

# LIGHT AND HEAT TEST

1.- What is the speed of light?

- a) 300 000 km/s                      b) 500 000 km/s                      c) 100 000 km/s

2.- What happens with light when we make it pass through a prism?

- a) The beam of light is turned into a white ray of light.                      b) The beam of light is divided into the seven different colours that are the actual colours of light.                      c) The beam of light is divided into the colours that the object can absorb.

3.- Why do we see this ball orange?



4.- How does light travels?

- a) In waves                      b) Backwards                      c) In a straight line

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5.- Explain what happens in this picture:



6.- Explain what happens in this picture:



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## 7.- How is thermal energy created?

- a) By passing from the hot particles to the cold ones.      b) By friction of the particles.      c) By passing from the cold particles to the hot ones.

## 8.- How is thermal equilibrium reached?

- a) By passing from the cold particles to the hot ones.      b) By friction of the particles.      c) By passing from the hot particles to the cold ones.

## 9.- What are the three ways heat is transferred?

- a) Radiation, Convection, and Conduction.      b) Evaporation, Radiation and Conduction.      c) Radiation, Convection and Condensation.

## 10.- Explain how heat is transferred in these pictures:



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**11.- What is a thermal conductor?**

- a) It is a material that doesn't transfer heat effectively.      b) It is a material that transfers heat effectively.      c) It is a material that we put on our houses to get hot.

**12.- What is a thermal insulator?**

- a) It is a material that does not transfer heat effectively.      b) It is a material that we put on our houses to get cold.      c) It is a material that transfers heat effectively.

**13.- Explain the effects of thermal energy in these objects.**



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