



## NSTA At-Home Science and STEM Activities Approval Document

**\*Note:** For the purpose of this document, the term activity/activities refer to science activities which could encompass but is not limited to: hands-on investigations, explorations, demonstrations, and/or field activities and investigations.

**OVERVIEW:** This document serves three purposes:

1. To provide an additional level of safety review to ensure safer practices are being implemented for at home science and STEM activities assigned to PK-16 students.
2. Communicate guidance regarding the concerns school safety officers, chemical hygiene officers, supervisors, administrators, or department chairs have with students performing hands-on active learning experiences at home, any activities including observations, laboratory and field investigations, and any other hands-on activities. School safety officers, chemical hygiene officers, supervisors, administrators, and department chairs seek to ensure that teacher assigned tasks students are performing at home for their classes do not pose serious potential health and/or safety hazards and resulting risks to the students, people with whom they live, pets, the physical dwelling, or the environment. For additional information, use the Safer Remote Instructional Guides (for grades [PK-5](#) or grades [6-12](#)).
3. Include a sample form that schools may require teachers to submit requesting prior approval for any activity that students are assigned to perform at home.

### INSTRUCTIONS FOR COMPLETING THE FORM:

1. Review the guidelines below regarding requirements for “at-home” lab approval.
2. If your proposed science activity is not already on the school’s approved list, use the form below to request a review of your “activity at home”. Provide as much detail as you can, as the review process will be much faster if additional information is not needed.
3. Submit the completed form to the appropriate supervisor [\[create fillable PDF form or Google Form area here to enter supervisor’s contact information\]](#) for review. Submit this form at least two weeks in advance of the anticipated activity date (or earlier to gain approval before purchasing supplies or sending supplies home with students).

### GUIDELINES FOR INSTRUCTORS:

1. ***Students and parents/guardians (or the supervising adult) must be made aware of any potential health and/or safety hazards and, resulting risks associated with the assigned at home science or STEM activities prior to their start.*** They should be made aware of these through your school’s learning management system and an appropriate signed safety acknowledgement form ([Elementary](#), [Middle](#), or [High School](#)). In addition, the inclusion of a disclaimer statement like below is recommended:  
“The safety precautions/protocols outlined for each hands-on activity are based on use of the manufacturer’s/company’s recommended materials and instructions, your teacher’s safety protocols, legal safety standards, and better professional safety practices. **Students must conduct all activities under adult supervision.** Using

Adapted from [The Pennsylvania State University Environmental Health and Safety “Lab at Home Guide and Approval Request Form”](#)



alternative materials or procedures for these activities at home may jeopardize the level of safety. Further information regarding appropriate safety procedures when conducting science and STEM related activities is provided by the NSTA. Do not hesitate to contact your teacher if in doubt of any safety protocols.”

2. Teachers have a [duty or standard of care](#) to put both parents/guardians and students on notice about all potential health and/or safety hazards and resulting risks allergens associated with at home activities. Opportunities for students to ask questions prior to performing the activity should be required. Any activity techniques that may be required should be demonstrated prior to performing the activity. It is recommended that the teacher upload a short video clip to their learning management system that describes and demonstrates the activity’s techniques for students, parents, and guardians.
3. Work that students will perform at home must not require special ventilation. Activities that would normally be performed under a fume hood or with a respirator will not be approved.
4. Activities performed at home should not require Personal Protective Equipment (PPE) beyond indirectly vented chemical splash goggles, nitrile gloves, or a non-latex apron/jacket. Instructors should provide **ALL** appropriate sanitized PPE required for students to conduct the assigned activities (e.g., ANSI/ISEA Z87.1 D3 indirectly vented chemical splash safety goggles). All kit items, especially PPE, should be sanitized by the instructor or school district before distributing and also upon receipt from students. Teachers should share a statement with students that communicates the need to follow all safety precautions prior to any activity (e.g., wearing closed-toe shoes, tying back long hair, avoiding baggy clothing and short skirts or shorts).
5. Activities that generate hazardous waste will not be approved. Chemical waste may not be poured down the drain! In the at home lab materials, instructors should provide all proper or pertinent waste and disposal procedures that are in compliance with local and state regulations put forth by the SDS in Section 13. Proper disposal considerations should be provided during instruction or made available for students.
6. Infectious materials may not be used at home. This includes human materials.
7. Consider allergens. Activities involving food should include alternatives for students with food allergies. If materials with latex such as balloons are to be included, make sure these items are not included in kits provided to students with latex allergies. Modifying kits for allergens of household members must be considered before sending kits home.
8. Remember that your students will not be working in a controlled laboratory/field environment. Their dwellings may include small children, pets, or family members with respiratory sensitivities and allergies.
9. Paints and other supplies used should be marked with the ASTM Non-Toxic label. All liquids included in the kit should be clearly labeled and in sealed containers. No hazardous chemicals should be sent home!
10. SDS sheets accompanying any activity materials should be included with the items sent home and provided in advance for parents/guardians or the supervising adult.



11. Directions for proper storage of liquids or other materials (as specified on the SDS) sent home must also be provided by the instructor to the parents/guardians or the supervising adult (ex. Store in a closed cabinet out of reach of pets or small children, etc.).

[Make the form below a fillable PDF form or Google Form]

**APPROVAL REQUEST FORM (to be completed by instructor):**

**Contact information**

Instructor Name	
School Building	
Department	
Email	
Phone	

**Activity Details**

<b>Course and Grade Level</b> for Proposed Activity	
<b>Description:</b> Provide a brief yet detailed description of the activity students will be performing.	
<b>Provided Materials:</b> Provide a list of all materials and equipment that will be provided to students. If the items are a commercially available kit, provide links to the specific kit and explain how students will obtain it .	

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<p><b>SDS and Storage:</b> Attach a Safety Data Sheet (SDS) for every hazardous material being used. What instructions will you provide for the storage of these materials?</p>	
<p><b>Student Provided Materials:</b> List any materials the students are expected to provide for themselves.</p>	
<p><b>Safety Instruction:</b> Describe how you will address safety with students before, during, and after the activity if the lesson is conducted synchronously. *If the activity will be student self-paced - Explain how safety criteria will be embedded in the instructional materials. How will you ensure adult supervision is present to monitor students' safety?</p>	
<p><b>Links:</b> Please provide links to any videos or resources that will be provided to students (or attach these items after the form).</p>	



**SUPERVISOR / ADMINISTRATOR / DEPARTMENT CHAIR REVIEW & APPROVAL**

Name	
Date	
Comments/ Revisions Required	[Make this area capable of being expanded to multiple lines on the PDF or fillable form]
Approval	Signature: _____ Date: _____
Changes Made After Initial Approval	Date: Description of Change(s) Made: Change Approved by: