Registration sheet

Experimental activity: Reversible transformations

You already know that the water cycle shows that some materials, such as water, change their physical state.
The same happens with materials like glycerine (candles).

We're going to carry out experiments with the following materials:
water, paraffin and salt.

Can these materials return to their original state after changing their physical state?

I think that…

Let's try it out, observe and record it.

fusion/solidification

1st

Paraffin (unlit candle)

state_____

2nd

The candle was lit.

Paraffin _____, passed into the state _____.

3rd

The paraffin has fallen into the cold dish and _____.

It passed into the state _____.

solidification / fusion

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1st

Water at room temperature.

State _____

2nd

The water bottle was placed in the _____.

The water _____, is now _____.

3rd

We took the bottle of water out of the freezer and the ice (frozen water) _____.

The water is now _____.

evaporation/ condensation

1st

Water in the bag.

State _____

2nd

The bag was placed in the sun. Some of the water _____.

The water _____, is now _____.

3rd

Water droplets formed inside the bag, because the bag was colder than the air inside it. It is _____. _____.

The water is now _____.

➢ **What can we conclude?** Circle the correct option..

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The paraffin and water **have changed/not changed** their physical state.
The paraffin and water **have returned/not returned** to their original state.

- Complete with the words from the box:

temperature/ reversible/ transformations

We can say that solidification, fusion, evaporation and condensation are _____ _____.

What contributes to (causes) these changes of state is the _____.

Dissolution

1st

Salt crystals.

State _____

2nd

The salt crystals were mixed with the liquid water. Stir very well and the salt _____/ _____.

The salt _____, passed into the state _____.

3rd

The water in which the salt was dissolved _____ and the small pieces of salt remained at the bottom of the container.

The salt has returned to _____.

Learn more...

- **Dissolution is also a reversible transformation that happens when we add a solute (salt, sugar, ...) to a solvent (water ...), forming a**

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solution. When the water in the solution evaporates, the salt remains at the bottom of the container, returning to its initial state.

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