**KS3 Astronomer knowledge organsier**

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| **Definitions** |  |
| 1 | Milky way | The name of our solar system. This includes all our planets  | 16 | Geocentric  | The belief that the Earth is fixed at the centre of the Universe. |
| 2 | Moon | A natural satellite. Earth has one moon.  | 17 | Eclipse | An eclipse occurs when one object in space blocks an observer from seeing another object in space. |
| 3 | Satellite | Any object that is in orbit around a planet | 18 | Magnification | To make something bigger. See Diagram 2. |
| 4 | Orbit | An orbit is a repeating path that one celestial body takes around another. All orbits are elliptical, meaning they're egg-shaped. | **Graph skills- what a good graph should have** |
| 5 | Gravity | Gravity is a force that attracts objects towards each other. | 19 | Correctly labelled axes | The independent variable should be on the x axis. The dependant variable should be on the y axis. |
| 6 | Waxing moon | The moon appearing bigger.  | 20 | Scale | The axes scales should fill the page- as should the points plotted. |
| 7 | Waning moon | The moon appearing smaller.  | 21 | Line of best fit | A line which passes through the points. This should **not** be a dot- to- dot. It can also curve if the points suggest this trend. |
| 8 | Telescope | An instrument that is used to see object far away. | 22 | Labelled axes | The axes should be labelled and include the correct units if necessary. |
| 9 | Dwarf plant | A planet that is so small that it does not affect other objects by its gravity. E.g Pluto | SunMercuryVenusEarthMarsJupiterSaturnUranusNeptunePluto (Dwarf planet) | $$Magnification= \frac{Image size}{Actual size}$$$$Image size=actual size ×magnification$$$$Actual size=\frac{Image size}{Magnification}$$ |
| 10 | Star | Burn hydrogen into helium in a process called nuclear fusion. |
| 11 | Universe | Contains billions of galaxies. Theories and evidence suggest it is expanding.  |
| 12 | Solar system | The solar system includes the Sun and all the objects that orbit around it due to its gravity. This includes things such as planets, comets, asteroids, meteoroids and moons. |
| 13 | Seasons | The Earth's axis is tilted as it travels around the Sun, This changes during the year because the Earth moves about the Sun. |
| 14 | Equator | The equator is a line which is not real drawn around a sphere or planet |
| 15 | Helio-centric | Helio-centrism is the idea that the Earth and other planets revolve around the Sun, which is the centre of the solar system | **Diagram 1: Order of planets** | **Diagram 2: Magnification equation** |