



Citizen Science STEM Process Skills Checklist

In citizen science, STEM process skills are an integral part of helping your students develop and complete their citizen science projects and demonstrate learning. These higher level thinking skills are also critical for students to be successful in pursuing the college and career paths of their choice, especially in STEM fields in the 21st Century. The following list is based upon research on scientific process skills in inquiry based informal learning environments.

Directions: Review the list and check which ones would be a high priority for your students in completing their citizen science project. You can also use this list to fill out Citizen Science Skills Checklists for Assessment.

- Observations
- Data Collecting
- Asking Questions
- Developing/Using Scientific Models
- Planning/Executing Investigations
- Analyzing Data
- Engaging in Argument from Evidence
- Constructing Explanations
- Sharing Findings
- Using the Engineering Design Process
- Solving Problems
- Comparing Approaches





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Individual Student Checklist

Directions: Select the citizen science skills that you would like your students to exhibit. Check off in each box whether or not the student has exhibited the citizen science skill or not and then tally up the totals.

Student Name: _____

Description of Citizen Science Skills	Exhibited Skill		Comments
	Yes	No	
Skill #1			
Skill #2			
Skill #3			
Skill #4			
Overall	/4	/4	





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Class Checklist

Directions: Select the Citizen Science skills that you would like your students to exhibit and write them in the top row. Check off in each box whether or not the student has exhibited the skill and then tally up the totals.

Student	Skill #1	Skill #2	Skill #3	Skill #4	Overall
Student #1					/4
Student #2					/4
Student #3					/4
Student #4					/4
Student #5					/4
Student #6					/4
Student #7					/4
Student #8					/4
Student #9					/4
Student #10					/4
Student #11					/4
Student #12					/4
Student #13					/4
Student #14					/4

Comments: _____

