In [geometry](https://en.wikipedia.org/wiki/Geometry), the tesseract is the [four-dimensional](https://en.wikipedia.org/wiki/Four-dimensional_space) analog of the [cube](https://en.wikipedia.org/wiki/Cube), the tesseract is to the cube as the cube is to the [square](https://en.wikipedia.org/wiki/Square_%28geometry%29). Just as the surface of the cube consists of six square [faces](https://en.wikipedia.org/wiki/Face_%28geometry%29), the hypersurface of the tesseract consists of eight cubical [cells](https://en.wikipedia.org/wiki/Cell_%28geometry%29). The tesseract is one of the six [convex regular 4-polytopes](https://en.wikipedia.org/wiki/Convex_regular_4-polytope).

The tesseract is also called an 8-cell, C, (regular) octachoron, octahedroid, cubic prism, and tetracube (although this last term can also mean a [polycube](https://en.wikipedia.org/wiki/Polycube) made of four cubes). It is the four-dimensional hypercube, or 4-cube as a part of the dimensional family of [hypercubes](https://en.wikipedia.org/wiki/Hypercube) or "measure polytopes".

In [geometry](https://en.wikipedia.org/wiki/Geometry), the tesseract is the [four-dimensional](https://en.wikipedia.org/wiki/Four-dimensional_space) analog of the [cube](https://en.wikipedia.org/wiki/Cube), the tesseract is to the cube as the cube is to the [square](https://en.wikipedia.org/wiki/Square_%28geometry%29). Just as the surface of the cube consists of six square [faces](https://en.wikipedia.org/wiki/Face_%28geometry%29), the hypersurface of the tesseract consists of eight cubical [cells](https://en.wikipedia.org/wiki/Cell_%28geometry%29). The tesseract is one of the six [convex regular 4-polytopes](https://en.wikipedia.org/wiki/Convex_regular_4-polytope).

The tesseract is also called an 8-cell, C, (regular) octachoron, octahedroid, cubic prism, and tetracube (although this last term can also mean a [polycube](https://en.wikipedia.org/wiki/Polycube) made of four cubes). It is the four-dimensional hypercube, or 4-cube as a part of the dimensional family of [hypercubes](https://en.wikipedia.org/wiki/Hypercube) or "measure polytopes".

In [geometry](https://en.wikipedia.org/wiki/Geometry), the tesseract is the [four-dimensional](https://en.wikipedia.org/wiki/Four-dimensional_space) analog of the [cube](https://en.wikipedia.org/wiki/Cube), the tesseract is to the cube as the cube is to the [square](https://en.wikipedia.org/wiki/Square_%28geometry%29). Just as the surface of the cube consists of six square [faces](https://en.wikipedia.org/wiki/Face_%28geometry%29), the hypersurface of the tesseract consists of eight cubical [cells](https://en.wikipedia.org/wiki/Cell_%28geometry%29). The tesseract is one of the six [convex regular 4-polytopes](https://en.wikipedia.org/wiki/Convex_regular_4-polytope).

The tesseract is also called an 8-cell, C, (regular) octachoron, octahedroid, cubic prism, and tetracube (although this last term can also mean a [polycube](https://en.wikipedia.org/wiki/Polycube) made of four cubes). It is the four-dimensional hypercube, or 4-cube as a part of the dimensional family of [hypercubes](https://en.wikipedia.org/wiki/Hypercube) or "measure polytopes".

**Spring Salad**

C:\Program Files (x86)\Microsoft Office\MEDIA\CAGCAT10\j0199283.wmfIt explores distant neighborhoods of the current incumbent solution, and moves from there to a new one if and only if an improvement was made. The local search method is applied repeatedly to get from solutions in the neighborhood to local optima. VNS was designed for approximating solutions of discrete and continuous optimization problems and according to these, it is aimed for solving [linear program](https://en.wikipedia.org/wiki/Linear_programming) problems, [integer program](https://en.wikipedia.org/wiki/Linear_programming) problems, mixed integer program problems, [nonlinear program](https://en.wikipedia.org/wiki/Nonlinear_programming) problems, etc.

**Spring Salad**

C:\Program Files (x86)\Microsoft Office\MEDIA\CAGCAT10\j0199283.wmfIt explores distant neighborhoods of the current incumbent solution, and moves from there to a new one if and only if an improvement was made. The local search method is applied repeatedly to get from solutions in the neighborhood to local optima. VNS was designed for approximating solutions of discrete and continuous optimization problems and according to these, it is aimed for solving [linear program](https://en.wikipedia.org/wiki/Linear_programming) problems, [integer program](https://en.wikipedia.org/wiki/Linear_programming) problems, mixed integer program problems, [nonlinear program](https://en.wikipedia.org/wiki/Nonlinear_programming) problems, etc.

**Spring Salad**

C:\Program Files (x86)\Microsoft Office\MEDIA\CAGCAT10\j0199283.wmfIt explores distant neighborhoods of the current incumbent solution, and moves from there to a new one if and only if an improvement was made. The local search method is applied repeatedly to get from solutions in the neighborhood to local optima. VNS was designed for approximating solutions of discrete and continuous optimization problems and according to these, it is aimed for solving [linear program](https://en.wikipedia.org/wiki/Linear_programming) problems, [integer program](https://en.wikipedia.org/wiki/Linear_programming) problems, mixed integer program problems, [nonlinear program](https://en.wikipedia.org/wiki/Nonlinear_programming) problems, etc.