**Middle School STEM Science Lab/Activity Planner**

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| Name of Lab/Activity: Animal Characteristics Card Game | Grade: 7 |
| California Science Standard(s): (please copy and paste standards taught during this lesson)SCI.7.LS.3 Biological evolution accounts for the diversity of species developed through gradual processes over many generations. As a basis for understanding this concept:Standard:SCI.7.LS.3.a Students know both genetic variation and environmental factors are causes of evolution and diversity of organisms. |
| Learning Objective/Goal:Students will understand characteristics of different animals. Students will be able to differentiate between different types of animals based on certain groups of characteristics. Students will see that humans are part of the animal kingdom. |
| Language Objective/Goal: (based on California Common Core Standards)Anchor Standard:Anchor Standard:LA.6-8.R.CCR.3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.Grade Level Standard:Grade Level Standard:LA.6-8.RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| Materials & Resources:Animal Characteristics card game, paper and pen for keeping score |
| Procedure:Have class complete the Pre-Assessment.Form groups of three to five students.Pass out the game materials.Explain the rules of the game, as students follow along with the instructions (see attached).Let students play the game in their groups.When done, debrief the main concepts. | Teaching Note Allow 5 minutes for the pre-assessment, 10 minutes for explaining the game, 15-20 minutes to play, and 5-10 minutes for the debrief. |
| Math Connection:Students will keep score by adding the point values for each card used, as per the rules of the game. | Teaching Notes:Remind students only completed sets score points. |
| Technology Extension of Learning: <http://www.kidport.com/reflib/science/animals/animals.htm>(site with vertebrates and invertebrates)<http://youtu.be/KpWQYi2fWIc>(YouTube video with slightly different characteristics) | Teaching Notes: |
| Formative Assessment: (please attach a copy)See attached. | Teaching Notes:I left this as unscored so there is less pressure. |
| Strategies for EL and Special Needs Students:Student Pairs, picture clues on some cards | Vocabulary:vertebrate, invertebrate, symmetry, bilateral symmetry, radial symmetry, asymmetrical |
| Alignment in science unit: (Brief description of lessons taught **prior to & after** this lab/activity)Previous: classification, characteristics of the animal kingdomAfter: evolution and natural selection, genetics |
| Brief description of lessons taught **after** this lab/activity:Evolution and natural selection; Darwin; genetics. |
| Lab/Activity adapted from: (website, textbook, etc.)None | Formative Assessment adapted from:None |
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| This lesson was developed by: |
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