

Location: \_\_\_\_\_

Date: \_\_\_\_\_

Observer: \_\_\_\_\_

Task Activity: \_\_\_\_\_

Start/End Time: \_\_\_\_\_

Focal Subject: \_\_\_\_\_

**ENGAGEMENT OBSERVATION SUMMARY**

<u>Sequential segments</u> Different engagement type Points of child's transition Science content changes Activity structure	<u>W/ whom</u> Adult Facilitator Peer Self	<u>What done</u> Ask, Answer Connect, Describe Discuss, Experiment Explain, Explore Identify, Listen, Observe, Predict, Problem-solve, Read, Use, Volunteer	<u>What with</u> Metacognition Ideas Procedure Challenges/ Problems Artifacts Phenomena Facts	<u>Participate</u> Active: <i>takes initiative</i> Passive+: <i>listening, attentive, alert</i> Passive - : <i>unfocused, not on task</i> Disruptive→	<u>Affect</u> +Aroused: Amazed, Joyful,, fun, happy, enthusiastic, eager, inspired, determined +Dearoused: calm, relaxed -Aroused: Distressed, upset, angry, frustrated, worried --- -Dearoused:Bored, drowsy, tired; Distracted, not on task; Disruptive (self and others)

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**ENGAGEMENT OBSERVATION SUMMARY**

Code	Cognitive	Behavioral	Affective
4 A lot to most (> 50%) 3 Some (25-50%) 2 Rarely (< 25%) 1 Not observed (0%)	Involvement with cognitive processes: _____ <b>High-Order Thinking:</b> Going beyond the basics (e.g., predicting, connecting, problem-solving, claim-making, noticing similarities/ differences, metacognition) _____ <b>Required Thinking:</b> Doing the basics (e.g., attentive, focused on task, reciting, naming, identifying, discussing procedures, complete worksheet as directed) _____ <b>Unrelated Thinking:</b> Uninvolved with task _____ <b>Unknown Thinking:</b> Unknown processes	Participation behaviors: _____ <b>Active.</b> Active, takes initiative, eager to participate. (e.g., hand raising, asking and answering questions are ok to code as Active in a setting without physical opportunity) _____ <b>Passive +.</b> Ready to learn and participates. _____ <b>Passive -.</b> Doesn't take initiative, gives up, unprepared, or distracted. _____ <b>Disruptive.</b> Actions interfere with self and other's learning.	_____ <b>Positive Aroused:</b> Amazed, Joyful, fun, happy, enthusiastic, eager, inspired, determined, startled-positive _____ <b>Positive UA:</b> Alert, calm, relaxed, at ease _____ <b>Negative UA-Bored</b> _____ <b>Negative UA-Sad/Drowsy/tired</b> _____ <b>Negative Aroused:</b> Distressed, upset, angry, frustrated, worried, startled-negative
4 Happened often 3 Happened a few times 2 Happened once 1 Not observed 0* No opportunity	Engagement with: _____ <b>Metacognition:</b> Thinking about learning process. Self-regulation; Choosing which strategy or approach to use. _____ <b>Challenges, problems*:</b> Working to goal without prescribed procedure; iterating, trial & error, etc _____ <b>Ideas:</b> Discussing causality, mechanism or fundamental principles; explaining, connecting, relating _____ <b>Artifacts*:</b> Dealing with physical properties; describing, observing, sketching; using simple devices. _____ <b>Phenomena*:</b> Exploring action/behavior (beyond physical properties) under different circumstances _____ <b>Procedures*:</b> Following prescribed instructions to complete a task. Step-by-step directions. _____ <b>Facts*:</b> Writing, reading, labeling, memorizing or reviewing factual materials such as names, dates, masses, weights, etc. Dealing with bits of canonical knowledge.		
Put the appropriate number in the space provided.		<b>Social interactions:</b> with Peer _____ with Adult _____ with Facilitator _____ 4. Extensive, ongoing interactions 3. cursory, ongoing interactions 2. Minimal interactions 1. None, but others were present 0. Not present  <b>Use of available resources:</b> _____ 4. Exceptional for task 3. Adequate for task 2. Minimal for task 1. None, but resources were present 0. Not present	<b>Resources</b> are: All accessible material or technological resources (not social, they are coded above), including but not limited to the artifacts that students may have employed during the activity.

**Overall Engagement:** (circle 1 per row)

	Affective	Positive Aroused	Positive Unaroused	Flat	Mixed	Negative Unaroused	Negative Aroused
Behavioral		Very High	High	Medium		Low	Very Low
Cognitive		Very High	High	Medium		Low	Very Low
<b>Overall</b>		<b>Very High</b>	<b>High</b>	<b>Medium</b>		<b>Low</b>	<b>Very Low</b>

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**ENGAGEMENT OBSERVATION SUMMARY**

	Circle applicable adjectives, notes on right	Initial Impressions, Before	During (include introductions and disruptions)	End
<i>Materials</i>	<p><b>Are materials organized and easily accessible?</b>  <b>*Do participants have choice in materials?</b>  <b>Quality:</b> Organized, labeled, well-maintained  <b>Availability:</b> Available, offered, allocated, shared  <b>Sufficient:</b> Infinite, adequate, insufficient for group  <b>Range:</b> Vast variety, some variety, minimal, single resource  <b>Authenticity to Science:</b> authentic/real, models/mimics, not authentic/not representative  <b>Adequacy of Scaffolding:</b> models, diagrams, pictures, examples, prompts, labeled signage, n/a</p>			
<i>Social</i>	<p><b>Are there facilitators/staff available and accessible?</b>  <b>*Do participants have a choice in how and with whom they interact?</b>  <b>Please outline interaction style</b> of each facilitator in notes            Interactive participant, lecture, demonstration with materials, reference only (information, answer giver), non-interactive.  <b>Facilitator Involvement:</b> Highly involved -&gt;not involved</p>			
<i>Activity Structure</i>	<p><b>What is the structure and content of the activity?</b>  <b>*Note participant autonomy within activity structure: what choices (if any) are participants able to make about the activity</b>  <b>Ideas:</b> Prominent, powerful, central to science.   <b>Activity:</b> Facilitated, presentation/ demonstration, hands on or tinkering, interactive exhibit, observational exhibit, didactic.   <b>Interaction:</b> Competitive, cooperative, independent  <b>Procedure:</b> Fixed, open  <b>Outcome:</b> Fixed result, open result</p>			
<i>Space</i>	<p><b>What type of space is it?</b>  <b>*Do participants have choice in how and where they interact with the space? Can they sit or stand, move around, etc?</b>   <b>Location:</b> School, museum, outside, community center, library, lab, home  <b>Type:</b> classroom, exhibit, afterschool program, camp, class, lecture, assembly</p>			

**Overall Opportunity to Engage with Science via:** (circle 1 per row)

Materials	Very High	High	Medium	Low	Very Low
Social	Very High	High	Medium	Low	Very Low
Activity	Very High	High	Medium	Low	Very Low
Space	Very High	High	Medium	Low	Very Low