3.1	A student has a beaker of water at 20 °C which is placed on a tripod. A Bunsen
	burner is placed underneath the beaker and a lid is then placed on top of the
	beaker. The Bunsen burner is turned on, heating the water until it starts to boil at
	100 °C

Describe and explain the changes in the arrangement and movement of the particles as the water's temperature rises and then boils.

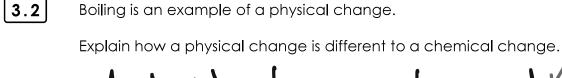
In a liquid the particles are close traither moving randamly and are free to more around one another.
moving randarly and are fre to more around
are auother.
As the temperature increaser the particles
As the temperature increaser the particler more forter as they gain kinetic and potential energy.
sotatiel energy.
Then the lieund starts boiling the
Un the liquid starts boiling the temperature remains constant. This is because
all the every supplied isist increasing the
all the energy supplied isn't increasing the kintic energy of the particler, it is
increasing their potential evenue.
As it turns into a got the particular
Spread out and more randomly in all
direction with a range of speeds.

6 marks









A physical change can be reversed and the material retains its original properties.

1 mark

3.3 State what happens to the mass of the water as it boils to become a gas.

The mans of voter remains the same / (it has just changed state).

1 mark



