

## Conduction, convection, and Radiation

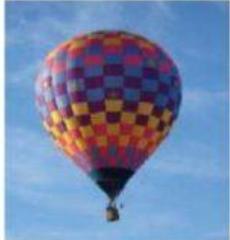
Last Name:	First Name:	Period: _____	Date: _____
------------	-------------	---------------	-------------

### Review

	Transfer of heat by	Example
Conduction	Contact	• Touching a hot rod
Convection	Moving of air/liquid Hotter rises Less hot(colder) sinks	❖ Boiling water ❖ Wind ❖ Magma inside the earth
Radiation	Transfer by waves No contact	➢ Sun ➢ Radiator ➢ microwave

## Questions 1

**Instructions:** Label the picture as Conduction, Convection or Radiation

Heat from camo fire 	Heat from your hand melts the ice 	Hotter air rises 
You touch a remote control 	Food gets cooked on the hot pavement 	Boiling H <sub>2</sub> O 

Warm food in a microwave



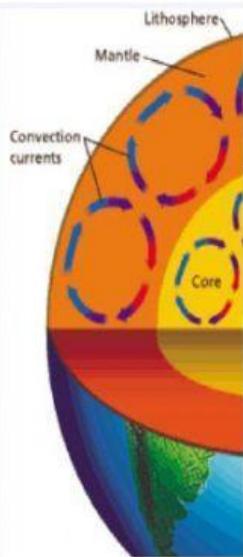
The hot air from the hairdryer rises and as it cool down sinks



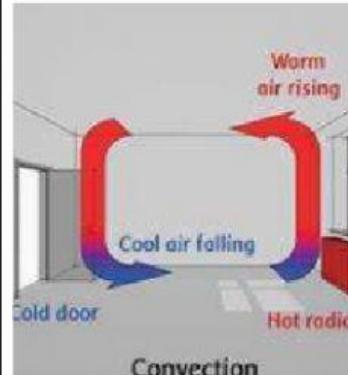
Pan on a stove



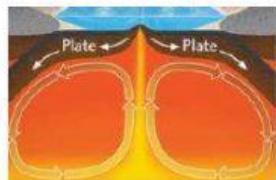
Hot magma rises and less hotter sinks



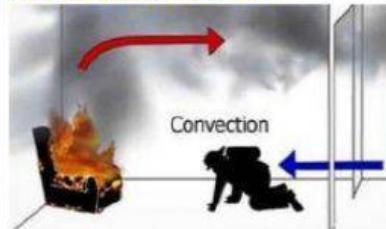
Heat rises – cold sinks



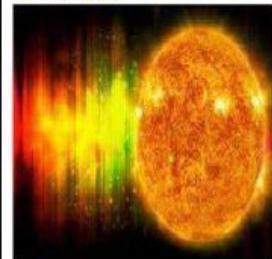
Hotter Magma rises and less hotter sinks



Circulation of air

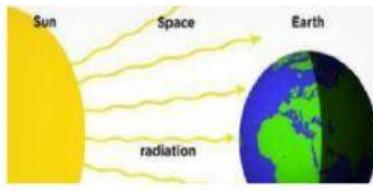
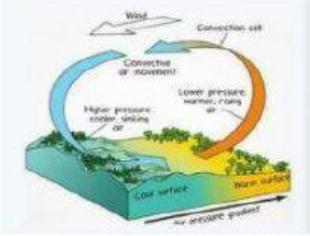
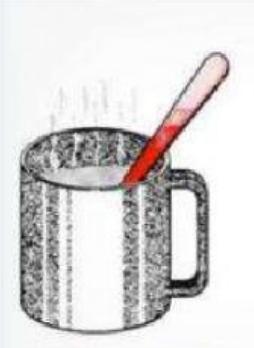


The sun



Electromagnetic radiation



<p><b>The sun heat</b></p> 	<p><b>The air movement is by Con....</b></p> 	<p><b>The wind moves because...</b></p> <p><b>WIND</b></p> 
	<p><b>Spoon get hotter by contact</b></p> 	<p><b>Touching a hot handle</b></p>  <p><b>Conductive Heat Transfer</b></p>

## Questions 2

The first statement of the **2nd law of thermodynamics** - **heat flows** spontaneously from a **hot** to a **cold** body.

It tells us that an ice cube must melt on a **hot** day, rather than becoming colder. **In other words**, the ice cube **will not** give away energy to a hotter object and become colder (**this will not make any sense**)

**Instructions:** Use the above paragraph to complete the sentences