

# STEM Facilitation Quality Checklist



## Ranking:

- 3: Skill consistently observed throughout STEM activity.
- 2: Skill occasionally observed throughout the STEM activity.
- 1: Skill absent or not observed during the STEM activity.

STEM Facilitation Skill	Score
1. Activity and learning connect with a learning goal.	
2. Materials and space are prepared ahead of time.	
3. Materials are interesting, safe and appropriate.	
4. Youth physically and actively manipulate materials (hands-on).	
5. STEM content is accurate and related to the activity/learning goal.	
6. Youth reflect on their experience (the STEM activity is “minds-on”).	
7. STEM content connected to youth’s personal lives and/or STEM careers.	
8. ALL youth are included in activity.	
9. Group/behavior management is effective and positive.	
10. Youth discuss their own ideas relevant to the topic, activity and/or learning goal with each other and the facilitator.	
11. Youth make some choices regarding the activity and/or their learning.	
12. Youth practice 21 <sup>st</sup> Century skills (aka “soft” skills): teamwork, communication, creativity, and/or problem-solving.	
13. Youth use science and engineering practices* and/or the engineering design process.	

*\* Ask Questions/Define Problems; Develop and Use Models; Plan and Carry Out Investigations; Analyze and Interpret Data; Use Mathematical and Computational Thinking; Engage in Arguments from Evidence; Construct Explanations/Design Solutions; Obtain, Evaluate, and Communicate Information.*

## Suggestions for use:

- STEM Ambassadors: Use this checklist while planning to ensure a quality activity.
- STEM Ambassadors: Use this checklist for self-reflection after facilitating a STEM activity.
- STEM Supervisors: Use this checklist to observe STEM Ambassadors and provide feedback.
- Before suggesting changes while providing feedback, ask for self-reflection and/or simply state what you observed. People can often self-identify improvements and make changes on their own.
- When observing or reflecting, take notes on specific examples of each skill for future reference.
- Identify 2-3 strengths. Plan to incorporate these into future STEM activity facilitation.
- Identify 1-3 opportunities for growth. Plan to take trainings to help you develop these areas.

# STEM Activity Observation Notes

Name of Observer:

Date and Time:

Name of STEM Activity Facilitator:

Location:

Number of youth:

Age of youth:

STEM Activity Name/Description:

Observation Notes:

Observer signature: \_\_\_\_\_ Date: \_\_\_\_\_