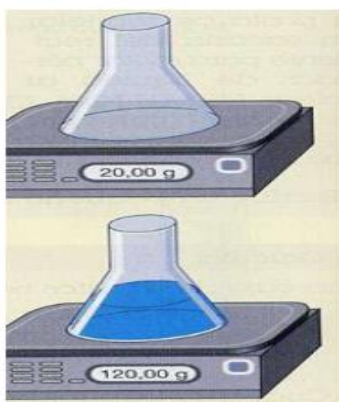


1ª EVALUACIÓN FISICA & QUIMICA – 2º ESO UNIT 2: ACTIVITIES. MATTER AND ITS PROPERTIES		Grupo:	Nota:
Apellidos:	Nombre:	Fecha:	Faltas:

- Imagine a scale with two balloons on each end. One of the balloons is filled and one is empty. Which balloon weighs more? Why?
- Give three examples of general properties and three examples of specific properties.
- Indicate if the following properties are specific or not explaining briefly why:
 Combustibility, mass, weigh, conductivity, colour, pressure, velocity, hardness, length, surface and solubility.
is /is not a specific property because it can / cannot be used to identify substances.
- Calculate the mass of the following liquid:



- There are three containers with water, alcohol and olive oil. Indicate which is in each bottle



PROPERTY	Specific?	A	B	C
MASS		3 Kg	4 Kg	3 Kg
COLOUR		Colourless	Colourless	Yellow
COMBUSTIBILIDAD	YES	NO	YES	YES
SUSBTANCES				

- 6) Calculate the density of an object with a mass of 0,5 Kg with a volume of 2 m³.
- 7) Two balls, one made of lead and another made of gold, with the same volume are sunk in water . Which ball will increase more the level of water?
Why ?
- 8) There are two boxes, one made of iron and the other made up of cardboard. Choose the correct answer:
- a) The larger box has a higher density
 - b) The heavier box has a higher density.
 - c) The iron box has a higher density.
- 9) Indicate whether the following bodies are of the same substance.

	A	B	C
MASS	500 g	25 Kg	0,1 Kg
VOLUME	0,5 L	25 L	0,1 L
DENSITY (Kg/L)			
SUBSTANCE			

Which properties have helped you to identify the substances?

Why?

- 10) Indicate the physical state:

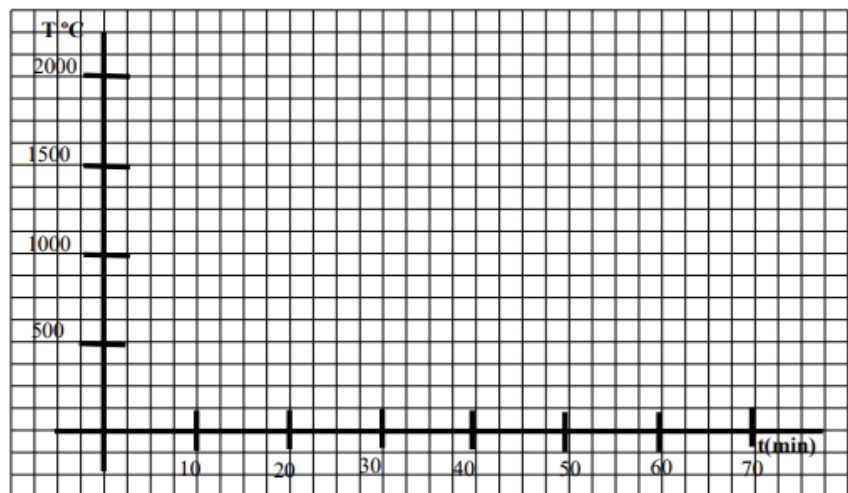
TEMPERATURE	-50 ° C	60 ° C	500 ° C
SUBSTANCE	PHYSICAL STATE?	PHYSICAL STATE?	PHYSICAL STATE?
WATER	SOLID		
LEAD (POMO)			
OXYGEN			GAS
MERCURY			
ALCOHOL			
ACETONA			

Freezing and boiling points of some substances.							
Substance	Water	Alcohol	Lead	Iron	Mercury	Oxygen	Acetone
Tf (°C)	0	-117,3	328	1539	-38,5	-219	-95,4
Te (°C)	100	78,4	1749	2740	357	-183	58,5

11) What are the differences between boiling and evaporation?

12) It has been measured the temperature of a substance, while it was heating up, with the following results:

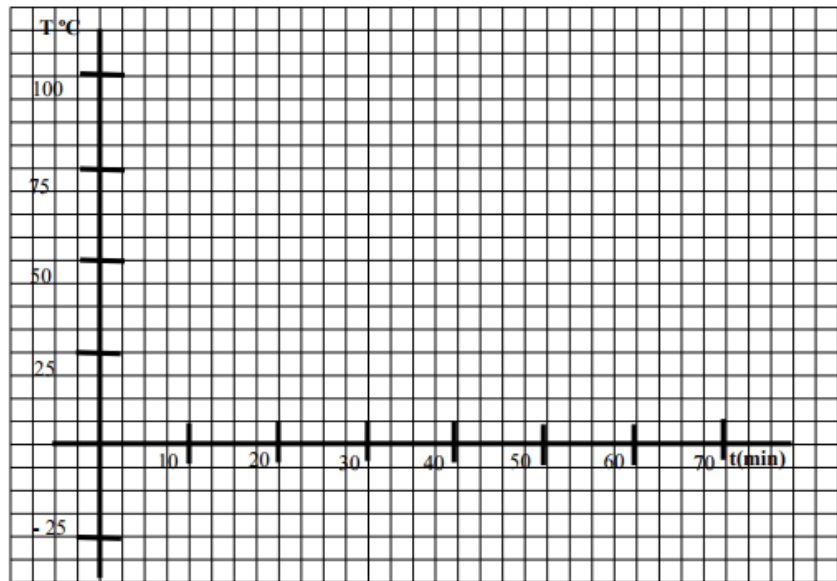
t (min)	T (° C)
0	100
5	150
10	250
15	328
20	328
25	328
30	800
35	1300
40	1500
45	1750
50	1750
55	1750
60	1750
65	1800
70	1900



- Make a graph using the table
- Indicate, in the graph, the physical states (solid, liquid and gas) of this substance.
- Indicate, in the graph, where have the changes of state occurred.
- What is the substance?

13) It has been measured the temperature of a substance, while it was introduced in a fridge, with the following results:

t (min)	T (°C)
0	80
5	60
10	40
15	20
20	0
25	0
30	0
35	0
40	0
45	-5
50	-10
55	-15
60	-20



- Make a graph using the table
- Indicate, in the graph, the physical states (solid, liquid and gas) of this substance.
- Indicate, in the graph, where have changes of state occurred?
- What is the substance?

14) When a gas occupies a volume of 2.5 m^3 , its pressure is 2.0 Pa . Use this information to complete the table below:

P (Pa)	2		20		4
V (m^3)	2,5	5		1,25	

15) When a gas occupies a volume of 2.5 m^3 , its temperature is 500 K . Use this information to complete the table below:

P (Pa)	500		250		100
V (m^3)	2,5	5		25	

16) Do the following conversions:

- 20°C to K
- 550 K to $^\circ\text{C}$
- -10°C to K
- 150 K to $^\circ\text{C}$