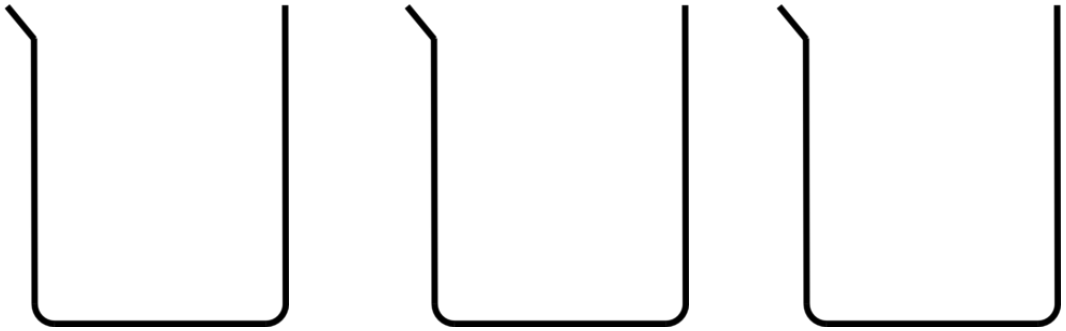
Watch the Reversible and Irreversible Changes, and the Chemical Reactions videos to find out the answers to these questions.

Reversible reactions

Question 1) What are the three states of matter in Science? What do the molecules in each look like? Can you label how strong the bonds are between each of the molecules in each state?



Question 2) Complete the sentences below:

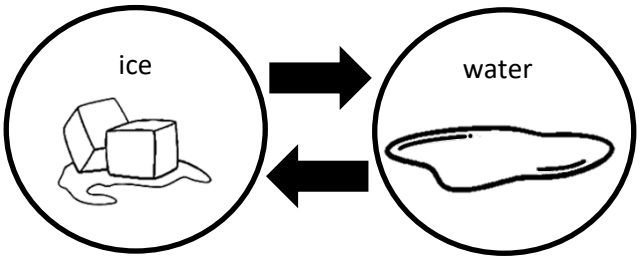
When a solid turns in to a liquid, we call it _____.

When a gas turns in to a liquid we call it _____.

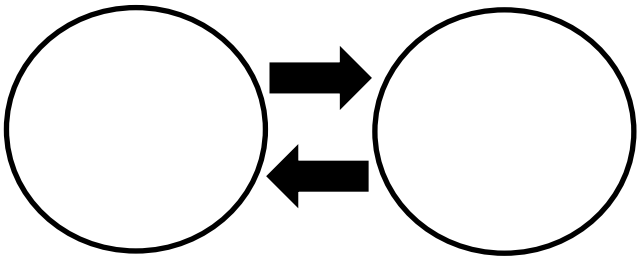
When a liquid turns in to a solid, we call it _____.

When a liquid turns in to a gas we call it _____.

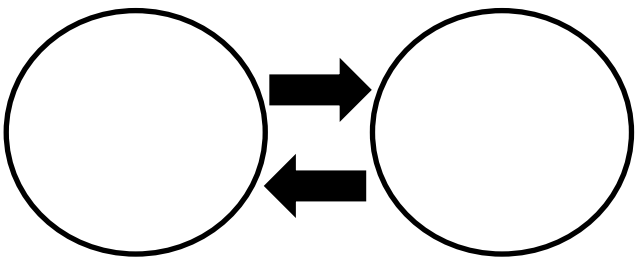
Question 3) Give three examples of reversible reactions. Name and draw some examples in the circles. On the line below write what state they are in. See the example.



