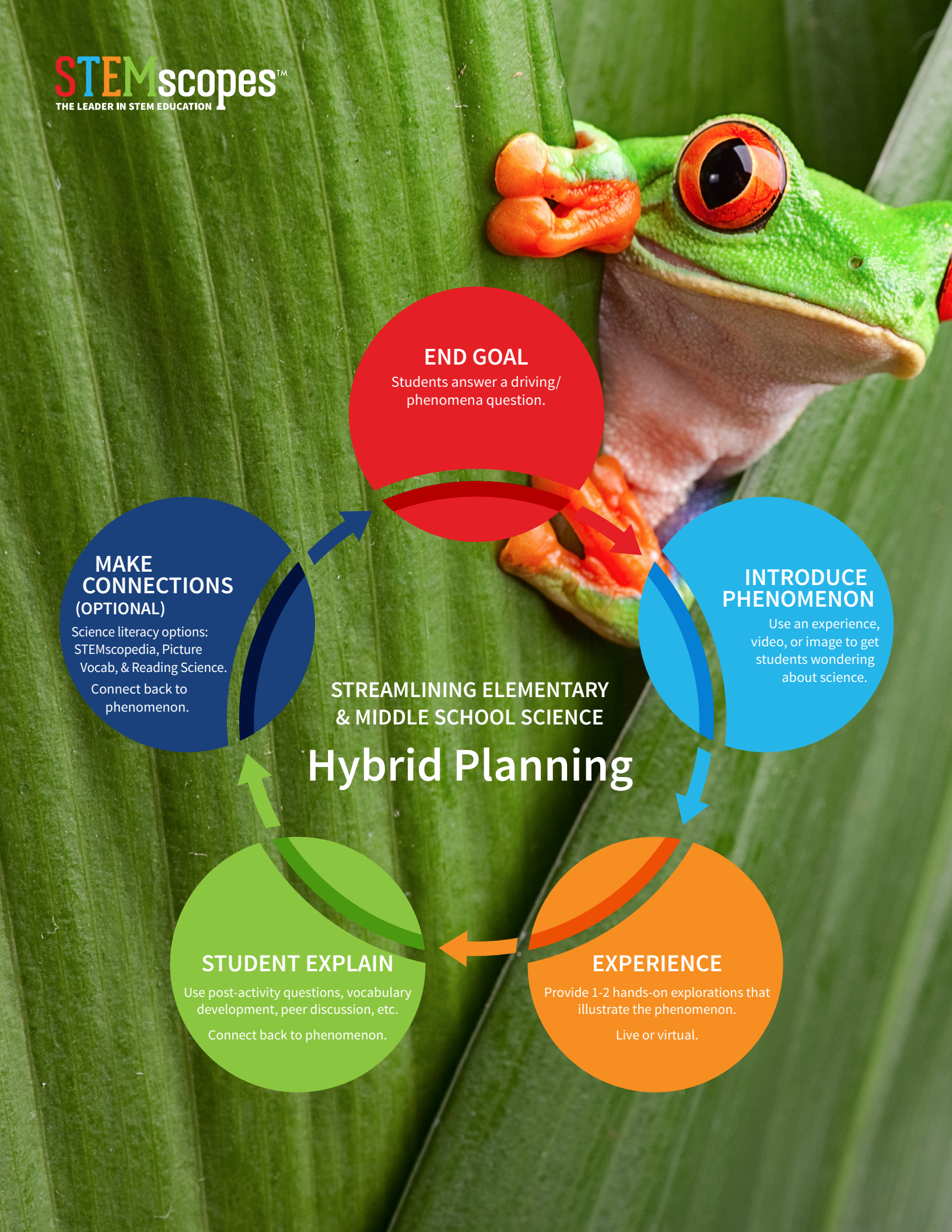
STEMscopes™
THE LEADER IN STEM EDUCATION



END GOAL

Students answer a driving/ phenomena question.

INTRODUCE PHENOMENON

Use an experience, video, or image to get students wondering about science.

EXPERIENCE

Provide 1-2 hands-on explorations that illustrate the phenomenon.

Live or virtual.

STUDENT EXPLAIN

Use post-activity questions, vocabulary development, peer discussion, etc.

Connect back to phenomenon.

MAKE CONNECTIONS (OPTIONAL)

Science literacy options: STEMscopedia, Picture Vocab, & Reading Science.

