

Chemistry

Delprov A2
engelsk version

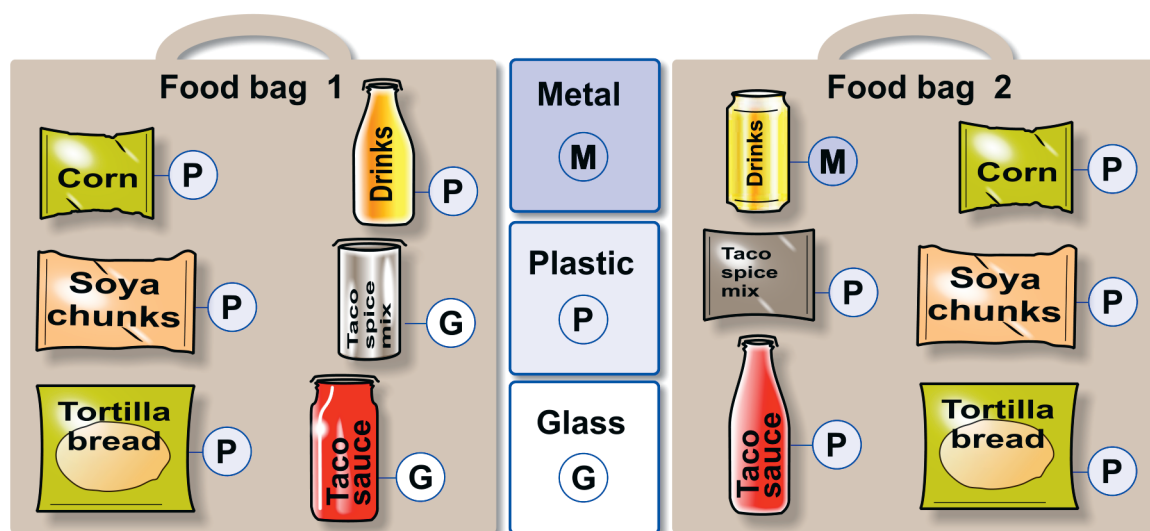
Årskurs

9

Elevens namn och klass/grupp

11. Choice of food bag ("Matkasse")

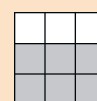
At supermarkets, the same food can be sold packed in different materials. The different materials affect the environment more or less. A supermarket wants to change into more environmental-friendly packaging. The store has developed two food bags containing a "Taco-dinner". The groceries are packed in different material. The store needs help from their customers to offer the most environmental-friendly food bag as "Taco-dinner".



Your task is to write a proposal where you recommend Food bag 1 or Food bag 2. The purpose of the proposal is to give the store possibilities to make a decision based on scientific arguments.

You will in the proposal:

- Use information from the fact sheet**
 Compare the three packaging materials in Food bag 1 and Food bag 2 regarding the aspects raw material, production and properties. State the advantages and disadvantages of the three packaging materials, regarding these three aspects.
- Take a view**
 Recommend one of the food bags.
- Use knowledge of chemistry**
 Reason in two steps regarding the three of the advantages and one of the disadvantages with the food bag you recommend.
- Adjust your text**
 Be objective and reason based on scientific arguments.



| Fact sheet | | Material | | |
|------------|--------------|---|---|---|
| | | Metal | Plastic | Glass |
| Aspects | Raw material | The raw material is extracted from minerals, for example bauxite. | The raw material is crude oil. | The raw material is sand, sodium hydroxide and calcium hydroxide. |
| | | Imported for example from Brazil and Australia. | Imported for example from Norway. | Imported for example from Belgium. |
| | Production | Energy consumption in production is approximately 150 kJ/g. | Energy consumption in production is approximately 50 kJ/g. | Energy consumption in production is approximately 15 kJ/g. |
| | | 95 % of the energy is saved when recycling instead of new production. | 50 % of the energy is saved when recycling instead of new production. | 20 % of the energy is saved when recycling instead of new production. |
| | Properties | Density 2,7 g/cm³. | Density 1,4 g/cm³. | Density 2,5 g/cm³. |
| | | Is possible to melt and reshape. | Is partly possible to melt and reshape. | Is possible to melt and reshape. |

[illegible]

[illegible]



Institutionen för tillämpad utbildningsvetenskap