



List of objects on the game board:

Square Number	Object	Definition
1	Home	/
3	Telescope	A telescope is an instrument that aids in the observation of remote objects by collecting electromagnetic radiation (such as visible light). The first known practical telescopes were invented in the Netherlands at the beginning of the 17th century, using glass lenses. They found use in terrestrial applications and astronomy.
5	Bosscha Observatory	An observatory is a location used for observing terrestrial or celestial events. Astronomy, climatology/meteorology, geology, oceanography and volcanology are examples of disciplines for which observatories have been constructed. Historically, observatories were as simple as containing an astronomical sextant (for measuring the distance between stars) or Stonehenge (which has some alignments on astronomical phenomena). Pictured is Bosscha Observatory in Indonesia.
7 & 8	Space Shuttle Columbia	A Space shuttle is a vehicle designed for (usually) manned space flights. Past missions on space shuttles have launched probes, taken man to walk on the moon among many other exciting missions. Pictured is the Space Shuttle Columbia, which first flew in 1982.
11 & 12	Aurora	The aurora is a natural light display seen at high and low altitudes on Earth caused by interactions in the Earth's magnetic field with particles from solar winds.
15	Meteor Shower	An event in space where a number of bright, visible meteors fly past the view of the Earth, all originating from a single point in the night sky, lasting for up to a few days. The first great storm

		recorded was in 1833, where an estimated over one hundred thousand meteors an hour, witnessed by observers through the northern hemisphere.
16	Comet	A comet is a celestial object which fly through the solar system and heat up and become very visible when it passes by the Sun. A famous example of a comet is Halley's Comet which is visible to Earth every 75-76 years.
19	Earth	The third planet from the Sun in the solar system. A terrestrial planet and the only confirmed planet to harbour life.
21, 22, 39, 40	Sun	The most famous and visible star from Earth. The centerpoint of the solar system, around which all eight planets of the solar system orbit.
23	Mercury	The smallest and closest planet to the Sun in the solar system. Mercury has next to no atmosphere, and has an orbital period of just 88 Earth days.
24	Venus	The second planet from the Sun, and also the hottest planet in the solar system. Its frequent sulphuric acid rain showers make this planet a very undesirable place for life.
27	Mars	The fourth planet from the Sun and the furthest terrestrial planet from the Sun, nicknamed 'the red planet'. Mars is home to the tallest mountain in the solar system, Olympus Mons which stands at 21km high.
28,29	Asteroid	Asteroids are minor planets which orbit the Sun, like comets but larger, but not as large as planets. Asteroids are typically in the order of km's in diameter.
30	Jupiter	The fifth planet from the Sun in the solar system, and the largest planet in the solar system. Jupiter is primarily composed of gas and is therefore known as a gas giant. Jupiter has a 'big red spot', a 300 year old storm caused when a comet (Shoemaker Levy 9), impacted.
32,33	Saturn	Saturn is the sixth planet from the Sun in the solar system. Saturn is best known for its rings composed mainly of dust and ice, and takes nearly 30 years to orbit the Sun.

35	Uranus	Uranus is the seventh planet from the Sun in the solar system, and is also a gas giant. Uranus is the coldest planet in the solar system, with a minimum atmospheric temperature of -224 degrees Celsius. Interestingly, Uranus rotates on its axis to the opposite direction to the other planets in the solar system.
36	Neptune	Neptune is the eighth and final planet from the Sun in the solar system. Neptune was named after the Roman god of the sea. Neptune has a very active climate, large storms migrate through its upper atmosphere, one of the largest storms ever seen was on Neptune, observed in 1989 and lasted about 5 years.
37	Dwarf Planet	Dwarf Planet is the name given to objects orbiting stars that aren't as large as planets and are bigger than asteroids. There are 5 accepted dwarf planets in the solar system, these include Pluto, Ceres, Haumea, Makemake and Eris. Although there are 394 possible dwarf planet candidates in the solar system, including the 5 officially accepted dwarf planets.
45,46,55,56	Centaurus	Centaurus is one of the brightest constellations in the night sky, located in the southern sky, and contains the notable star Alpha Centauri, the nearest star system to our own.
46	Southern Cross	The Southern Cross is the smallest constellation of the 88 modern constellations, but is also one of the brightest making it one of the best known constellations. It can only be observed from the southern hemisphere, or from locations of 30 degrees North or below in the northern hemisphere.
50	Orion Nebula	The Orion Nebula is a cloud of diffuse gas located in the constellation of Orion. Visible to the naked eye, the Orion Nebula is around 1,344 light years away from Earth.
53,53,68,69	Milky Way	The Earth, the Sun and many things we see around us are located in the Milky Way Galaxy. On a clear night in a less polluted location on Earth, the spiral

