In preparation for the 2020-21 school year, science teachers will have to modify normal instructional practices to prevent the spread of viruses and other disease-causing organisms.

When planning lessons, consider the following:

**Ongoing consultation:**
- The Centers for Disease Control (CDC)
- The Alabama Department of Public Health (ADPH)
- The RoadMap to Reopening Schools
- The Alabama K-12 Safety Guidelines
- Local Education Agency (LEA) Policies/Procedures

**Do students have to complete a hands-on activity to master the three-dimensions (SEP, CCC, DCI) of the standard?**

**YES**

Consider the following for:
- **FACE-TO-FACE INSTRUCTION**
  - Allow time for proper sanitation of surfaces and personal protective equipment.
  - Clear lab area of any unnecessary items that may need sterilizing.
  - Establish student safety practices (wearing masks, gloves, sharing materials, etc.).
  - Consider flow of traffic to reduce student movement in adherence to ADPH.

- Use disposable materials or small scale practices when possible.

**HYBRID/ AT-HOME INSTRUCTION**
- Establish student safety practices (wearing masks, gloves, sharing materials, etc.).
- Let one student perform the hands-on portion of the lab while the remainder of the group observes and records data from an appropriate distance.
- Let one student perform the hands-on portion of the lab while another records it to share with the remainder of the group.
- Have students analyze data and develop explanations through remote means.

- Do not assume there will be adult supervision in the home.
- Obtain parental permission before sending anything questionable home to students.
- Consider videoing the classroom activity and uploading to an online platform or provide WebEx, Zoom or other virtual method for participation.

**Other considerations:**
- Individual vs. group investigations
- Individually vs. group investigations

**INDIVIDUAL LABORATORY INVESTIGATIONS**
- Provide adequate spacing for students and staff.
- Provide adequate amounts of materials for individual work.

**GROUP LABORATORY INVESTIGATIONS**
- Let one student perform the hands-on portion of the lab while another records it to share with the remainder of the group.
- Have students analyze data and develop explanations through remote means.
- Let one student perform the hands-on portion of the lab while the remainder of the group observes and records data from an appropriate distance.

**AMSTI further considerations:**
- AMSTI will sanitize materials before delivery to schools.
- Schools and/or LEA’s are responsible for providing sanitation and personal protection equipment (PPE) supplies to teachers.
- Goggles and other reusable PPE should be cleaned prior to and after each use.
- Consider using alternate chemicals in an experiment if there is a possibility they may react with sanitation chemicals.

**AMSTI**

**Visit AMSTI K-12 Science Remote Learning Resources for alternative investigations.**

**Scan for AMSTI K-12 Science Remote Learning Resources**

**Scan for OSHA Safety Data Sheets.**

**Scan for Alabama K-12 Science Safety Guidelines.**
https://bit.ly/3a3sqmq

**Scan for RoadMap.**
https://bit.ly/3gCz1Xn

**Scan for Safety for Hands-on Home Instruction.**
https://bit.ly/3kcNgV0

**Scan for Alabama K-12 Science Safety Guidelines.**
https://bit.ly/3a3sqmq

**Scan for RoadMap.**
https://bit.ly/3gCz1Xn

**Updated 8/7/2020**