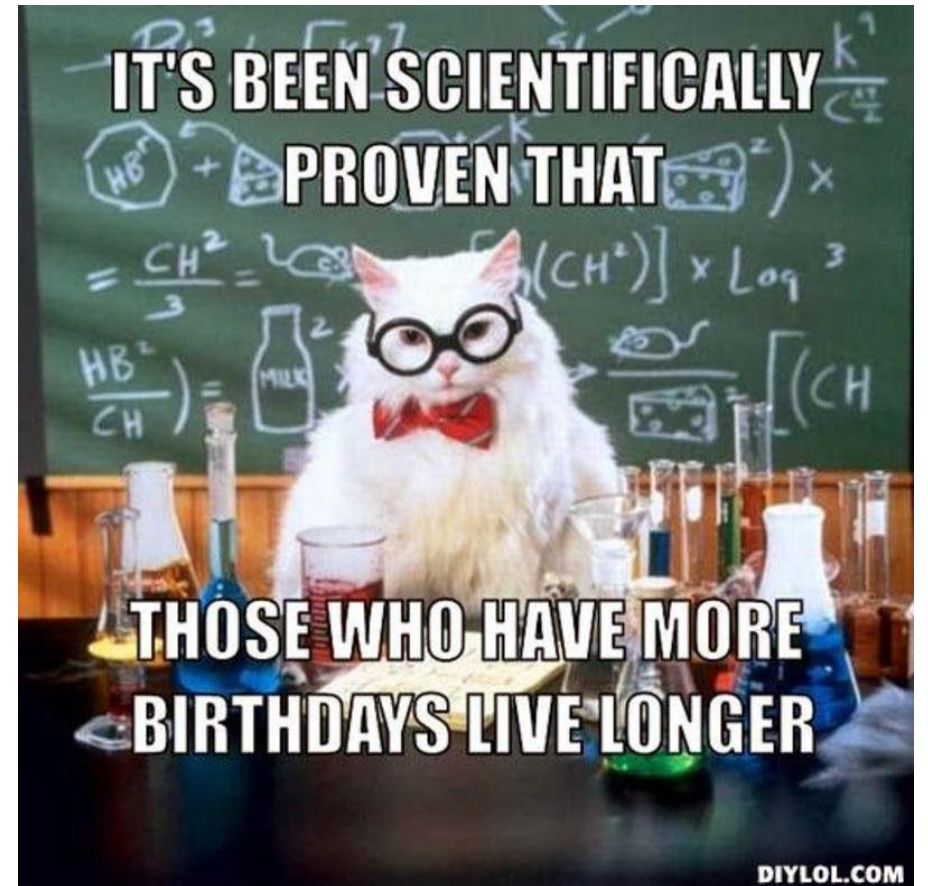


BEFORE CLASS BEGINS...

- **Grab the paper at the door.**
- **Pull out Page 15. Hold onto it.**
- **Pull out HW Chapter 11.2.**
Make sure that your name, date, and block are on it.
- **Don't forget Quiz is on Friday.**



PAGE 15 – THERMAL ENERGY TRANSFER

8TH GRADE SCIENCE



PAGE 15 ONLINE ACTIVITY

Log onto LMS and click the link, called [Page 15 Online Activity](#).

Scientist: _____ Date: _____ Block: _____

15

8th Grade Science

Unit 2: The Physical Properties of Matter Thermal Energy Transfer

Online Activity

Directions: Log onto the LMS. Select the link called Page 15 Online Activity. Navigate through the activity and fill in the graphic organizer below.

The energy of motion is called...



