Reading. THINKING SCIENTIFICALLY

In studying science one of the things you have to do is to learn to think scientifically. What does this mean? Well, it can best be understood by knowing the difference betseen a scientific statement and an unscientific statement.

A scientific statement is one which can be disproved by investigation. An example of a scientific statement is “potatoes contain starch”. We can test the statement by carrying out a simple chemical test on a potato.

Here is an example of an unscientific statement: “Britain is better under the Conservatives”. This is an unscientific statement because it cannot be tested by investigation and therefore cannot be disproved. I’s a statement not of science but of opinion.

Unscientific statements are sometimes made by manufacturers about their products. Here is an example. It is written on the side of the bottles containing a certain type of bleach which is used as a powerful disinfectant in the home: “THE FRESH SMELL TELLS YOU IT KEEPS ON KILLING GERMS.”

1.- Explain why it would be imposible to test this statement scientifically. Suggest a scientific statement wich the manufacturer might make about this particular product.

2.- Look the labels of various ítems at home. Find five statements which you think are scientific and five which are unscientific. Choose one of the unscientific statements and write a letter to the manufacturer criticising this kind of advertising.