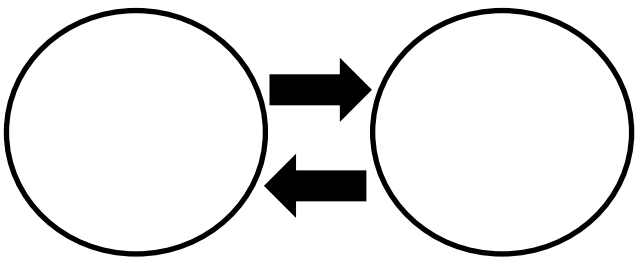
solid liquid



_____ _____



_____ _____

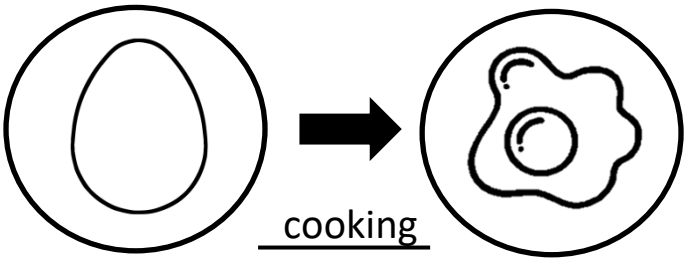


_____ _____

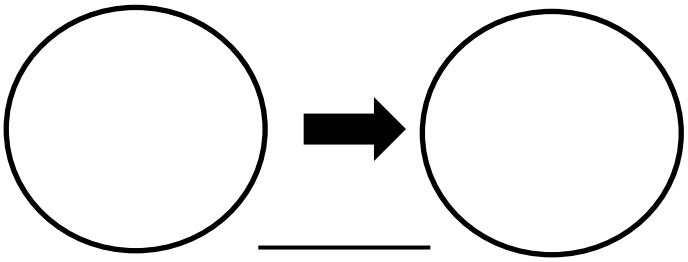
Watch the Reversible and Irreversible Changes, and the Chemical Reactions videos to find out the answers to these questions.

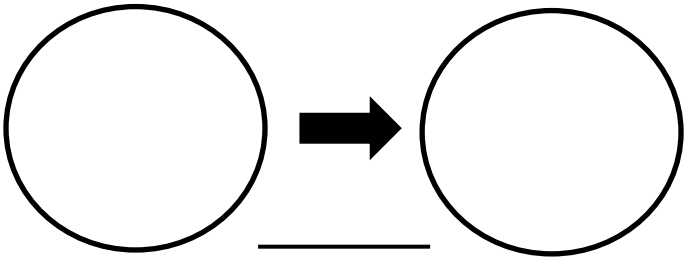
Irreversible reactions

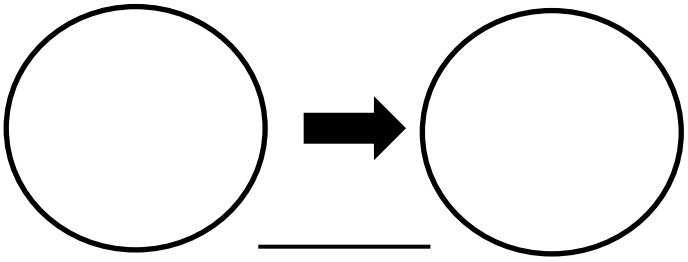
Question 4) Give three examples of irreversible reactions. What process has caused the change?



Cooking an egg







Question 5) Label the diagram of the candle burning to explain what is happening.

Label and name the fuel

Label the burning wick

Label the carbon dioxide being produced.

Wax melting is a

_____

change.

A candle burning is an

_____

change.

Watch the Reversible and Irreversible Changes, and the Chemical Reactions videos to find out the answers to these questions.

Chemical reactions

Question 6) Complete the sentence below by filling in the missing words:

A chemical reaction is where at least two substances _____ to create a new substance.

This means the _____ holding each of the original substances together have been broken and new _____ have been made.

We can tell if a chemical reaction has taken place because _____ is produced (often seen as bubbles or fizzing), _____ is produced and a new substance is formed.

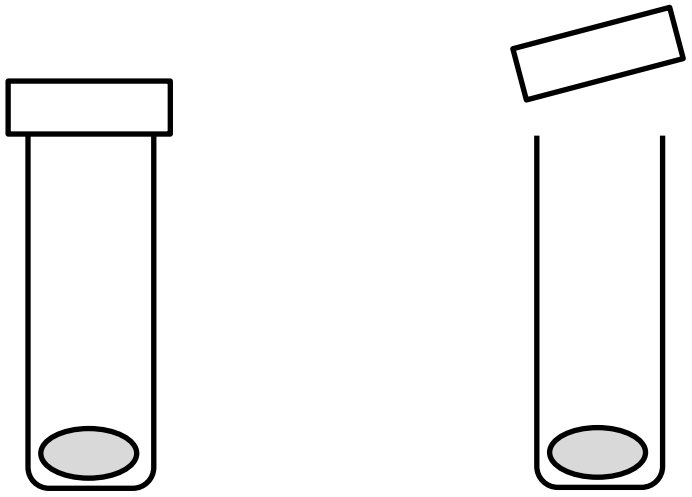
A chemical reaction is always _____.

Question 7) label the diagram and explain why the lid is forced off the container.

Label the following:

- Effervescent tablet
- Water
- Lid
- Tube
- Carbon dioxide
- Pressurised container

You might want to add your own explanation.



Question 8) Answer the following questions:

What gas is produced when bicarbonate of soda mixes with vinegar?

_____

What is an 'exothermic reaction'?

_____

Give 5 examples of chemical reactions you might see in everyday life.

_____

_____

_____