

## SESSION 1 | PBS: ASKING TESTABLE QUESTIONS

# Meet Mateo

Essential question: What questions would a research lab ask first?

**TODAY'S TAKE-HOME** A patient story becomes science when we turn what we notice into questions we can investigate.

## Bring yesterday forward

Start here: careful observation is the first scientific tool.

## Quick reading

An observation is what the record shows. A testable question asks what evidence could help us learn next. Keep those two jobs separate.

Optional reading: <https://www.nidcr.nih.gov/health-info/cleft-lip-palate>

## Deck map

Slides 5-6: study and question the picture | Slide 7: name the rule | Slide 8: read the biology evidence | Slides 9-11: transfer and decide | Slides 12-13: exit and bridge.

## The visual in words

Observe	Name what is unknown	Ask a testable question
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## Build the idea

Model start: Mateo has an opening in the upper lip and roof of the mouth. I wonder which normal building step did not finish.

- Record two observations without explaining them yet.

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- Write two How questions and two Why questions.

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- Revise one question so evidence could help answer it.

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## Use the analogy, then return to the science

### ANALOGY

Detective notebook

### BIOLOGY

Facts go in one column. Questions that evidence could answer go in the other.

## Apply the model to Mateo

Mateo is a composite teaching case built from published science. No real patient information is used.

**What can this lesson explain? What cannot it prove?**

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## Exit ticket and next unlock

### EXIT

**Turn one observation into one testable question.**

### NEXT

**If we could watch development, what would we see happening to the face?**

## Four truths check

Truth 4: Developmental processes can go wrong. Circle the part of today's notes that supports this truth.