Connect back to phenomenon.

STREAMLINING ELEMENTARY & MIDDLE SCHOOL SCIENCE

Hybrid Planning

Streamlining Elementary Science

In Classroom	At Home
Start with the End Goal **Purpose for Learning: Explain Phenomenon** ☐ Students answer the Investigative Phenomena Question ☐ Acceleration: Science Art	✓ Assign a digital document with commenting features ✓ Ask students to answer the Investigative Phenomena question ✓ Students explain the phenomenon ✓ Student screencast presentation of explanation
Introduce Phenomena ☐ Engage: Investigative Phenomena Video Clip ☐ Scope Page: Student Wondering of Phenomena Question ☐ Students develop their own questions (driving question board)	✓ Assign Video-Clip or Simulation ✓ Live or Prerecorded Video Session to address Phenomenon ✓ Develop a digital driving question board
Provide 1-2 Experiences around Phenomena ☐ Engage: Hook ☐ Explore: Consider Materials Needed ☐ How do I simplify it for the home? Can it be demonstrated? ☐ Elaborate: Online Simulations	✓ Live or Prerecorded Video Session to showcase: Hook / Explores ✓ Use simple materials to demonstrate the phenomenon ✓ Online simulations (when applicable)
Explain Phenomena / Purposeful Discourse ☐ Post-Activity Questions ☐ Science Vocabulary as it relates to Experience ☐ Connections between Phenomen ☐ Small-Group Collaboration ☐ Peer Review	✓ Provide a digital document with commenting features ✓ Ask: “How does the ‘experience’ relate to our driving question or phenomenon we are exploring?” ✓ Have students develop content vocabulary in context with the experience ✓ When possible, have them meet with small groups before meeting with you!
Connections to Phenomena (optional) ☐ Explain: All Pieces ☐ Elaborate: All pieces ☐ “How does this activity help explain the phenomena?” ☐ Acceleration: Extensions ☐ Acceleration: Science Art	✓ Provide digital document for review ✓ Ask: “How does this...connect to our driving question or phenomenon we are exploring?” ✓ “Provide me with (one, two, etc.) piece(s) of evidence that helps to explain our driving question or phenomenon.”

Streamlining Middle School Science

In Classroom	At Home
Start with the End Goal **Purpose for Learning: Explain Phenomenon** ☐ Evaluate: Claim-Evidence-Reasoning ☐ Evaluate: Open-Ended Response (scan for applicable questions) ☐ Students answer the Investigative Phenomena Question ☐ Acceleration: Science Art	✓ Assign a digital document with commenting features ✓ Ask students to answer the Investigative Phenomena question ✓ Students explain the phenomenon ✓ Student screencast presentation of explanation
Introduce Phenomena ☐ Engage: Investigative Phenomena Video Clip ☐ Scope Page: Student Wondering of Phenomena Question ☐ Students develop their own questions (driving question board)	✓ Assign Video-Clip or Simulation ✓ Live or Prerecorded Video Session to address Phenomenon ✓ Develop a digital driving question board
Provide 1-2 Experiences around Phenomena ☐ Engage: Hook ☐ Explore: Consider Materials Needed ☐ How do I simplify it for the home? Can it be demonstrated? ☐ Elaborate: Online Simulations	✓ Live or Prerecorded Video Session to showcase: Hook / Explores ✓ Use simple materials to demonstrate the phenomenon ✓ Online simulations (when applicable)
Explain Phenomena / Purposeful Discourse ☐ Science Vocabulary as it relates to Experience ☐ Explain: Communicate Science ☐ STEMscopedia - Guiding Questions ☐ Editing features in Google Documents ☐ Small-Group Collaboration ☐ Peer Review	✓ Provide a digital document with commenting features ✓ Ask: “How does the ‘experience’ relate to our driving question or phenomenon we are exploring?” ✓ Have students develop content vocabulary in context with the experience ✓ When possible, have them meet with small groups before meeting with you!
Connections to Phenomena (optional) ☐ Explain: All Pieces ☐ Elaborate: All pieces ☐ “How does this activity help explain the phenomena?” ☐ Acceleration: Extensions ☐ Acceleration: Science Art	✓ Provide digital document for review ✓ Ask: “How does this...connect to our driving question or phenomenon we are exploring?” ✓ “Provide me with (one, two, etc.) piece(s) of evidence that helps to explain our driving question or phenomenon.”