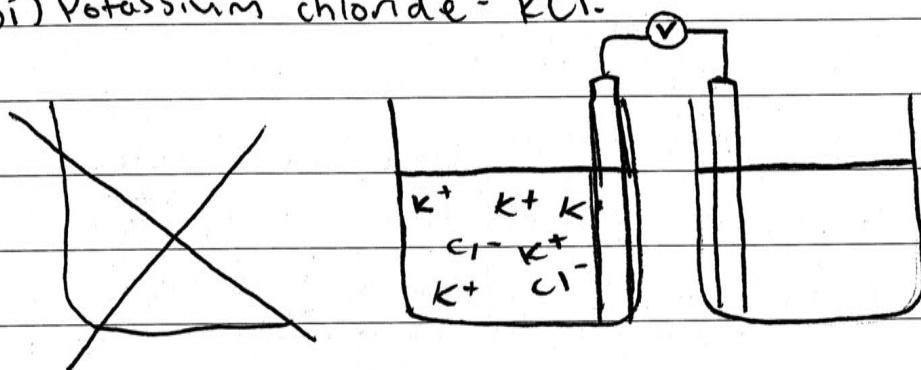


Start here.

a) As the artefact is mainly composed of wood, with a small piece of metal banding, the artefact would have been prone to the wood rotting and the effect of salt water on the metal banding. The artefact would be severely damaged.

bi) Potassium chloride - KCl.



iii) checking the flow of electrons.

c) Steel 1, with a composition of 99.8% Fe and 0.2% C would produce a hard steel. Steel 2 would also be quite strong and steel 3 would be the strongest, with the addition of magnesium. Steel 4 however would be weaker with the addition of chromium and nickel.

Start here.

di) The investigation could be performed in relation to oxygen, water and ~~temperature~~^{light}.

For oxygen, you would have 3 test tubes, first with normal conditions (water, oxygen & light), second with a seal of oil to prevent more oxygen from entering the system and third with all oil, which allows no oxygen.

For water, there would be firstly a control with ideal conditions, secondly a test tube with water covering half the nail, and thirdly a test tube with no ~~air~~ water whatsoever.

For light, three test tubes again. One in full sunlight all the time, second test tube changes between light and dark and third test tube all dark.

ii) Oxygen ~~contd~~ is reduced the further into the ocean you go, so naturally the rate of corrosion would be lower in these areas.

2) Techniques used for restoring and conserving wooden and ~~met~~ copper artefacts have many positives and negatives. An example being to simply chip away at deposits which have built up could actually destroy the artefact.

Immersion in acid baths can help to release some deposits but can also damage the original artefacts. Pieces of wood can be dried and restored or cast.

Additional writing space on back page.