1. _____

It is measured as –



2. _____

Which determines an object's



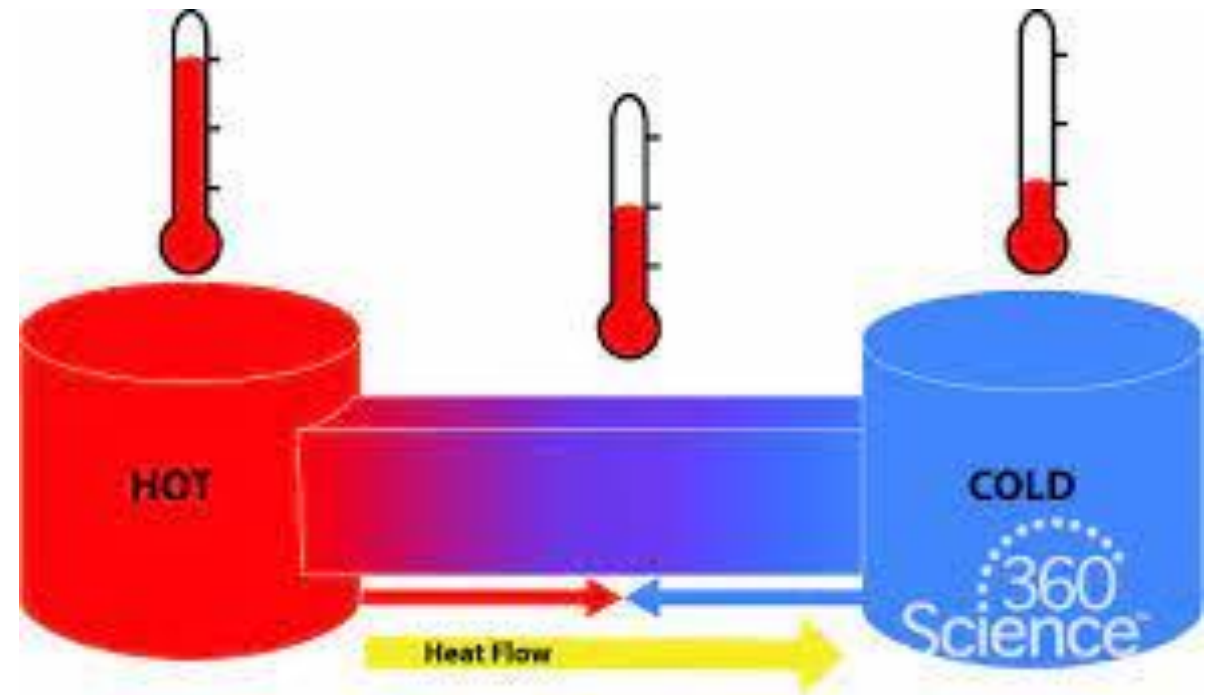
3. _____

It is found in a cup of water and a pool.
Comparatively, the pool contains

Which flows from...

HEAT

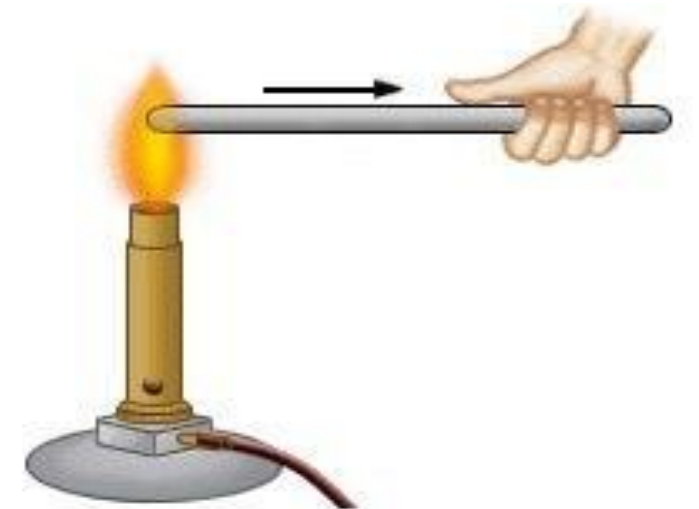
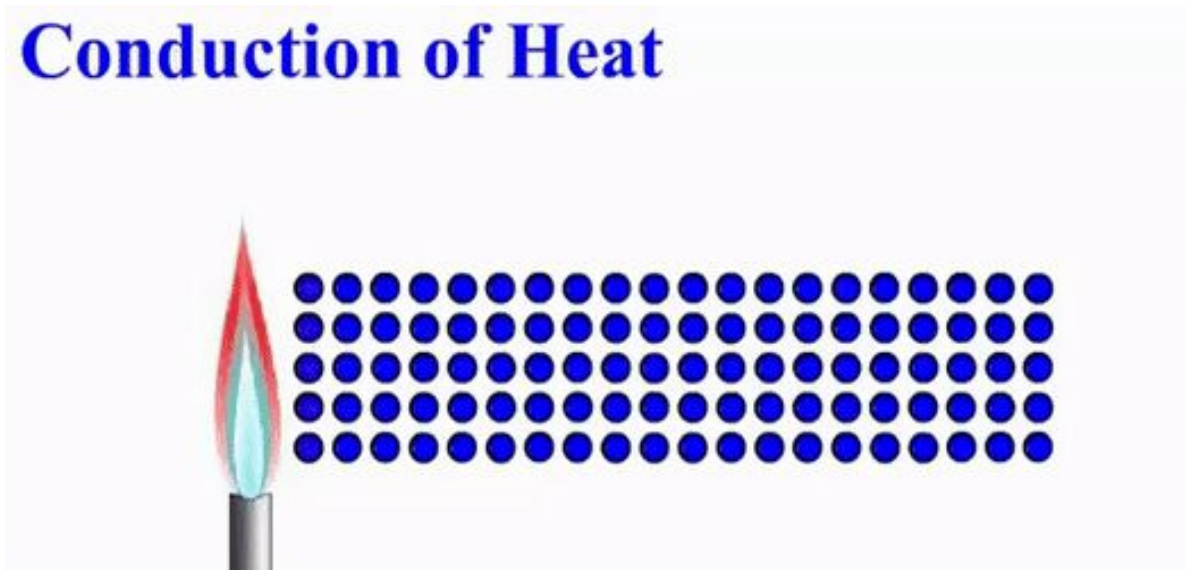
- Heat is thermal energy that is moving or is capable of moving.
- Thermal energy transfer is a process that occurs, when two systems interact.
- Thermal energy transfer is also referred to as heat transfer.



