

Quest Lesson Guide: Tally Your Building Blocks

Pillar: MATHEMATICS	Concept: Calculating	Code: MC1.1	Level: 1
Summary: Tally your building blocks.			
STEAM Integration: Science (Physical Sciences)			
Learning Objectives			
Students will learn about...		Students will learn to...	
Calculate solutions to problems using numbers and simple functions		Calculate solutions to problems using numbers and simple functions (+, - and %). Use two groups of objects to determine "how many more". Use visual representation of numbers when adding/subtracting (e.g. blocks).	

Quest Introduction:

Through trial and error, investigate the number of blocks it took to build your rover parking ramp.

Students use their Mission Log (Journal) to record their design & tally blocks



Fun Facts:

Mission Control want a full sitrep on how our resources are being used so they can help us plan for enhancements. The professor has asked you to count the number of blocks used to construct your rover parking ramp and record in the Mission Log with photos.

Once you have finished the tally, take pictures of the different shaped blocks used to construct the shelter and record in your Mission Log with the name of the geometric shape for each and the percentage based on total blocks used.

In-Game Assessment:

The students earn XP in the following badges: 1. Calculator – 100% 2. Photographer– 25%	Related in-game quiz that tests concepts: 1. Quiz: N/A
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Formative Assessment:

Once the student finished a quest, you can also assess them based n observation and discussion, and according to the following scale. If assessing a student’s partially completed project, use the “Notes” section. In this case, assess the child based on their understanding of the projected learning outcomes and how effectively they implemented them on the part of the project they did complete.

5	4	3	2	1
Complete Achievement of goal/task/ understanding	Mostly Complete Achievement of goal/task/ understanding	Partially Complete Achievement of goal/task/ understanding	Very Incomplete Achievement of goal/task/ understanding	Did Not Complete goal/task/ understanding

Notes:
