Trilobite Species and Sorting

Summary

A species is a group of living organisms with similar individuals that can exchange genes or interbreed. But there can be great variation within a species! For example, there are many different types of butterflies! In this activity, we will be using different household objects to model how variation is observed and categorized within a species.

Materials

- Several of the same type of household item
  - We recommend smaller, hands-on objects that can easily be sorted and handled such as buttons, beads, toy cars, balls, pebbles, seeds, etc.

Steps to Follow (All activities must be done with adult supervision)

1. Briefly review what a species is.
   a. Can you think of plants or animals that are the same species?
   b. How are these organisms similar, how are they different?
2. Lay your objects on the table or floor, spread them out a little so you can see them all.
3. Make observations about the objects.
   a. Are they the same size, color, texture, weight?
4. Sort the objects into different piles based on their characteristics. The exciting thing about this activity is that you can categorize objects however you’d like!
   a. For example, if using balls you can sort by size, then sort by color, then weight, then texture, etc. There’s no right or wrong way to organize them.
   b. Some objects may not fit into any of the categories you have. Are these new species?
   c. Some objects may fit into more than one category. Which characteristics are most important in determining how they’re categorized?
5. Observe how many different species you have been able to create from one pile.
   a. Does this number change when you categorize differently?
   b. How many new species did you create?

Ohio Early Learning and Development Standards

Approaches Toward Learning/Engagement and Persistence/Persistence
Cognition and General Knowledge/Cognitive Skills/Reasoning and Problem-Solving
Cognition and General Knowledge/Mathematics/Algebra/Group and Categorize
Cognition and General Knowledge/Mathematics/Measurement and Data/Describe and Compare Measurable Attributes
Cognition and General Knowledge/Science/Science Inquiry and Application/Inquiry

Ohio Learning Standards: K.LS.1, K.PS.1