THERMAL ENERGY TRANSFER

- There are three thermal energy transfer methods:
 - Conduction
 - ✓ The transfer of heat through direct touch

Conduction of Heat



THERMAL ENERGY TRANSFER

□ There are three thermal energy transfer methods:

□ Convection

✓ The transfer of heat by the motion of fluid molecules, including a liquid or a gas.



THERMAL ENERGY TRANSFER

□ There are three thermal energy transfer methods:

□ Convection

✓ During convection, heat is transferred through the circular movement of particles, which creates a convection current.

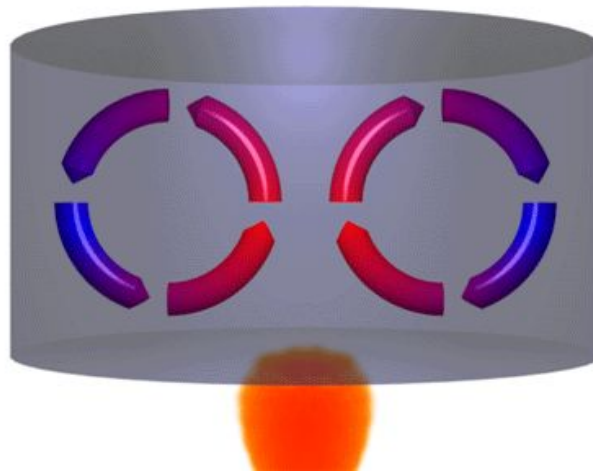


THERMAL ENERGY TRANSFER

□ There are three thermal energy transfer methods:

□ Convection

- ✓ In a convection current, warm particles rise, while cool particles fall, creating the circular current.

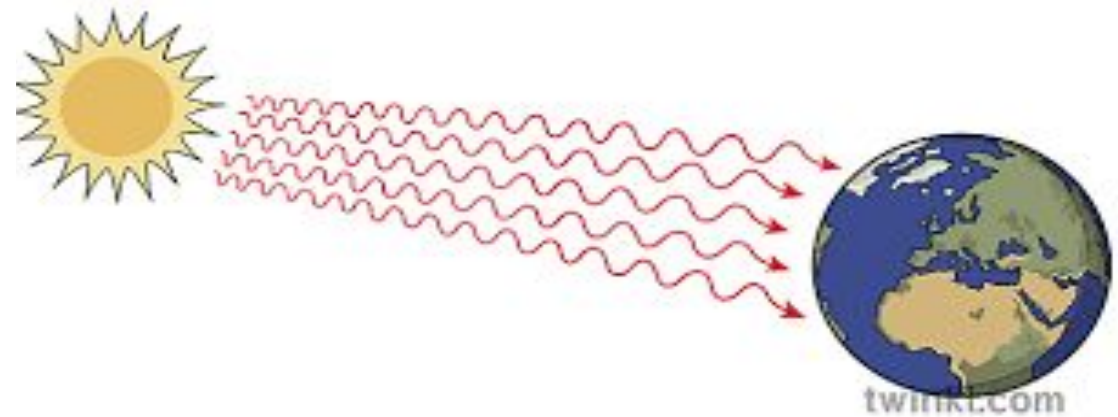
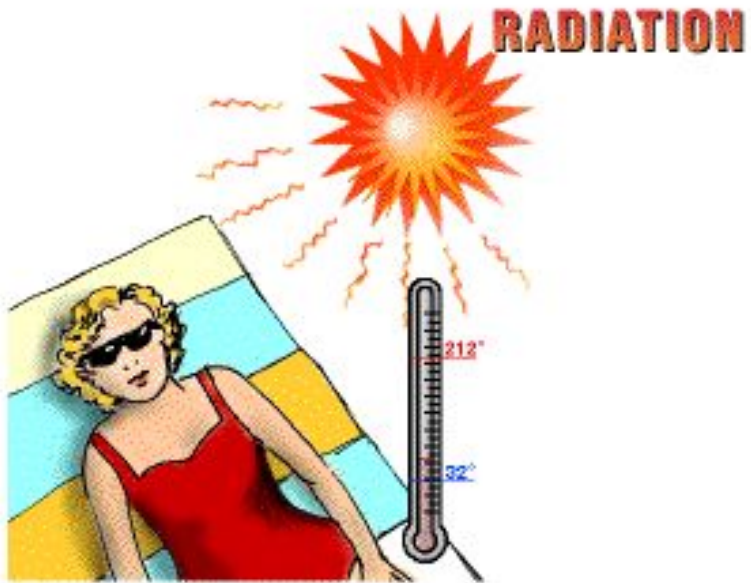


