We claim:

1. A fluorophosphate glass with high bone forming ability having metaphosphate units and fluorophosphate ~~units~~ ions [$P_2(O,F)_7$] in it made from a composition of (36-65) phosphorus pentoxide - (22-36) calcium oxide - (11-32) sodium oxide - (0.01-20) calcium fluoride - (0.01-12) zinc oxide, said percentages being molar percentages.

2. The composition for a bone graft substitute, scaffold or orthopaedic implant made of fluorophosphate glass as claimed in claim 1, wherein phosphorus pentoxide is substituted by any of the following: Ammonium di hydrogen phosphate, Phosphorus chloride, ammonium phosphate, calcium phosphate, sodium phosphate, and silver phosphate.

3. The composition for a bone graft substitute, scaffold or orthopaedic implant made of fluorophosphate glass as claimed in claim 1, wherein calcium oxide is substituted by any of the following: Calcium sulphate, calcium carbonate, calcium fluoride, calcium fluorophosphate, calcium chloride, calcium caseinate, and calcium bicarbonate.

4. The composition for a bone graft substitute, scaffold or orthopaedic implant made of fluorophosphate glass as claimed in claim 1, wherein sodium oxide is substituted by any of the following: Sodium carbonate, and sodium citrate.

5. The composition for a bone graft substitute, scaffold or orthopaedic implant made of fluorophosphate glass as claimed in claim 1, wherein calcium fluoride is substituted by any of the following: Calcium di fluoride, calcium tri fluoride, calcium fluorophosphate, and sodium fluoride.

6. The composition for a bone graft substitute, scaffold or orthopaedic implant made of fluorophosphate glass as claimed in claim 1, wherein zinc oxide is substituted by any of the following: Zinc, zinc chloride, zinc iodide, zinc fluoride, zinc sulphate.

7. The composition of claim 1, wherein the bioactive glass has a composition by either molar percentage or weight percentage:

Compound	Mol.%	Wt.%
P_2O_5	36-65	60-70
CaO	22-36	12-20
Na_2O	11-32	6-20
CaF_2	0.01-20	0.3-5
ZnO	0.01-14	0.1-12

8. Any bone graft substitute, scaffold or ~~O~~orthopaedic implant containing the composition of claim 1, wherein it is made essentially of said fluorophosphate glass or coated with said fluorophosphate glass for use in humans, farm animals or pet animals.