



DISTANCE LEARNING INSTRUCTIONAL MODEL

California Elevate Science provides many resources that will help you engage students during distance learning based on two different scenarios: primarily **synchronous** and primarily **asynchronous**. Classes that meet regularly online in real time using a video conferencing application (at least 1 hour/week) are primarily **synchronous**, whereas classes that meet less often and students are working mostly on their own time are primarily **asynchronous**. Asynchronous activities can be completed at any time and turned in when completed. But which activities are best optimized for each scenario?

SYNCHRONOUS

ASYNCHRONOUS

ENGAGE

POLLS

Start the online meeting with this activity as a class warm-up or engagement tool.

INQUIRY WARM-UPS

Conduct this activity as a teacher demonstration to harness background knowledge and spark interest about the lesson content.

WRITE

Assign the prompt for homework. These activities can give you a sense of your students' knowledge and misconceptions. And they give your students a chance to interact with the content from a personal, real world perspective.

EXPLORE

INTERACTIVITY

Assign the Interactivity for students to complete ahead of time to practice some of the lesson content before meeting as a class.

UINVESTIGATE LAB

Assign the uInvestigate Lab Video to watch independently. To get the most out of the lab experience, ask students to read the lab before watching the lab video. If possible, adapt the lab materials to those students may have at home. Otherwise, conduct a teacher demo of the lab and have students complete the Analysis section at the end of the Lab.

INTERACTIVITY

Assign the Interactivity for students to work on independently.

UINVESTIGATE LAB

Assign the uInvestigate Lab Video to watch independently. Record a teacher demo or find a similar lab video online for students to watch. Ask students to complete the Analysis section at the end of the Lab.

VIRTUAL LAB

Assign the virtual lab for students to complete independently or in small virtual groups.

EXPLAIN & ELABORATE

VIDEO

Assign the Video for students to watch ahead of time so that they are ready to discuss the lesson's concepts as a class.

Encourage students to take notes or write down questions they have as they view the video. Alternatively, watch the video as a group and discuss.

INTERACTIVITY

Work through the Interactivity together as a class or assign it to small groups to work on together, and then come back as a class to discuss. Your video conferencing software may provide a way for you to work in small groups at the same time.

QUEST CHECK-IN

Work through the Interactivity together as a class or assign it to small groups to work on together, and then come back as a class to discuss. Your video conferencing software may provide a way for you to work in small groups at the same time.

VIDEO

Assign the Video. Ask students to write a paragraph that summarizes the video, or ask them to summarize the video using a different form of media.

INTERACTIVITY

Assign the Interactivity to individuals. Or, request that the students work in small groups to complete.

QUEST CHECK-IN

Assign the Quest Check-In to individuals or small groups to complete.

EVALUATE

QUIZ

Assign the Quiz for students to take independently.

QUIZ

Assign the Quiz for students to take independently.

OTHER LEARNING OPPORTUNITIES

To increase student engagement, consider giving students a choice of completing any of the following by assigning **Virtual Labs** and **uEngineer It! Interactivities** to work through as a class, in a small group, or individually. Students should also be encouraged to read the lesson in their **Student eText** for more information. Encourage motivated students to prepare presentations about features or the **Case Studies**, or an investigation they may have completed on their own.

To increase student engagement, consider assigning **Virtual Labs** and **uEngineer It! Interactivities** to work through in small groups or assign individually. Students should also be encouraged to read the lesson in their **Student eText** for more information. Encourage interested students to prepare presentations about features and **Case Studies**.

