



# **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?

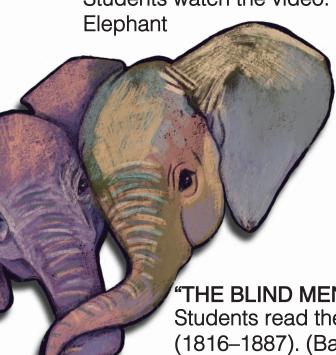




## "THE BLIND MEN AND THE ELEPHANT" - VIDEO

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



"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**

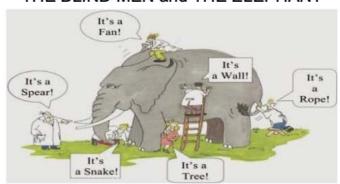
Have students reflect back on perceptions shaping our understanding of the world:

- 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!



For additional lesson plans and more information please visit www.artofknowingcurriculum.com

### 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.

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

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ART DIRECTION & ILLUSTRATION Susu Attar

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