Who's More Closely Related?

Organisms that have greater similarities to each other are more closely related than those which share only a few characteristics. In this activity, we will look at pictures of various organisms and put them into groups based on how they look, and attempt to figure out which organisms are more closely related.

Procedure:

1. Lay out all 20 photograph cut-outs on the table so that you can see all of them.

2. Pick one organism and find other organisms that seem most similar to it. Put the photographs in this first group together, clearly separated from the other photographs. Try and do this on your own first, because we will be comparing results later on.

3. Write down the names of these organisms in the row for group 1 of the table A below. Names are found at the bottom of each photograph.

4. Write down what features are shared by the organisms you have put in group 1 in the table A. Be as detailed as possible in listing out all the reasons for why you have put these organisms in the same group.

5. Continue making more groups and filling up the table until you have put all 20 organisms into a group. You do not need to fill up all the rows provided in the table.

Table A: Observations and Groupings

Group No.	Group members (names of organisms)	Shared features
1		
2		
3		
4		
5		
6		
7		
8		
9		

Questions:

1. *Compare your list of groups with your friends. Do the groups that you have made match with everyone else? If no, why do you think people got different results?*

2. *Choose one of your large groups in your and propose how it could be split into 2 smaller groups. Explain how your split the group.*

3. *Propose how you could combine 2 of your smaller groups. Explain how you chose which groups to combine.*

4. *Which organism was the most difficult to place? Explain why.*

5. *List 2 characteristics that all 20 organisms share.*