## **Game Description**

Humanity has decided to exploit the resources contained in asteroids. In order to do this, the settlers have to build a space station in the asteroid belt. The resources to build a space station would be too expensive to transport there, so the settlers must mine them from the asteroids.

Players of the game control the settlers. Settlers wander in the asteroid belt with single person spaceships looking for resources.

Asteroids are covered in rocks. The depth of this rock mantle can vary from asteroid to asteroid. The important resources (water ice, iron, carbon, uranium, etc.) can be found in the core of the asteroids. Some resources (like uranium) are highly radioactive. There can be hollow asteroids, whose core is empty. The core of an asteroid is always homogeneous; it is always made of a single kind of a material.

A settler can do one operation in a single move. There are several operations, like travelling, drilling, mining, building robots, building teleportation-gates, etc. When a settler travels, they go to a neighboring asteroid (an asteroid may have multiple hundreds of neighbors). When a settler drills, they deepen the hole in the mantle with one unit. When a settler mines, they extract the resource from the core of the asteroid. This is only possible if the mantle has been completely drilled through. A single settler can only carry 10 units of resources, that's the spaceships' capacity. A hollow asteroid, however, can be filled with a unit of resource, counting as an operation.

There are some dangers lurking in the asteroid belt. When a fully drilled asteroid with a radioactive core is at perihelion, the asteroid explodes and kills any settler on it. Radioactive material, therefore, can only be mined when the asteroid is at aphelion. Sometimes a sun storm reaches the asteroid belt, and it is also dangerous to the settlers. A settler can only survive a sun storm if they hide in the core of a hollow asteroid. This, of course, is only possible if the mantle has been drilled through.

When a fully drilled asteroid with water ice in its core is at perihelion, the water ice sublimates (disappears).

Using up a unit of iron, a unit of carbon and a unit of uranium, the settlers can build autonomous robots controlled by artificial intelligence. These robots can only travel between asteroids and drill holes. Robots cannot mine because they are unable to transport things. Rrobots, however, can survive radioactive explosions, and in this case they land on a neighboring asteroid. Sun storms do damage robots unless they hide in a hollow asteroid.

Using up two units of iron, a single unit of water ice and a single unit of uranium, the settlers can build a pair of teleportation-gates. The gates can be later deployed in the vicinity of the asteroid the settler is on. The two gates of a pair remain in contact for good, and entering either the traveller (settler, robot, etc) will be immediately transported to the other. The settler can bring the freshly built gates with themselves, but at the same time a single settler can only bring two gates.

The game can end in two ways. If all the settlers die, the players lose. If, however, they can mine at least three unit of each resource and they collect those materials on a single asteroid, they can build the space station and the players win the game.