Geoscience education for infants using geological specimen

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NPO Science and Art has developed natural science education in kindergarten since 2016. The classroom runs a natural science class of 9 classes (60 infants and 8 elementary school students) every week. In this presentation we will introduce the following three programs and their educational effects.

- 1 ·Fossil Excavation Experience
- 2 ·Mineral Kaleidoscope
- 3 ·Dinosaurs Card Game

In the fossil excavation experience, the real ammonoid is embedded in the mixture material of gypsum plaster and sand. Children feel the excavation sensation with wooden sticks and rubber hammers. Let the fossils found by the children are made labels, and let them manage themselves as children's own collection.

Mineral Kaleidoscope program uses small stones such as quartz(purple/pink) and olivine to make a kaleidoscope. While observing the stone, develop a story to its origin and the topic of the production area. In Dinosaur Card Game, while playing ordinary game, let children show and touch fossils (replicas, real fossils) of dinosaurs and marine

reptiles that appeared in Card.Teach children how to get dinosaurs information by using an picture books. By introducing the feedback of this program, not only can infants earth science, but also includes the role of extending the interest afterwards. This program is proposed to be an excellent program in earth science education from early childhood.

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