

K/1st Grade - Counting Collections

(Focus: Science & Math)

Project Specifications

Wonderings: What do I want to collect? What is the best way to organize my collection? Why is that the best way?

Requirements: Create a collection of items to be sorted 4 different ways.

Research Plan

Why did you select the items?

Scientific Thinking

What did you sort and what were the different ways you sorted them?

- Create a collection of one type of object. Example: buttons, leaves, coins, rocks, etc).
- Sort in an organized way by a physical characteristic (Ex: color, texture, shape, size, etc.).
- Sort 4 times by a different characteristic each time.

Scientist's Data and Results

How many did you have in each sort? What was the best way to sort your collection and why?

- Document what you notice about each sort - similarities, differences, more, less, etc..
- Be sure to include detailed numerical data in the form of graphs, charts, tally marks, and or drawings about all four sorted collections.
- Decide which is the best way to sort and explain why.

Visual/Digital Display

How will you share your findings?

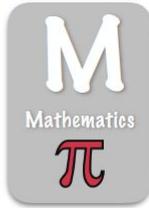
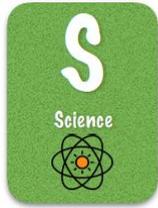
- The collection/display may only occupy a space the size of a student's desktop (24" long and 15" deep). Collections may be mounted on a display board, cardboard/tagboard, or any reasonable manner that fulfills the size display requirements. All written requirements from above should be displayed on the board or in a Scientist's Log. (see samples)
- Students must produce their own display that is organized and clearly communicates findings.

Oral Presentation

How will you verbally explain your project?

- Must be 1-2 minutes and explain the purpose of the project and what was discovered. Presentations can be via video, but the student has to be the one explaining in the video, and student must be prepared to answer questions during the presentation about the collection, procedure, and what was learned.

*Please see scoring rubric on the back for even more details.



Room _____ Score _____ /15

Teacher _____

Name _____ Grade _____ Project Title _____

STEAM Fair - K & 1st Grade Scoring Rubric

	3 Master Scientist	2 Super Scientist	1 Scientist in Training	0 Not Evident
Research Plan Why did you select the items?	-All written parts of the research plan are complete. - Detailed explanation of collection choice is neat and free of errors; highest quality work is evident.	-All parts of the research plan are complete. -Lacks a detailed explanation of collection choice. -Work is neat but may have some errors.	-Some parts of the research plan may be incomplete or missing; -Plan is evident, but may not be complete or was not followed. -Frequent errors in writing; illegible writing.	-Research plan not complete.
Scientific Thinking What did you sort and what were the different ways you sorted them?	-Student created a collection of one type of object. Example: buttons, leaves, coins, rocks, etc). -Student sorted in an organized manner according to a physical characteristic (Example: color, texture, shape, size, etc.). -Student sorted 4 times by a different characteristic each time.	-Student created a collection of one type of object. Example: buttons, leaves, coins, rocks, etc). -Student sorted in an organized manner according to a physical characteristic (Example: color, texture, shape, size, etc.). -Student sorted 3 times but the physical characteristic chosen may be unclear.	-Student created a collection of one type of object. Example: buttons, leaves, coins, rocks, etc). -Student sorted but it may not be organized according to a physical characteristic (Example: color, texture, shape, size, etc.). -Student resort at least 2 more time but the physical characteristic chosen may be unclear.	-Student did not organize their collection by physical characteristic (Example: color, texture, shape, size, etc.). -Student did not sort, or only sorted 1 way.
Scientist's Data and Results How many did you have in each sort? What was the best way to sort your collection and why?	-Includes detailed numerical data in the form of graphs, charts, tally marks, and or drawings about all four sorted collections. -A clear conclusion about the best way to sort and why is made.	-Includes detailed numerical data in the form of graphs, charts, tally marks, and or drawings about all three sorted collections. -A conclusion about the best way to sort was made.	-Includes numerical data in the form of graphs, charts, tally marks, and or drawings for some sorted collections. -The conclusion was unclear.	-Numerical data in the form of graphs, charts, tally marks, and or drawings about sorted collections were not made. -No conclusion was made.
Visual / Digital Display How will you share your findings?	-Visual / digitally produced display is student produced, organized, and strongly communicates the student findings.	-Visual/digitally produced display is student produced, fairly organized, and communicates the student findings.	-Visual/digitally produced display is student produced, not organized, and does not communicate student findings.	-No visual/digitally produced display was submitted.
Oral Presentation How will you verbally explain your project?	-Student is able to explain the collection, procedure and what was learned without any prompting.	-Student is able to explain the collection, procedure, results, and what was learned; but needed teacher prompting.	-Student has difficulty explaining the collection and what was learned.	-Student is unable to explain the collection.