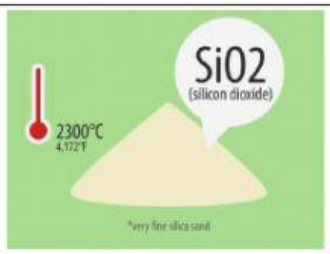
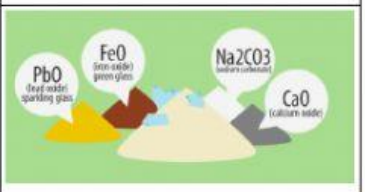
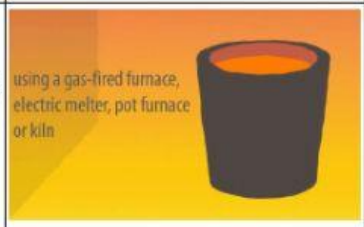
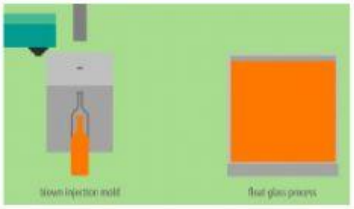
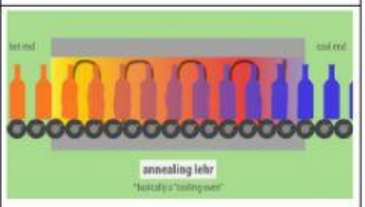
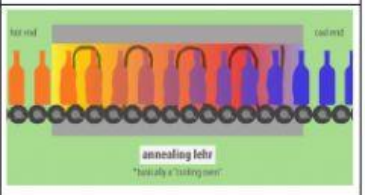
How is glass made?

1. Watch the videos and fill the gaps.

1st. **Sand** is the main **ingredient** for _____ **glass**. Containing mostly ***silicon dioxide***, **sand** _____ at 2300° Celcius.	
2nd. **Common commercial glass is made** with ***sand*** _____ with _____ ***glass***, ***soda ash*** *(Na_2CO_3, ceniza)* and _____ *(CaO, cal)*.	
3rd. The ***soda ash*** *(Na_2CO_3, ceniza)* lowers the **sand**'s _____ **point**, **making** it more energy efficient to _____.	
4th. While the _____ *(CaO, cal)* **counters** (contrarresta) the **soda-ash**'s **effect** of **making** glass _____ in **water**.	
5th. Other _____ **can be added** to **color** the glass or give it other _____.	
6th. The _____ **is** now **molten** (= melted) into a _____.	
7th. Then the **molten glass is homogenised** and more **chemicals can be** _____.	

LIVEWORKSHEETS

8th. At this point the **glass is** _____ in its required **form**, for example as a _____ or **pane**[1].	
9th.a The final **step is** a controlled _____ of the still **hot glass object** in a specialised ... _____ called an ***annealing lehr*** (horno de recocido).	
9th.b _____ **annealing** (recocer) **glass** is significantly **weaker** **(más débil)**.	
10th. To **increase strength** (fortaleza) even more, **glass can be toughened** (endurecido) or **tempered** (templado) using _____ and … _____ **treatments** (tratamientos).	

1 A **flat piece** of **glass**.

LIVEWORKSHEETS