

# FLOWCHART FOR SELECTING AND USING PHENOMENA TO DRIVE INSTRUCTION

Which TEKS standard(s) is/are addressed in the lesson or unit?



Tips for finding a phenomenon to match the TEKS being studied:

- Look for pictures, video links, demonstrations, simulations, etc embedded in your curriculum.
- Do an internet search using the terms “phenomenon” and keywords in the TEKS.
- Look at collections made by trusted sources, including NSTA, The Wonder of Science, and the University of Illinois Phenomena Finder.



What is the most direct way to present a phenomenon connected to the TEKS? Direct observation, teacher demonstration, computer or live simulation, video, picture, data, etc. While student observations can be the most straightforward method, they are not always practical, safe, or feasible.



Present the phenomenon to students without explanation.



Record and organize students’ questions and ideas about the phenomenon.



Instruct students to create an explanation using a model they share, argue, and defend with their peers.



Select investigations, simulations, and other activities that students can engage in to support their understanding of scientific concepts. These can be from your existing curriculum, selected by students based on their questions, or a combination of both.

OR

Students should engage with text and video that explain the phenomenon and the associated scientific concepts.



Students should update their explanations/models/arguments to include the new information/data.