The **Solar System** is the <u>gravitationally</u> bound <u>planetary system</u> of the <u>Sun</u> and the objects that orbit it, either directly or indirectly. Of the objects that orbit the Sun directly, the largest are the <u>eight</u> <u>planets</u>, with the remainder being smaller objects, such as the <u>five dwarf planets</u> and <u>small Solar System bodies</u>. Of the objects that orbit the Sun indirectly—the <u>moons</u>—two are larger than the smallest planet, <u>Mercury</u>. Idl

The Solar System <u>formed 4.6 billion years ago</u> from the <u>gravitational collapse</u> of a giant interstellar <u>molecular cloud</u>. The vast majority of the system's <u>mass</u> is in the Sun, with the majority of the remaining mass contained in <u>Jupiter</u>. The four smaller inner planets,

Mercury, <u>Venus</u>, <u>Earth</u> and <u>Mars</u>, are <u>terrestrial planets</u>, being primarily composed of rock and metal. The four outer planets are <u>giant planets</u>, being substantially more massive than the terrestrials. The two largest, Jupiter and <u>Saturn</u>, are <u>gas giants</u>, being composed mainly of <u>hydrogen</u> and <u>helium</u>; the two outermost planets, <u>Uranus</u> and <u>Neptune</u>, are <u>ice giants</u>, being composed mostly of substances with relatively high melting points compared with hydrogen and helium, called <u>volatiles</u>, such as water, <u>ammonia</u> and <u>methane</u>. All eight planets have almost circular orbits that lie within a nearly flat disc called the <u>ecliptic</u>.

Unless the Polish court case changes anything – and that's a big if – individual member states will have two years to turn the new rules into their own national law. To help clear things up, here's WIRED's guide to the EU Directive on Copyright.

The Directive on Copyright and its most controversial component, Article 13, requires online platforms to filter or remove copyrighted material from their

The Solar System also contains smaller objects. [e] The <u>asteroid belt</u>, which lies between the orbits of Mars and Jupiter, mostly contains objects composed, like the terrestrial planets, of rock and metal. Beyond Neptune's orbit lie the <u>Kuiper belt</u> and <u>scattered disc</u>, which are populations of <u>trans-Neptunian objects</u> composed mostly of ices, and beyond them a newly discovered population of <u>sednoids</u>. Within these populations are several dozen to possibly tens of thousands of objects large enough that they have been rounded by their own gravity. [10] Such objects are categorized as <u>dwarf planets</u>. Identified dwarf planets include the asteroid <u>Ceres</u> and the trans-Neptunian objects <u>Pluto</u> and <u>Eris</u>. [e] In addition to these two regions, various other small-body populations, including <u>comets</u>, <u>centaurs</u> and <u>interplanetary dust clouds</u>, freely travel between regions. Six of the planets, at least four of the dwarf planets, and many of the smaller bodies are orbited by <u>natural satellites</u>, [f] usually termed "moons" after the <u>Moon</u>. Each of the outer planets is encircled by <u>planetary rings</u> of dust and other small objects.

The <u>solar wind</u>, a stream of charged particles flowing outwards from the Sun, creates a bubble-like region in the <u>interstellar medium</u> known as the <u>heliosphere</u>. The <u>heliopause</u> is the point at which pressure from the solar wind is equal to the opposing pressure of the <u>interstellar medium</u>; it extends out to the edge of the <u>scattered disc</u>. The <u>Oort cloud</u>, which is thought to be the source for <u>long-period comets</u>, may also exist at a distance roughly a thousand times further than the heliosphere. The Solar System is located in the <u>Orion Arm</u>, 26,000 light-years from the center of the <u>Milky Wayg</u>alaxy.