Afin que les sujets de l'épreuve orale de DNL physique-chimie anglais soient cohérents entre eux, il a été décidé qu'ils devaient comprendre :

- du texte avec un maximum de 250 mots ;
- des documents d'illustration variés : graphe, diagramme, données physico-chimiques, images, histogrammes, spectres, représentations de molécules....
- une question finale d'ouverture ne faisant pas appel à des notions scientifiques et permettant d'ouvrir le débat.

Le contenu doit rester dans les compétences exigibles du programme de physique-chimie de Terminale S ou de première L/ES. La notion abordée par les documents doit être facilement et rapidement identifiée par l'élève.

Voici pour exemple un sujet de chimie et un sujet de physique.
Chemistry of a perfume bottle

Document 1: Natural occurrence of Aldehydes and Ketones

[http://chemwiki.ucdavis.edu]

Aldehydes and ketones are widespread in nature and are often combined with other functional groups. Aldehydes and ketones are known for their sweet and sometimes pungent odors. The odor from vanilla extract comes from the molecule vanillin. Likewise, benzaldehyde provides a strong scent. However, not all of the fragrances are pleasing. In particular, heptan-2-one provides part of the sharp scent from blue cheese.

![Vanillin](image1.png)

![Benzaldehyde](image2.png)

![Heptan-2-one](image3.png)

Document 2: Nerol and Geraniol

Nerol and geraniol are two chemicals with the formulae of C_{10}H_{18}O. To be even more precise, nerol and geraniol are almost the same substance. Chemists would say that they're isomeric forms for each other. This slight difference changes their smell. Nerol scent reminds of fresh sweet roses. Geraniol is often used to imitate the taste of many fruits.

![Nerol and Geraniol](image4.png)

Document 3: IR Spectrum of geraniol

Researchers began using infrared cameras to diagnose thermal envelope defects in the late 1970s.

Document 4: IR Astronomy

Infrared astronomy is the branch of astronomy and astrophysics that studies astronomical objects visible in infrared (IR) radiation. The wavelength of infrared light ranges from 0.75 to 300 micrometers. Infrared radiation is absorbed at many wavelengths by water vapor in the Earth's atmosphere, so most infrared telescopes are at high elevations in dry places, above as much of the atmosphere as possible. Cold, dark molecular clouds of gas and dust in our galaxy will glow with radiant heat as they are irradiated by embedded stars. Infrared can also be used to detect protostars before they begin to emit visible light. Stars emit a smaller portion of their energy in the infrared spectrum, so nearby cool objects such as planets can be more readily detected.

Present and comment on these documents. Focus on at least one chemistry topic. To what extent does Chemistry take part of everyday life?