**Storms Comparison Chart**

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| **Feature** | **Thunderstorm** | **Tornado** | **Hurricane** |
| **What** | A small storm with heavy precipitation, thunder and lightning | Rapidly whirling funnel shaped cloud that reaches from a cloud to the ground. Up to 300mph | Tropical cyclone with winds > 74mph |
| **Where** | Can happen anywhere | Mostly in the U.S. Tornado Alley  TX, OK, KS and NE | Open warm ocean and coastal areas |
| **When** | Can happen anytime. More common in spring and summer. | Early spring to early summer  800 – 1300 each year | Atlantic Ocean June 1 – Nov 30 |
| **Requirements** | * Warm moist air * Nudge or lifting mechanism such as a cold front. * Instability air continues to rise. | Thunderstorm, usually a super cell thunderstorm | * Low pressure zone * Warm water > 84°F * Warm to depth of 150ft * Low to no vertical wind shear |
| **How They Form** | * Warm air is pushed up * When water vapor condenses it releases heat * Warmed air rises higher | * Thunderstorm * Winds blowing at different directions at different heights causes rotation * Rotating cloud reaches the ground | * Warm moist air rises in low pressure zone * Air rushes to low pressure center * The wind causes more evaporation and lift – more heat energy * Coriolis effect causes rotation |
| **Size** | Very small | 100 feet to 1 mile | Usually 100-300 miles wide |
| **How Long They Last** | Down draft stops process within about 30 minutes | Can last minutes to 1hour | Up to 2 weeks |
| **Dangers** | * High winds, flying debri * Heavy rains and flash floods * Lightning | * Very high winds * Heavy rains – flash flooding * Lightning | * Storm surge * High winds, flying debri * Flash floods * Lightning * Tornadoes |