Radiation

Thermal radiation is the transfer of heat in the form of wave energy from a relatively warmer body to a cooler body.

By radiation, heat energy travels outward from the heat source just as the spokes on a wheel radiate out from the wheel's center.

Did you know that in Latin, radius means 'spoke'? Several spokes, in Latin, are called radii.

That's where the word radiation comes from! Any heat energy that moves outward like spokes on a wheel is called radiation.

The sun radiates heat outward to the earth and solar system.

Campfires radiate heat energy outward toward chilly campers and roasting marshmallows.

Those metal heaters that radiate heat energy in cold buildings.

What are they called? Oh, yeah! Radiators!

Dark colored objects tend to absorb radiated heat more than light colored objects.

All electromagnetic waves, including infrared heat waves, have a measurable wavelength — the distance from crest to crest of the wave.

There are many different types of wave energy beside infrared, or heat, energy. Radio waves, microwaves, ultraviolet waves, and visible light waves are all types of electromagnetic wave energy. Electromagnetic waves of different types have different wavelengths. Waves in the electromagnetic spectrum can be very long, as in the case of radio waves, for example, or very short, as in the case of X-rays.
Across
3. Type of electromagnetic wave used by cell phones
4. Radiated heat travels via this type of electromagnetic wave
5. Radiated heat moves from a relatively warmer body to a _____ body
9. Type of electromagnetic radiation that we often refer to simply as “radiation;” rumored to turn ordinary organisms into superheroes
10. The source of radiated heat in our solar system

Down
1. This type of object tends to absorb radiated heat better than light colored objects
2. The only type of electromagnetic radiation that humans can see
6. Objects that are ____ to a source of radiated heat become warmer, sooner than objects that are farther away.
7. The distance from crest to crest of a wave
8. Metal heater that uses radiated heat to warm buildings
Across

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Thank you!

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If you have any questions, comments, feedback, or requests, please don’t hesitate to contact me at kellytinpg@gmail.com.