

CH7: Physico-chemical analyses

ACTIVITY 1 : Is your tap water drinkable ?

■ Acquiring vocabulary: filling in the blanks

| English | French |
|---------------------------|--------------------------|
| A water sample | Un échantillon d'eau |
| An analysis, two analyses | Une analyse, 2 analyses |
| A conductimeter | Un conductimètre |
| Exposure to a chemical | Exposition à un polluant |
| An oil spill | Une marée noire |
| A landfill | Une décharge |
| Sewage | Les égouts |
| Leakage | Une fuite |
| Groundwater | Nappe phréatique |
| Kitchen tap | Eau du robinet |

■ Learning about water analyses : documents 1 to 3

According to **documents 1 to 3**, which common analyses are carried out on a sample?

Different ion concentrations are determined. Coliform bacteria colonies are counted.

Give examples of pieces of equipment that can be used?

One can use (for example) a conductimeter, a mass spectrometer, a gas chromatograph.

■ Analysing a laboratory report : documents 4 to 6

According to **documents 4 to 6**, is the Louisiana tap water drinkable?

This water is not drinkable. Indeed the number of bacterial colonies exceeds the amount recommended. Moreover, the ion concentration is above the recommended limit.

Similarly, in your opinion is the Fluvanna tap water drinkable?

This water seems to meet all requirements

Activity summary

What you must remember :

- vocabulary associated with water analysis

Skills linked to the curriculum :

| Compétences | Capacités à maîtriser |
|---|---|
| <ul style="list-style-type: none"> – APP | <ul style="list-style-type: none"> – Connaître le vocabulaire lié aux analyses d'une eau de ville |
| <ul style="list-style-type: none"> – APP – ANA – COM | <ul style="list-style-type: none"> – Citer des analyses physico-chimiques mises en œuvre dans le cadre d'études environnementales. |
| <ul style="list-style-type: none"> – APP – ANA – COM | <ul style="list-style-type: none"> – Savoir analyser, interpréter des résultats de dosage afin de déterminer la potabilité d'une eau de ville. |
| <ul style="list-style-type: none"> – COM | <ul style="list-style-type: none"> – Savoir présenter les résultats d'une analyse et des conclusions. |