THERMAL ENERGY TRANSFER

□ There are three thermal energy transfer methods:

□ Radiation

✓ The transfer of heat through indirect contact

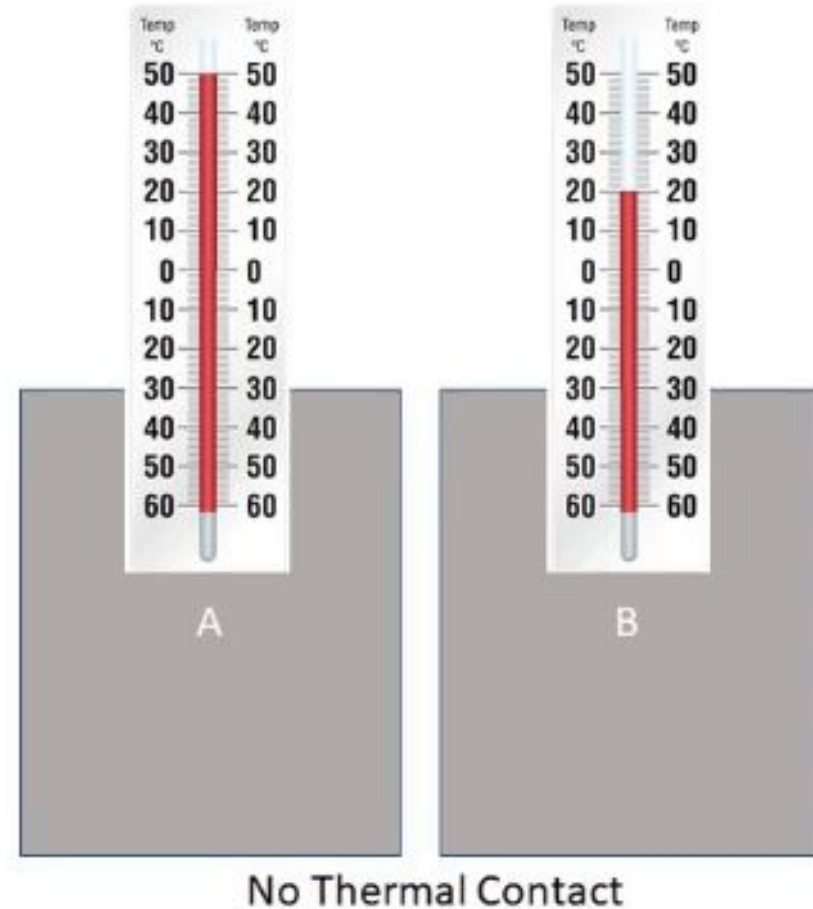


VIDEO LINK

- <https://www.youtube.com/watch?v=HpCvWuvCUoA>

HEAT TRANSFER

- During thermal energy transfer, heat moves from the warmer to the cooler object.
- Thermal energy transfer continues until thermal equilibrium is reached.
- Thermal equilibrium is a condition, in which two objects have the same temperature.



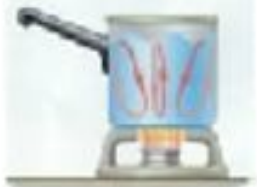

PRACTICE PROBLEMS

Complete 17 – 25, using the sentence stem.

Practice Problems

Directions: Examine each scenario, then determine the thermal energy transfer method, using the sentence stem.

+

No	Scenario	Answer
17	 Warm and Cool Currents	This is an example of (<u>conduction OR convection OR radiation</u>) because the thermal energy transfer method is (<u>indirect contact OR direct contact OR a circular current</u>).
18	 Heat in Spoon	This is an example of (<u>conduction OR convection OR radiation</u>) because the thermal energy transfer method is (<u>indirect contact OR direct contact OR a circular current</u>).