Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_ Ast: \_\_\_\_\_

**ALIEN PERIODIC TABLE ACTIVITY**

Imagine you are a biologist 500 years in the future, in the year 2519. Alien life has been discovered on a distant planet, and the fossil record of these aliens has been collected by space-travelling archaeologists. They have identified five different species of aliens and tracked their evolution over time through the fossils they have gathered. However, like is often the case using the fossil record, there are missing pieces. Your job is to fill in the missing pieces by noticing the patterns that exist in the fossils provided.

Your group will receive a set of cards with the pictures of aliens on them. Arrange those cards on your table in a series of rows and columns that causes patterns to appear in the characteristics of the alien figures. Use those patterns to identify places where you are missing a card for an alien that should be there, then predict what the missing alien will look like. Use the questions below to guide you toward your answer, as well as to explain your thoughts along the way.

1. There are five distinct alien species depicted in your cards. Describe how you were able to identify which cards showed which species.
2. Within each species, a series of changes occurred over time that is shown by the fossil record. What changes can you identify within each species that help you identify older fossils from newer ones?
3. While each of the five species underwent changes, certain features are shared among members of different species during certain time periods. What characteristics helped you group members of different species into similar “time-period” groups?
4. If you arrange the cards by species in horizontal rows and by time period (evolutionary changes) in vertical columns, you will see that an empty place where a card should go represents a “missing fossil”. What patterns did you use to identify where this missing card should go and what the alien in that spot should look like?
5. Draw your prediction of what the “missing alien” should look like.