		arms of the milky way galaxy can be seen from the Earth.
58	Cat's Eye Nebula	The Cat's Eye Nebula was one of the first nebulae discovered, first observed by William Herschel in the constellation of Draco in the Northern Hemisphere in 1786. The Cat's Eye Nebula is around 3,300 light years from Earth.
59	Monocerotis Nebula	The Monocerotis Nebula or V838 Moncerotis, as it is also known is a red variable star in the constellation of Monceros, which lies around 20,000 light years from the Earth. The red star is engulfed by its planetary nebula. In 2002, the star was observed having a major outburst, which reason for which is still yet to be confirmed by astronomers.
61	Galaxies	This artist's impression of the distant galaxy SMM J2135-0102 shows large bright clouds a few hundred light-years in size, which are regions of active star formation, These "star factories" are similar in size to those in the Milky Way, but one hundred times more luminous, suggesting that star formation in the early life of these galaxies is a much more vigorous process than typically found in local galaxies.
63,64	Stellar Classification (Luminosity Class)	Stars are classified in two systems, both of which can be found on Hertzsprung Russell diagrams. The first system is the Morgan-Keenan system which classifies stars in the order of O, B, A, F, G, K, M, L T. And the second is in roman numerals which classify the stars in the order of O, Ia, Ib, II, III, IV, V, VI, VII. Stars are classified by their observed colours.
67	Black Hole	The result of a collapsed star of around 30+ solar masses after supernova. The gravitational fields of black holes are so strong that not even light can escape, hence them being called 'black' holes.
71	Supernova	This stunning picture of Cas A is a composite of infrared (red), optical (yellow) and X-ray (green and blue) images. The infrared image from the Spitzer Space Telescope reveals warm dust in the outer shell with temperatures of about 25 degrees

		<p>Celsius, whereas the optical image from the Hubble Space telescope brings out the delicate filamentary structures of warmer (10,000 Celsius) gas; Chandra shows hot gases at about 10 million degrees Celsius. This hot gas was created when ejected material from the supernova smashed into surrounding gas and dust at speeds of about ten million miles per hour. A comparison of the infrared and X-ray images of Cas A should enable astronomers to determine whether most of the dust in the supernova remnant came from the massive star before it exploded, or from the rapidly expanding supernova ejecta.</p>
75, 76	Planetary Disk Illustration	<p>Planetary disks are found around newly formed stars, and are typically made up of gaseous material. The materials of the disc eventually form planets, asteroids and other solar system objects.</p>
79	Illustration of extrasolar planet (transit)	<p>The first exoplanet was discovered in 1992, and since then over 1700 planets have been discovered and confirmed. One method of finding exoplanets is looking for discrete dips in the brightness of nearby stars, caused by the orbiting planet passing in front of the star.</p>
83,84	Planet forming disk	<p>In current theories of how stars and planets are created, astrophysicists believe that as nebulae collapse, a star in the centre of the nebula disk forms, and is then surrounded by a planetary disk. The materials in the planetary disk later coalesce to form larger objects, such as planets, asteroids, or other objects found in a solar system.</p>
87,88,89	distant galaxies	<p>The image shows a rich tapestry of 7,500 galaxies stretching back through most of the universe's history. credit: HST</p>
91	Illustration of extrasolar planet	<p>The image shows an impression by David A. Hardy of a possible scene from a moon orbiting the extra-solar planet in orbit around the star HD70642. credit: NSF</p>
95	Gliese 667	<p>A trinary star system found in the constellation of Scorpius, around 22.1</p>

		light years from Earth. The stars have exoplanets have stars orbiting, meaning these exoplanets would, at certain points of their orbit see three stars in the sky.
96	planet impact	The image depicts how many astrophysicists think the moon was formed. By the impact of a larger object with what was then the Earth. The smaller object was then bound by the gravitational field of the larger object, giving rise to the Earth-Moon system.
99	Life in jovian planet	Some theories suggest life could form in Jovian planets, although it is unlikely. Jovian planets may have the materials needed to form life, although it is not understood fully what conditions are needed for a planet to harbor life.
100	Triple star sunset in an extrasolar planet	Artist's conception of the three suns and the newly discovered Jupiter-sized planet from the perspective of a hypothetical moon orbiting the planet. The large yellow sun is already halfway over the horizon. The orange and red suns are still visible in the sky. This artist's animation shows the view from a hypothetical moon in orbit around the first known planet to reside in a tight-knit triple-star system. HD 188753 Ab is a gas giant planet, about 1.14 times the mass of Jupiter, with an orbital period of 3.3 days discovered using the Keck I telescope atop Mauna Kea in Hawaii, and zips around a single star that is orbited by a nearby pair of pirouetting stars. credit: NASA