What is an Orbit?

Using this link - <https://www.nasa.gov/audience/forstudents/5-8/features/nasa-knows/what-is-orbit-58.html> answer the following questions:

|  |  |
| --- | --- |
| Question | Answer |
| What is an orbit? | An orbit is a regular, repeating path that one object in space takes around another one |
| What is an object in orbit called? | Satellite |
| What is an example of a natural satellite? | Earth or moon |
| What is an example of a man-made satellite? | International space centre |
| What orbits the sun? | Planets, comets, asteroids and other objects |
| What is the imaginary surface called for anything orbiting the sun? | Ecliptic plane |
| What are all orbits shaped like? | Oval |
| Do satellites that orbit Earth stay the same distance from Earth? | No |
| What is the closest point called when a satellite is closest to Earth? | Perigee |
| What is the farthest point called? | Apogee |
| What would happen to a satellite without gravity? | Would go off into space in a straight line |
| What has to be balanced for orbit to continue? | Momentum and gravity |
| What will happen if momentum is too small? | The object will be pulled down and crash |
| What will happen if momentum is too high? | The satellite will speed past orbit into space |
| What is orbital velocity? | The speed needed to stay in space |
| Is the orbital velocity slower or faster with a higher orbit? | Slower |
| What type of orbit is the international space centre in? | Low orbit |
| What does LEO stand for? | Low Earth Orbit |
| What is classed as LEO? | First 100-200 miles of space |
| How long does one complete orbit in LEO take? | 90 minutes |
| What does GEO stand for? | Geosynchronous Earth orbit |
| What is GEO? | Satellites that stay above a location on Earth |
| What is the distance above the equator for GEO? | 23,000 miles |
| What is a polar orbit? | A satellite that’s orbit passes the two poles |