M82
A galaxy 12 million light years from Earth that is undergoing a burst of star formation.
CARTWHEEL GALAXY

A ring galaxy 400 million light years from Earth.
NGC 4696
A large elliptical galaxy in the Centaurus Galaxy Cluster, about 150 million light years from Earth.
J0617 in IC 443
A neutron star located in a supernova remnant about 5,000 light years away.
CASSIOPEIA A
A supernova remnant believed to be the remains of a massive star that exploded over 300 years ago.
W3 MAIN

A region of massive star formation about 6,000 light years from Earth in the Perseus arm of the Milky Way.
Mz 3

Also known as the Ant Nebula, this newly formed planetary nebula is 3,000 light years away.
1E0657

Site of a collision between two large galaxy clusters about 3.4 billion light years from Earth.
M87
An elliptical galaxy known in the Virgo cluster about 50 million light years away.
M31
Central region of the Andromeda Galaxy, 2.5 million light years from Earth.
ARCHES, QUINTUPLETS, AND GC STAR CLUSTERS

Three massive star clusters near the enormous black hole at the center of the Milky Way, about 26,000 light years from Earth.
PUPPIS A

A supernova remnant about 7,000 light years from Earth.