Where Did I Come From? A Heredity Electronic Portfolio

Summary

Purpose: After students in a 5th grade class have discovered the similarities and differences in traits among family members and how each trait might have been inherited, they will write a report about an animal, show a possible family tree, create a Power Point presentation using heredity vocabulary, and put it altogether in an Electronic Portfolio.

Time Frame

5 class periods of 45 minutes each

Group Size

Individual

Life Skills

Thinking & Reasoning, Communication

Materials

Students will use the following software programs and store their projects on disk, H drive, or CD: PowerPoint® Software Publisher® Software Inspiration 7® Soffware Microsoft Word® Software

Background for Teachers

All living things inherit a set of characteristics or traits from their parents. Members of any given species transfer traits from one generation to the next. The passing of traits from parent to offspring is called heredity and causes the offspring to resemble the parent. Some traits differ among members of a population, and these variations may help a particular species to survive better in a given environment in getting food, finding shelter, protecting itself, and reproducing. These variations give the individual a survival advantage over other individuals of the same species.

Student Prior Knowledge

Comprehension, Power Point, Microsoft Word, Inspiration 7, note taking, and listening skills. Students have already completed an Inventory of Traits, studied about Paint's Family Tree, watched a video on Genes and Heredity, and have defined vocabulary terms for the unit.

Intended Learning Outcomes

1-Use science process and thinking skills. 2-Manifest scientific attitudes and interests. 3-Understand science concepts and principles. 4-Communicate effectively using science language and reasoning.

Instructional Procedures

1. Students will research a specific animal and on Microsoft Word will write a report on how specific physical attributes provide an advantage for survival in a specific environment. Vocabulary terms that need to be included in the report, if appropriate are: behavior, environment, heredity, inherited, instincts, learned behaviors, life cycle, offspring, organism, parent organism, population, specialized structures, species, survival, trait, and variations. 2. Students will create a possible family tree for this animal using Inspiration 7. 3. Students will create a PowerPoint presentation showing the vocabulary and an appropriate picture for that vocabulary word. 4. Students will create an Electronic Heredity Portfolio of their knowledge of the subject.

Extensions

Students who have studied the basics about Heredity and Genetics, may find it useful and interesting to gain more insights into the topic by consulting with a scientist or mentor. Science topics that are presented with hands-on learning may help students generate a genuine interest and they may have a desire tofurther their study of the topic. This adds value to the experiences students have in the classroom when we have meaningful activities in all disciplines.

Assessment Plan

Students will be assessed on their Portfolio for subject knowledge, organization, originality, technical aspects, and citing their sources.

Rubrics

Multimedia Presentation Rubric for Heredity

Bibliography

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