What are the major kinds of biomes?

Biome categorization varies according to the priorities and needs of the categorizer. Depending on whom you ask, there may be as few as five or as many as 20 different biomes on Earth. Here, we’ve broken the five most commonly identified biomes into some widely recognized subcategories:

1. **AQUATIC BIOMES**
   - Include all watery regions of the Earth.
   - **Freshwater**: Both lentic (still water) and lotic (moving water) biomes, including lakes, ponds and wetlands. Still water is often very nutrient dense.1
   - **Marine**: The largest biome, covering the greatest amount of surface area; the open ocean. These ecosystems contain a greater density of phytoplankton than of plants; closer to shore, plants are more plentiful and the water is more nutrient rich.2

2. **FOREST BIOMES**
   - Vary in temperature and are dominated by trees.
   - **Temperate**: Generally dominated by deciduous trees, which shed their leaves with the changing of seasons. These areas tend to have cold winters and significant rainfall.3
   - **Tropical**: Closest to the equator. Marked not by the four seasons that occur in temperate forests but rather by a dry season and a wet season. Deciduous trees may shed their leaves, but this does not follow a strict four-season schedule. Marked by great biological diversity.3
   - **Taiga**: The northernmost forest biome, taigas’ colder climates are dominated by coniferous trees, often on mountains. Coniferous trees (such as pine) do not shed leaves in winter. Though other trees do exist in the taiga, this biome is marked by relatively low biological diversity.4

3. **TUNDRA BIOMES**
   - Are frigid, treeless and have a short growing season.5
   - **Arctic**: Situated at high latitudes, the most northern arctic regions have a permafrost ground with very small, hardy plants. Less extreme regions have broader plant diversity and few animals, i.e. small herbivores and their predators.6
   - **Alpine**: Located at high altitudes, these biomes are marked by mountainous regions.6

4. **DESERT BIOMES**
   - Are frequently found at the center of continents and are characterized by very little rainfall or available water.7
   - **Hot and dry**: Almost no plant growth.
   - **Semi-arid**: Some precipitation; may be hot or cold.
   - **Coastal**: Markedly unstable; prone to fog blowing in from off the ocean. Often among the world’s driest deserts.

5. **GRASSLAND BIOMES**
   - Are dominated by tall grasses, with few shrubs or trees.8
   - **Savanna**: A mainly tropical grassland environment, consisting primarily of tall grasses with some shrubbery, and largely known for its diverse wildlife: rhinoceroses, elephants, lions, hippopotamuses, cheetahs and more.
   - **Temperate**: A dryer environment with tall grasses that are periodically curbed by natural wildfire. Most commonly found in Europe and North America, these areas are known as steppes or prairies depending on their location.