Soil Chefs 4. Whose Grew? Draw a Conclusion and Share Results

SPINACH to WIN it!

For the Classroom:

- Group structure - whole group
- Location - at seats
- Approximate time - 20 minutes

Common Core and Georgia Standards of Excellence:

- S3E1c. Students will use observation to compare similarities and differences of texture, particle size, and color in top soils (such as clay, compost, and sand).
- S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.
- S3CS8/S4CS8/S5CS8. Students will understand important features of the process of scientific inquiry.
- S3CS5/S4CS5/S5CS5. Students will communicate scientific ideas and activities clearly.

Materials:

- Measuring tape (1 per small group)
- Writing paper (1 per student)
- Pencils (1 per student)

Directions:

1. Draw Conclusions
   a. A few weeks later, students in their small groups can estimate the height of their plants, measure the height using standard tools, and compare the difference in their plant's height to others in the class.
   b. Based on their comparison, small groups can discuss which type of soil grew the tallest spinach plant and brainstorm why that may be true.
2. Share Results
   a. Provide each child with a sheet of writing paper and a pencil.
   b. In each group, children can write their results, conclusion, and explanation of why they think the experiment may have turned out as it did.
   c. Results should include a detailed description of the soil mixtures that was created by the group.
      i. Showing the ratio of clay to soil to compost in fractions with a denominator of 10, as well as a denominator of 100, and written in decimal notation.
      ii. Comparing the amount of clay to soil to compost that they chose to use, conveying comparisons using the symbols >, +, <.
      iii. Displaying both an equation and a visual model showing how the parts add up to the full recipe.

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