



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

JUMPSTART OR CONNECTION ACTIVITY

Have students read this before arriving to class. Start by having students share their ideas, answers, and solution strategies right away to give you a sense of their background knowledge or misconceptions.

JUMPSTART OR CONNECTION ACTIVITY

If possible, use synchronous time to discuss this activity. Otherwise, create a collaborative bulletin board or white board for students to post their ideas to so that you can see what background knowledge they are bringing to the lesson.

EXPLORE

VIDEO

Assign the Video (if available) 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 any questions they have as they watch the video. Alternatively, you could watch the video as a group and discuss.

VIDEO

Assign the Lesson Video (if available). Ask students to write a summary of the video content.

INTERACTIVITY

Assign the Interactivity for students to complete individually or in small groups.

UNINVESTIGATE LAB

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.

VIRTUAL LAB (3-5 ONLY)

Assign the virtual lab for students to complete independently or in small virtual groups. Have each student submit their own digital notebook entries.

SYNCHRONOUS

ASYNCHRONOUS

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 write down any 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.

UENGINEER IT!

Work through the uEngineer It! activity together as a class or assign it to small groups to work together, and then come back as a class to discuss.

VIDEO

Assign the Video. Ask students to write three things they learned, 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.

UENGINEER IT!

Assign the uEngineer It! activity to individuals or small groups to complete. Consider opening up the materials list to similar items that students can find at home.

EVALUATE

QUIZ

Assign the Quiz for students to take independently.

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OTHER LEARNING OPPORTUNITIES

To increase student engagement, consider assigning the **Leveled Readers**, including the **STEM Readers**. Students can choose to work independently or in small reading groups. Encourage interested students to report back on their work or to prepare a presentation about what they learned.

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