: analysis and reflection on issues of affect and power

Closing Reflections



WARM-UP: RATIONAL KNOWLEDGE
Review rational knowledge from last week



ACTIVITY 1: THE “BLIND MEN AND THE ELEPHANT” GALLERY WALK

1. Have each student visit a poster with a stanza from the poem and answer the following questions:
 - a. What is the man observing?
 - b. What is the man thinking?
 - c. What is the man concluding?
 - d. Ask students to clarify: Do we agree with this conclusion? What is faulty about this line of reasoning?
 - e. Each student presents their response to the class





ACTIVITY 2: “PIGEON, FOX, AND HERON” SMALL GROUP DISCUSSION

- Review the story with the class, then break into small groups for Activity 2.
- Introduce the activity:

Each student is given a stanza from the poem:
Pigeon is worried because she has eggs and Heron advises her
Fox comes to ask for eggs and Pigeon says no
Fox tricks the Heron
- Have each group answer the following questions:
 - what is the character observing?
 - What is the character thinking (previous knowledge)
 - What is the character concluding?
 - How does the character feel at this moment?
 - Is there anything else affecting the conclusions or decisions
 - that the characters are making (fear, identity, other emotions?)
 - How are the character’s feelings affecting their thinking?

CLOSING REFLECTION

1. Ask students to journal about or otherwise reflect on a time when they drew a conclusion that was incomplete or faulty.
2. Reflection prompts:
 - a. What happened with your reasoning? Why?
 - b. What did you learn from that experience?

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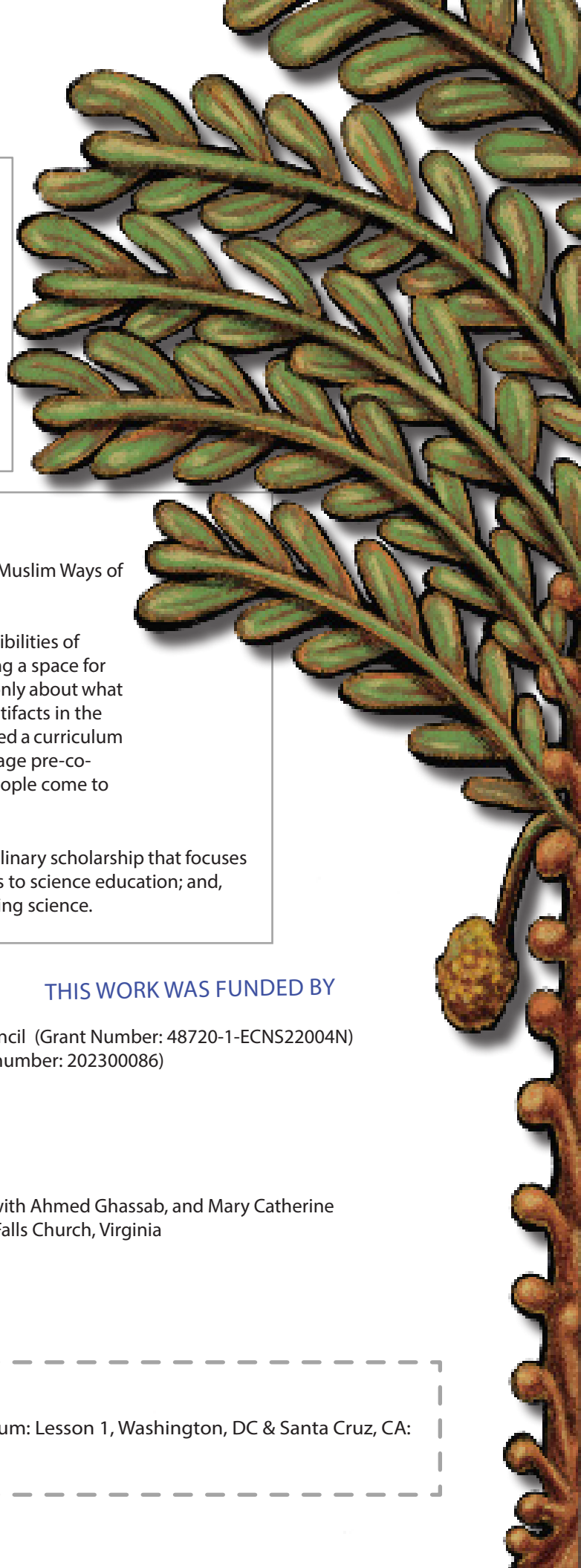
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THE ART OF KNOWING

LESSON 12

RATIONAL KNOWLEDGE 3

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OBJECTIVES

Reflect on processes of reasoning

Reflect on how emotions/affect shape/change rational thinking

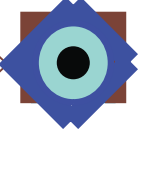
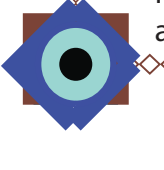


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Big poster board and sticky notes in 3 different colors

Images of moments from the story of the “Fox, Pigeon and Heron”



LESSON OVERVIEW

Warm-up: Review rational knowledge

Activity 1: “The Pigeon, the Fox, and the Heron” - analysis and reflection on issues of affect and power

Activity 2: Small Groups - reflect on sound reasoning, power and affect

Closing Reflections



LEAD IN:



WARMUP: REVIEW RATIONAL KNOWLEDGE

ACTIVITY 1: PIGEON, FOX AND HERON SCENARIOS

1. Review the story with the class, then break into small groups
2. Introduce the activity:
Each student is given a stanza from the poem
Pigeon is worried because she has eggs and Heron advises her (flashback)
Fox comes to ask for eggs and Pigeon says no
Fox tricks the Heron
3. Have each group answer the following questions:
What is the character observing?
What is the character thinking (previous knowledge)
What is the character concluding?
How does the character feel at this moment?
Is there anything else affecting the conclusions or decisions that the characters are making (fear, identity, other emotions?)
How are the character's feelings affecting their thinking?





ACTIVITY 2: SMALL GROUPS

1. Introduce a new scenario by giving the students a different beginning of a story, but stop when the dilemma arises.
2. Tell the students they get decide what the character does in the scenario, but they need to:
 - a. Demonstrate what the character already knows, what they observe or witness, and what decision they make.
 - b. Add details about what they are feeling or what other forces are affecting their decision making.
3. Have the students share their stories with the rest of the class.

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