|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Living Leaf Mysteries**A taxonomic key is a series of paired statements about the physical characteristics of organisms. It is used to identify organisms. In this activity, you will create a taxonomic key.**Procedure****1. 268_3rd list** Your teacher will show you f pictures of different leaves.**2.** Use the hand lens to examine each of the leaves. Lookfor characteristics like those in the table. Make a list ofﬁve or more characteristics for each leaf in your ISN..**Materials** Pictures of 5 different types of leaves metric ruler

|  |
| --- |
| **Leaf Characteristics to Consider** |
| **Characteristics** | **Observations** |
| Overall Shape | Is the leaf needlelike and narrow or is it flat? If it is a flat leaf, is it rounded, oblong, heart-shaped, or some other shape? |
| Simple vs. Compound | Is the leaf a single unit, or is it made up of individual leaflets? If it is made up of leaflets, how are they arranged on the leaf stalk? |
| Pattern of Veins | Do the leaf’s veins run parallel from a central vein, or do they form a branching pattern? |
| Leaf Edges | Are the edges of the leaf jagged or smooth? |
| Leaf Texture | Is the leaf’s surface fuzzy, shiny, or another texture? |

**3.** Use your observations to create a taxonomic key for the leaves. Your taxonomickey should consist of paired statements, similar to the example shown above. **4.** Exchange your leaves and taxonomic key with a partner. If your partner cannotmatch all of the leaves using your key, revise your key as necessary. **Think It Over**Do you think every single leaf of the same type would share the same taxonomiccharacteristics? Explain. Why it is important that the paired statements be contrasting statements? |  |