

Fact or Fake Light Questions



1. Light energy can be absorbed.
FACT – When light comes in contact with an opaque object, it can be transferred to heat energy.
2. Light energy can be transformed into electrical energy.
FACT- In a solar or photovoltaic cell, light can be transferred into electrical energy as in a solar calculator.
3. Leaves on trees can be translucent.
FACT – Light can travel through leaves and scatter the light.
4. Light energy cannot travel in empty space.
FAKE – Light does NOT need a medium in which to travel. This is why we can see stars and sunlight. Light energy is transferred when it hits the molecules in our atmosphere causing it to heat up.
5. Light waves traveling from one transparent material to another one can bend.
FACT – This is refraction.
6. Leaves can absorb light energy.
FACT – In photosynthesis, the chloroplasts use this energy to break apart water and carbon dioxide to form carbohydrates and oxygen.
7. The bending of light waves is known as reflection.
FAKE – The bending of light from one translucent material to another is refraction.
8. Something that is opaque can reflect light energy.
FACT – We can only see objects if the light is reflected back to our eyes.
9. Leaves can reflect light energy.
FACT- We can only see objects if the light is reflected back to our eyes
10. In a mirror, the outgoing light ray can be reflected at a different angle than the incoming light ray.
FAKE- The Law of Reflection states that the angle of the incoming light ray and angle of the outgoing light ray are equal.
11. A material through which light can pass but will be scattered in different directions is known as translucent.
FACT – This is the definition of translucent.
12. The sun is the source of 99.9% of all the energy on the Earth.
FACT