Name: Period: Date:

**Life: Plants**

As you watch the “Plants” episode of the BBC series ***Life***, pay special attention to the different types of adaptations plants have for surviving in stressful environments. Jot down notes in the graphic organizer below as you watch.

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| Adaptations for: | Name of Plant: | Briefly describe its adaptation: |
| Light | Vines on the forest floor |  |
| Airplants |  |
| Low Nutrients | Sundew |  |
| Venus Flytrap |  |
| Pollination | Sunflowers |  |
| Richea Honey Bush |  |
| Milkweed |  |
| Heliconia |  |
| Seed Dispersal | Brunsvigia |  |
| Alsomitra |  |
| Saguaro Cactus |  |
| Availability of Water | Dragon’s Blood Tree |  |
| Desert Rose |  |
| Red Mangroves |  |
| Temperature | Broad-leaved Trees |  |
| Pine Trees |  |
| Bristlecone Pines |  |

1. Light
   1. Vines climb up trees
   2. Airplants live in treetops
2. Nutrients
   1. Sundew catches mosquitoes in sticky “dew”
   2. Venus flytrap catches flies by snapping shut when trigger hairs are touched
3. Pollination
   1. Sunflowers face the sun and the warmth stimulates production of nectar
   2. Richea Honey Bush has fused flower petals for insulation; birds eat fused flowers to expose stamens, which insects then pollinate
   3. Milkweed has defense against monarch caterpillars, but those that survive pollinate the flowers
   4. Heliconia ration their nectar so hummingbirds must continually return
4. Seed dispersal
   1. Brunsvigia seeds are dispersed when dried flower stalks break off and roll away
   2. Alsomitra seeds have paper-thin wings that allow it to glide for hundreds of meters
   3. Saguaro cactus fruits are eaten by birds, ants, tortoise
5. Water
   1. Dragon’s blood tree collects mist on its leaves and the droplets run down the trunk into the roots
   2. Desert rose loses leaves and stores water in its trunk
   3. Red mangroves’ roots take in oxygen from the air when above water and filter out salt when submerged
6. Temperature
   1. Broad-leaved trees pull nutrients into their trunks and produce sugary “antifreeze”
   2. Pine trees have antifreeze in their needle-like leaves, which are also coated in a layer of wax
   3. Bristlecone pines rarely sheds needles, grow slowly